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People Parks Win-Win Framework: Integrating components that can influence people-park relationships



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Protected areas are often surrounded by impoverished communities. Biodiversity must be conserved while improving community well-being. Greater insight is required into what influences pro-conservation attitudes and behaviour in these communities. Much appears to rest on the relationships between protected area staff and local communities surrounding the parks, yet there is limited understanding of stakeholders' perceptions and how to pragmatically achieve win-win solutions. With the current lack of a multidimensional framework to enhance understanding of this complex and dynamic relationships, this research aimed to construct a comprehensive integrated framework representing the components that can influence people-park relationships. The framework was constructed via a threefold approach, namely a broader literature review, a focused study of existing schemata and primary research regarding the attitudes and behaviour of three local communities bordering three different protected areas in South Africa. The resultant People Parks Win-Win Framework consists of four layers (each with its own components): 'External context', 'Stakeholders', 'Community beneficiation' and 'Outputs'. Its unique arrangement focuses on beneficiation, inclusion of more stakeholders and their characteristics, the centrality of relationships and demonstration of outputs (how preceding layers can culminate in win-wins and how pro-conservation attitudes and behaviour fit into this). A simplified framework is also provided, for stakeholders to superimpose their own characteristics, benefits, influences and beneficiation principles. This research draws on the work of others as well as primary research to produce this multidimensional framework capturing the influences on people-park relationships with a focus on achieving both community well-being and biodiversity conservation.

Conservation implications: Win-wins for community well-being and biodiversity conservation are complex. Yet potential exists for tangible and intangible beneficiation, which can foster positive attitudes resulting in pro-conservation behaviour and robust reciprocate relationships between parks and neighbouring communities. To this end, the framework serves as a practical tool for protected area managers and stakeholders involved in the people-park relationships, which can be customised to particular contexts.

Keywords: benefits; biodiversity conservation; local community well-being; people-park relationships; People Parks Win-Win Framework; pro-conservation attitudes.

Introduction

The conservation crisis, together with impoverished communities on the verges of natural protected areas, creates a major challenge. The natural environment globally is losing biodiversity, highlighting the urgency to conserve protected areas in order to halt this loss (Abrams et al. 2009; Allen et al. 2019). Ceballos et al. (2015:1) confidently conclude that there has been an 'exceptionally rapid loss of biodiversity over the last centuries, indicating that a sixth mass extinction is already under way', with a devastating loss of ecosystem services looming. The crisis, however, can be lessened through rapid intensified conservation efforts, but this window of opportunity is quickly closing (Ceballos et al. 2015). At the same time, the majority of protected areas in Africa are surrounded by poor communities (Davies et al. 2014; Shackleton et al. 2010) and are experiencing increasing illegal harvesting of natural resources (Mutanga, Muboko & Gandiwa 2017). According to recent forecasts, by 2050, Africa's population is expected to double and half of that population

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will be under 25 years of age (Baker 2015; United Nations 2021). These youngsters will also carry the majority of the unemployment burden (African Development Report 2015). In South Africa, where this research was conducted, the 'triple problem' of poverty, unemployment and inequality is commonplace (World Economic Forum 2019).

The dual crises of poverty and biodiversity loss are therefore two distinct but connected concerns in the 21st century (Davies et al. 2014; Nyaupane & Poudel 2011) - not only in Africa, but globally. This linkage has resulted in attempts to decrease poverty through management systems whereby local community livelihoods are incorporated into action plans and locals become involved in and support the conservation of biodiversity (Abrams et al. 2009; Davies et al. 2014; Stoll-Kleemann 2005). In South Africa, government is also increasingly highlighting the twofold achievement of peoples' well-being and park conservation and the participation of local communities in this. For example, while comparing the National Environmental Management: Protected Areas Act 57 of 2003 (South Africa 2003) and the National Environmental Management: Biodiversity Act 10 of 2004 (South Africa 2004) with the more recently released 'Norms and Standards for the Management of Protected Areas in South Africa' (South Africa 2016), the responsibilities placed on protected areas to improve human well-being are much more distinct. These include community welfare, development, education, communication, use of natural resources, access to the land and long-term economic benefits. With stakeholders within protected areas worldwide, as well as in Africa and South Africa, working towards improved involvement of neighbouring local communities and with governments keenly advocating this, the integration of these two agendas is becoming increasingly pressing, but proving more challenging and costly than anticipated (Adams 2013).

Yet this integration is essential as the future success of conserving wildlife and their habitats could depend on the attitudes and behaviour of communities living in and nearby protected areas (Snyman 2014; Tessema et al. 2007) and on the extent to which their lives are improved (Diedrich 2007; Hackel 1999). However, greater insight into what influences pro-conservation attitudes and behaviour is first required, that is, what causes local people to want to conserve and engage in pro-environmental behaviour? (Berkes 2004; Coria & Calfucura 2012; Imran, Alam & Beaumont 2014; Kiss 2004; Mbaiwa & Stronza 2010; Walpole & Goodwin 2001). Ferse et al. (2010:7) said: 'A deeper understanding of what drives positive conservation behaviour and what hampers it, is needed'.

A great deal appears to rest on the relationships between protected area staff and the local communities surrounding the parks. In South Africa, despite growing literature regarding protected area management, there is still limited understanding of the perceptions of both park officials and local communities regarding these inter-relationships

(Thondhlana & Cundill 2017). McCleave, Espiner and Booth (2006), who conducted a literature review of New Zealand case studies, highlight the significance of this issue but add that there is a scarcity of theory on people-park relationships. McCleave et al. (2006) warn that failing to recognise this important relationships can hamper effective management, cause the community to resent conservation and result in reduced social well-being and loss of tourism opportunities. Anthony (2021) who considers this relationships in the context of human-wildlife conflict and Mutanga et al. (2017) who investigate a range of influences on this relationships, contend that a deeper understanding of what affects people-park relationships is required. Stoll-Kleemann (2005), reporting on the international Governance of Biodiversity (GoBi) research project, which considered the integration of ecological and socio-economic approaches in improving protected area management, appeals for better relationships between protected areas and surrounding communities. These authors contend that pragmatic integration of the interests of both protected areas and neighbouring communities is an urgent requirement.

Pragmatic integration, however, requires achievement of the dual goals of biodiversity conservation and improvement in the well-being of communities bordering protected areas (Davies et al. 2014; Ferse et al. 2010). This is vital to impact positively on the biodiversity and poverty crises. Yet, as pointed out by Wali et al. (2017), there is much work needed on how to integrate biodiversity conservation with human well-being. In addition, solutions must be realistic, considering the very real constraints experienced by protected areas in South Africa, and elsewhere. This research refers to achieving this pragmatic integration as aiming for win-wins between parks and people.

Furthermore, answers to these problems need to be represented in a format that is useful to practitioners in nature conservation and community development, local communities and academics. However, following a review of existing frameworks (outlined later in this article), it would appear that a comprehensive integrated framework or schema such as this does not exist. Allendorf (2010) identifies this research gap:

The lack of a common framework limits not only our understanding, but also the development of future research areas and approaches to balancing conservation and sustainable development around protected areas (PAs). If we are to understand and address fundamental PA–people issues, we need a descriptive framework that enables the understanding of the relationships that people have with PAs and that facilitates comparisons among PAs. (p. 417)

Published in 2018, Stone and Nyaupane deliver a brief overview of different frameworks and models that link conservation, tourism and the livelihood of local people. They contend that existing frameworks:

[A]re based on simple static concepts and fail to capture the complexity and dynamic nature of the relationships ... Moving

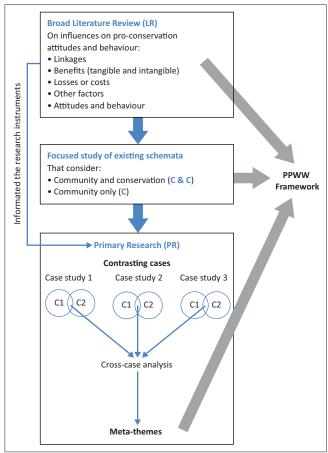
forward in addressing this complexity, there is a need to overcome the development and reliance on simplified models of complex systems. (Stone & Nyaupane 2018:309)

Wali et al. (2017) also argue for more multidimensional tactics to address community well-being, arguing that economic indices alone are insufficient and exclude other interrelated components that also account for community well-being.

The aim of this research was therefore to construct a comprehensive integrated framework representing the components that can influence people-park relationships. This research forms part of a larger study carried out (Queiros 2020), wherein this framework was the final output. This article first outlines the research strategy used to construct the framework followed by examination of existing schemata. In the results section, the People Parks Win-Win Framework (PPWW) is introduced, followed by a discussion on its distinctiveness and the various layers and components. The article is then concluded.

Research strategy

Figure 1 depicts the threefold approach used to construct the framework: a broad literature review, a focused study of existing schemata and primary research conducted in South Africa regarding the attitudes and behaviour of three local



C1 = Constituency 1 (local community); C2 = Constituency 2 (protected area).

FIGURE 1: Threefold approach to construct the People Parks Win-Win Framework.

communities bordering three different protected areas. Each approach contributed elements to the final framework. Existing schemata are discussed in detail as they inform the research gap. The current section briefly covers the design of the literature review followed by the methodology used in the primary research.

Design of the literature review

The literature review focused on the influences on proconservation attitudes and behaviour. The author sought to conduct a wide-ranging search so as to provide multiple lenses at the start of the research. This aligns with Maxwell (2013) who warns researchers to include concepts from beyond the traditional field of study. The language of the sources was restricted to English. Various keyword combinations were used in both Google Scholar and within the e-journals search engines of the University of South Africa's library. The researcher consulted the work of different researchers worldwide in the fields of tourism, the natural environment, development and social studies. A wide range of models and frameworks related to communities or communities and conservation were also consulted. The majority of sources consulted were in the fields of protected areas, biodiversity conservation and local communities. Some focused entirely on these domains, while others incorporated different combinations of the following keywords: attitudes, behaviour, benefits, participation, poverty reduction and natural resource management. Some of this research was from the perspective of a particular approach, such as sustainable tourism development, ecotourism or one of the numerous different approaches to community-based conservation and/or tourism. The literature review was updated after the collection of primary data, in order to include newer research.

The findings from the literature review were clustered under the different foci of the research. A key investigation was the contrasting views on the different linkages between benefits and losses or costs, pro-conservation attitudes and pro-conservation behaviour. This included research where connections were made between benefits or costs and attitudes; research that had very specific links between benefits or costs and behaviour and between attitudes and behaviour; and studies that argue against the presence of links between benefits and pro-conservation attitudes and behaviour. A large section of the literature review documented the different benefits (tangible and intangible) received by local communities bordering protected areas as well as the *losses* or *costs* incurred by these communities because of proximity to a protected area (since these can influence attitudes and behaviour). Finally, 'other factors' that were not benefits but could influence pro-conservation attitudes and behaviour were also considered. Some examples include the presence of tourism, local participation, multiple livelihood strategies and building trust.

The literature review informed the questions posed to the participants in the primary research. The full literature review as per Queiros (2020) is beyond the scope of this article. However, the specific components from literature that were integrated into the framework, which is the focus of this article, are clearly discussed in the tables that form part of the discussion.

Primary research methodology

The primary research was qualitative as the researcher sought to explore the feelings, opinions and perceptions of the participants in their own words (Roulston 2014). While much conservation-related research is quantitative, this research was firmly positioned in the interpretivism or constructivism paradigm, which acknowledges the multiple subjective interpretations that individuals will have of their world (Creswell 2014). In the context of African society and community, it was vital to work with social systems, where individuals' lived realities are constructed by both individuals and groups, and discovered via the interactions within these social groups (Bann 2001; Lune & Berg 2017). In this vein, and in order to hear the voices of the participants in ways with which they could identify, multiple methods were used to gather data. These methods were semistructured individual interviews, focus group interviews, adapted nominal grouping technique and drawings (of the communities living area in contrast to the protected area). Atlas.ti, as a data software package for qualitative research, was instrumental in organising and analysing the large body of data.

Data were collected at three case study sites within South Africa between December 2015 and September 2017. Each case study site comprises the following: (1) protected area where a tourism venture exists and (2) the local community located closest to the protected area (as these are usually the communities most affected by the protected area). In other words, within each case study, two groups of people (constituencies) formed part of the research. Constituency 1 (C1) refers to the local community living closest to the protected area. Constituency 2 (C2) denotes the protected area: conservation authorities (e.g. reserve management), conservationists, as well as other stakeholders that are involved in managing the tourism venture. Participants were selected using non-probability purposive sampling. For C1, it was important that the group constituted a balance of participants in terms of age, gender and societal position.

The three case studies varied from each other in the sense that each protected area had differing management models and ownership structures and were at different stages in the level of improvement in human well-being offered to the neighbouring community. Using open-ended questions around several themes, the contrasting cases assisted the researcher in determining how very different contexts influence attitudes and behaviour related to conservation. This enabled the framework to be more comprehensive. The first case study site was Dinokeng Game Reserve and Kekana Gardens community (13 C1 participants; 4 C2 participants) in

the Gauteng province. Dinokeng is a public-private partnership between provincial government and landowners, with the latter running various tourism establishments varying from budget to luxury. Regarding the level of improvement in human well-being for bordering communities, as a fairly new reserve opened in 2011 (Dinokeng 2017), reserve management and landowners are still developing different economic and social well-being programmes. Mkhambathi Nature Reserve and Khanyayo community (19 C1 participants; 5 C2 participants) in the Eastern Cape province formed the second case. Mkhambathi has been a nature reserve since 1982 (Queiros 2000). It is a provincial reserve on land owned by the surrounding local communities, and hence jointly managed by Eastern Cape Parks and Tourism Agency and a community trust. Income from tourism is currently minimal, as only a few mid-range accommodation options still exist, but a private company is developing some luxury accommodation. Low tourism numbers affect benefit flow and employment possibilities, but reserve staff have been interacting with the community for several years and run various economic and social upliftment programmes. The third case study was Phinda Private Game Reserve and Mnqobokasi community (24 C1 participants; 5 C2 participants) in KwaZulu-Natal. This reserve was established in 1991, is managed by &Beyond and offers luxury tourism (&Beyond 2018). Some land is owned by local communities which rent it to &Beyond. Unlike the other two case studies, Phinda has a dedicated organisation, Africa Foundation, focusing on community involvement and beneficiation. The relationships between Phinda and the Mnqobokazi community is well established, with employment opportunities and economic and social upliftment programmes in place. Within the conservation and tourism realm, the model followed by Phinda is widely perceived as successful.

At each site, C2 participants had individual semi-structured interviews. For C1, at each case study site, participants self-divided into two groups. Each group had a focus group interview and a drawing session. For the adapted nominal grouping technique, both groups came together. The research was conducted with a translator, in the mother tongues of participants, which at the three case study sites were Sepedi, isiMpondo and isiZulu, respectively. Access to the communities was facilitated by the protected area management and enabled via permission from community leadership.

At each site, the same questions were asked to participants regarding the following themes:

- The community's knowledge and experience of the protected area.
- The relationships between the community and the protected area.
- Positive and negative changes that the protected area had brought to the community's way of life.
- Elements that could increase positive attitudes of the community towards the protected area.
- The community's responsibilities towards the protected area.

- Benefits and losses incurred by the community because of living nearby a protected area.
- Participants' ideas of an ideal future in the context of being a community bordering a protected area.

For each case study, the data were transcribed and then coded inductively, creating a coding frame for each of the above-mentioned themes. After this, cross-case analysis took place to compare the findings across the three case studies, for each of these themes. Using this analysis, meta-themes were identified that captured the most pertinent influences on pro-conservation attitudes and behaviour across the three case studies. It was these meta-themes that helped to construct the framework.

As a result of the extent of the analysis (three case studies comprising 1217 coded quotes in total), followed by a cross-case analysis, the presentation and discussion of primary findings is beyond the scope of this article but can be found in Queiros (2020).

Existing schemata

In investigating existing schemata, two types were relevant to the people-park relationships – those representing the community and the conservation area and those focusing on the community only. Certain components from these existing schemata were then incorporated into the final framework.

Schemata that include the community and conservation area (C & C)

The 'Theory of resource use' by Firey (1960) was arguably the first model on protected area-people relationships and indicates the overlaps between the ecological, economic and social dimensions. Following on from that several authors included these components within more detailed models, such as Bennett (2016) and Ross and Wall (1999). Abel and Blaikie (1986) later developed a very detailed 'Management model for national parks'. It focused on elephants and ivory and different habitats. A few people elements were also included, such as employment opportunities and roads. In 2006, McCleave et al. published the 'Model of the New Zealand people-park relationships' and what affects the relationships. The park and its neighbours are the core of the model, surrounded by three dimensions: lifestyle, recreation and place attachment; tourism; and interactions with the park management agency. This model applies more to developed countries and to parks with a well-established tourism product. It is therefore less applicable to impoverished communities, resource access, meeting basic needs and so forth. Of interest to an integrated model, however, is that the 'stage of tourism development' is included as a component that plays a part in relationships (and is hence included in the final framework). Another approach was that of Zube and Busch (1990) who proposed four models of 'park-local population relationships'. Each model depicts a differing management approach that can encourage positive peoplepark relationships.

The following six schemas directly focused on both the community and the conservation area, with each one contributing to the final framework. Three of the models use a triangular structure. Nyaupane and Poudel (2011) created the model 'Linkages among biodiversity conservation, livelihood improvement and tourism development', which illustrates the two-way relationships between these three aspects. Their research used Appreciative Inquiry in three communities surrounding Nepal's Chitwan National Park. Uni-directional arrows between the three aspects highlight different linkages, such as investments due to tourism development result in improved livelihoods. Ross and Wall's (1999) 'Ecotourism paradigm' has a similar structure in the sense that it considers the balance and synergistic relationships between local communities, biodiversity and tourism. However, they also add 'management' to the centre of the model because it plays a pivotal role in maintaining balance via effective management. For example, a one-way arrow links management to the local community, with the mention of 'Outreach programmes' and 'Enforcement of use zones'. Later, Tsaur, Lin and Lin (2006) adapted Ross and Wall's (1999) framework. They represented 'tourism', 'local community' and 'the resource' as the three corners of a triangle, with bi-directional arrows connecting the corners and representing economic, social and environmental relationships.

The linked incentives model of direct linkage as a conservation strategy is the work of Salafsky and Wollenberg (2000). They had previously proposed three conservation strategies, namely no linkage, indirect linkage and direct linkage. It is the latter, as the ideal scenario, that became this model. Using a series of blocks with connecting arrows, it represents different connections between livelihood activities and conservation (labelled as 'biodiversity'). In this model, to protect the environment, alternative livelihood options that support biodiversity are provided to communities inside the conservation area (who might be an internal threat) and to communities outside the park (as a possible external threat). As a result of the linkages of increased benefits received, capacity building and locals recognising the value of biodiversity conservation, the notion is that local people will act to conserve.

Mutanga et al. (2015a) designed a framework for assessing the relationships between a protected area and community. They also used an arrangement of blocks (but in columns) with 'protected area (staff)' and 'community' as the two outer columns linked by the middle column of 'human-wildlife interface'. Their assertion is that conservation is enhanced if these relationships are positive. Mutanga et al.'s study is based on a literature review and demonstrates that the attitudes of both parties' shape relationships. Four major factors play a role, namely the history of the protected area in the sense of forced relocation and a fences or fines approach; benefits and costs because of living near to a protected area; sociodemographic factors, for example, level of education and

household size and income; and community involvement in conservation initiatives via Integrated Conservation and Development Projects.

Based on research in Myanmar and Nepal, the 'Framework for the protected area-people relationships' by Allendorf (2010) introduces the idea of layers within a framework. Allendorf selected universal terms that can be applied and compared across different cases. The inner layer represents people's physical relationships with the protected area (how locals interact with and use the area and the impact of the protected area on them in terms of costs). This layer also represents their attitudes towards the protected area (including their perceptions of the area) and concerns whether they like or dislike the protected area. The middle layer relates to people's perception of other entities, for example, management, non-governmental organisations (NGOs) and government (which can perform a direct or indirect role). Finally, the outer layer concerns the broader context of the social, political, cultural, historical and economic realms and their linkages to the people-park relationships.

Lastly, Bennett's (2016) article investigates research regarding perceptions and the contribution thereof to improving adaptive management and evidence-based conservation. He maintains that perceptions are often dismissed in conservation science, but are research-worthy because they provide valuable insights into how to ensure the support of the community and thereby long-term conservation. Bennett's (2016) schema, in the form of a flow chart, therefore depicts the importance of knowing the perceptions regarding different facets (social, ecological, governance and management), which will then generate or undermine support for conservation. These perceptions are influenced by the social context and the individual context.

Schemata focusing on the community (C)

Four schemas with a community focus contained valuable elements for inclusion into an integrated framework. These are briefly discussed next.

The 'Sustainable livelihoods framework' was developed by Scoones (1998) and is a multifaceted tool for analysing sustainable rural livelihoods. It includes five key indicators, namely context, livelihood resources, institutional processes, livelihood strategies and sustainable outcomes. In different contexts, several livelihood resources are available that combine to form a particular livelihood strategy, which in turn influences sustainable livelihood outcomes. This is affected by different processes and organisational structures. The different options aligned with each of the five key indicators are located in the centre of the framework (Krantz 2001; Scoones 1998).

Garrod et al. (2001) in Garrod (2003) present the 'Revised model of local participation in planning and managing ecotourism'. It has a different focus – outlining eight

consecutive steps that can be followed to foster local participation and good planning and management in ecotourism projects. Originally developed for marine ecotourism in the European Union's Atlantic region, this model has wider applicability to various ecotourism projects in different locations (Garrod 2003). Garrod argues that participation should be well integrated into these planning steps and not just be an 'add-on'.

Quite different in structure, the Stool model was developed by Brook et al. (2009) for a project in Northern Canada. It depicts four critical supports (the legs of the stool) that are necessary in order to foster community-based wildlife health monitoring and research. These supports are collaboration, information and analysis, funding and education. The seat of the stool, being a local champion, is a key contribution of this model – coordinating, 'holding' the supports together and keeping participants engaged and informed.

Finally, based on a literature review of community-based tourism across rich and poor countries, Giampiccoli, Jugmohan and Mtapuri (2015) generated the 'Community-Based Tourism E model' (CBT E model). This model contains eight Es, which represent the fundamental pillars against which a community-based tourism project can be evaluated. They are endogenous (reliance on natural resources); environment (care thereof as well as physical infrastructure); education (to advance both skills and education); empowerment (economic, psychological, social and political); equity (in terms of distributing benefits and resources); evolving (continuous improvement and adaptation); enduring (long-term sustainability); and entrepreneurship (the support thereof) (Giampiccoli et al. 2015).

The research gap presented in the introduction revealed that a comprehensive integrated framework that captures the components that could influence people-park relationships does not exist. This section has examined some of the existing schemata. These schemata hold value and components thereof are built into the framework resulting from this research.

Results: The People Parks Win-Win Framework

By integrating existing schemata and existing literature with primary research findings, a newly synthesised framework was constructed. This section introduces the PPWW – a comprehensive integrated framework representing the components that can influence people-park relationships (Figure 2). Through the threefold approach, comprehensiveness and generalisability was increased and a tool was created that can be used by relevant stakeholders. Following the framework, its various layers, components and linkages are discussed via several tables. Its contribution to the field of nature conservation is also discussed.

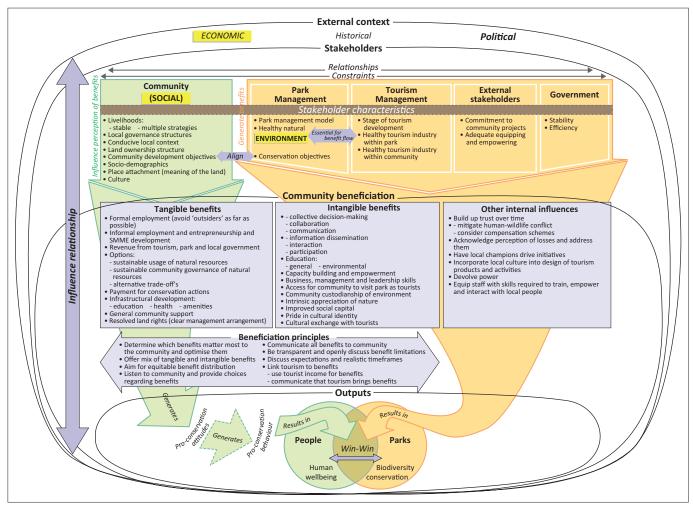


FIGURE 2: People Parks Win-Win Framework.

Discussion

The PPWW Framework provides a detailed overview of the different layers and the components within each layer that can influence people-park relationships. Four layers are set out, namely 'External context', 'Stakeholders', 'Community beneficiation' and 'Outputs' and each contain their own components. To demonstrate validity and reliability, four tables accompany the discussion to review the origin of each component and layer. The PPWW Framework can be used by stakeholders involved in the relationships between people and parks, as a practical tool to facilitate win-win situations for both communities and biodiversity conservation.

By representing multiple influences on this relationships between people and parks, the PPWW can assist in shaping protected area management strategies for varying people-park arrangements, ranging from benefit-sharing only to true co-management. The PPWW components neither operate in isolation nor as a complete package. It depends on the context of each protected area and its adjacent or resident community. Stakeholders (often from trans-disciplines) should adapt it to their own context, taking cognisance that all these components can impact the

relationships between people and parks. Stakeholders also need to be aware that these relationships are complex and no single framework will entirely capture all impacting components.

The PPWW is a significant departure from other schemata for the following reasons:

- It is specific to the components that emerged in this research via primary and secondary research.
- Its arrangement and the detailed focus on beneficiation (and principles to follow in benefit distribution) is novel.
- The PPWW incorporates multiple stakeholders and indicates that all can be involved in beneficiation with these relationships affecting the achievement of a winwin scenario.
- As the characteristics of the stakeholders have considerable influence, they are included.
- It concludes with an 'Outputs' layer, which suggests that
 preceding layers and components can culminate in the
 provision of benefits by stakeholders and represents the
 results this can have on community members –
 potentially leading to pro-conservation attitudes and
 behaviours and ultimately to a successful relationships
 between people and park. Moreover, what takes place in

- this final layer can feed back into preceding layers, creating a positive cycle.
- Finally, the centrality of relationships in the framework differentiates it from other schemata. While relationships are inherent in some of the linkages represented in the schemata that focus on both the community and the conservation area, only Mutanga et al. (2015a) include the word 'relationships' within their framework, while Ross and Wall (1999) used it in the title of their framework. Furthermore, the current framework is different in showing that all layers and components influence relationships.

The discussion continues throughout Table 1, Table 2, Table 3 and Table 4. Each layer is numbered and main headings are in bold. Grey and white sections differentiate components from each other and linking arrows are indicated in italics.

The key for Table 1, Table 2, Table 3 and Table 4 and their preamble is as follows:

C = Existing schemata that focus on the Community only.

C & C = Existing schemata that include Community and Conservation area.

PR = Primary Research.

LR = Literature Review.

Table 1 outlines the origin of each component within the 'External context' layer. As the outer layer, the 'External context' influences all other layers and components within the framework. The idea of layers of influence is borrowed from Allendorf's (2010) 'Framework for the protected-area—people relationships' (C & C). People Parks Win-Win Framework uses its 'Context' layer as the outer layer, renaming it as 'External context'. However, while Allendorf (2010) includes economic, historical, political, social and cultural within this outer layer, PPWW only uses the first three components. It integrates social and cultural within the next layer for 'Stakeholders'. This is because the framework contains a dedicated layer for 'Stakeholders' and the 'Social' component is therefore better positioned alongside 'Community' as a stakeholder.

Table 2 considers the components within the 'Stakeholders' layer of PPWW. Allendorf (2010) (C & C) has a similar layer but labels it as 'Entities'. People Parks Win-Win Framework includes 'Community' and 'Tourism management' as stakeholders, thus adding to what Allendorf included, namely 'Park management', 'NGOs' and 'Government'. Table 2 also contains a sub-layer, entitled 'Stakeholder characteristics' (highlighted in brown) – included because the PR reveals that the specific characteristics/ circumstances of each stakeholder can influence this relationships. The characteristics of the community influence their perception of benefits (vertical green text in framework), while the characteristics of the other

stakeholders will influence the generation of benefits (vertical peach text in framework).

Table 3 contains the origin, context and discussion around the components in Layer 3, namely 'Community beneficiation'. The LR revealed various schools of thought on the linkages between benefits and losses, proconservation attitudes and behaviour. Several authors establish a link between benefits and attitudes (Liu et al. 2014; Reimer & Walter 2013; Scanlon & Kull 2009; Strickland-Munro & Moore 2014) while others include lack of benefits or costs as influencing attitudes (Black 2015; Kideghesho, Røskaft & Kaltenborn 2007; Mehta & Heinen 2001). Some researchers extend receipt of benefits to changing attitudes and behaviour (Biodiversity Conservation Network 1999; Gadd 2005; Hulme & Murphree 1999; Kideghesho et al. 2007; Mbaiwa 2005; Ogunbode 2013; Shibia 2010; Tran & Walter 2014) and some contend that it is also a lack of benefits or losses that influence attitudes and behaviour (Burgoyne & Mearns 2017; Odindi & Ayirebi 2010; Thondhlana, Cundill & Kepe 2016).

Considered cumulatively, there is strong support in literature for the notion that benefits and losses influence attitudes, which in turn influence behaviour. In this PR, benefits and losses emerged as key in influencing attitudes and some links to behaviour were also found. Therefore, based on the importance of benefits, as emerging in the LR and PR, PPWW includes a layer dedicated to 'Community beneficiation'. Some C & C schemata mention benefits (Mutanga et al. [2015a] include 'Benefits and Costs'; Ross and Wall [1999] refer to 'Outreach Programmes'; Salafsky and Wollenberg [2000] mention 'Benefits'); and Nyaupane and Poudel (2011) list a few examples of benefits (such as jobs, education and infrastructure). However, PPWW's focus on the main benefits is a departure from existing schema. Losses or costs incurred by the community are excluded because PPWW focuses on requirements for a win-win relationships.

It is important to observe that it is the presence of beneficiation and beneficiation principles that lead to the outputs (discussed in Table 4). The stakeholder characteristics of the community will influence their perception of benefits (vertical green text in framework) and the characteristics of park management, tourism management, external stakeholders and government will influence the generation of benefits (vertical peach text in framework).

The final section of the discussion (in Table 4) centres on the 'Outputs' layer, which suggests the outcomes that could be expected should enough of the components discussed in Table 1, Table 2 and Table 3 be in place.

Finally, for practitioners who would prefer a simplified framework on which they can superimpose their own characteristics, benefits, influences and beneficiation principles, Figure 3 provides the 'Simplified People Parks Win-Win Framework'.



 TABLE 1: Layer 1 and components used to build the People Parks Win-Win Framework.

1. External context components	Origin	Original context and discussion
ECONOMIC	C & C (Tsaur et al. 2006)	Tsaur et al.'s (2006) adaptation of the framework by Ross and Wall (1999) indicates three components of the people-park relationships: economic, social and environmental. In contrast to other schema, PPWW does not include these in the same layer, nor as corners of a triangle. They are still present, but distributed throughout the framework. This is a departure from previous schema.
Historical	C & C (Allendorf 2010) PR	Allendorf includes 'Historical' as part of the broader context that influences people-park relationships. The PR reveals 'Historical context' as a key influence on participants' expectation of benefits and their identification of losses/costs incurred because of living near a protected area.
Political	C & C (Allendorf 2010; Bennett 2016) C (Scoones 1998) PR	Allendorf (2010), Bennett (2016) and Scoones (1998) include politics as an influence on context. In PPWW, this refers to countrywide politics, which, while part of external context, can also influence the 'Stakeholders' and 'Beneficiation' layers. In volatile political climates, foreign NGOs as external stakeholders may withdraw from a country and tourism then also suffers as tourists stay away. This in turn affects the flow of benefits to the community. At Dinokeng, for example, prior to elections, it is harder to work with the community as government sometimes make rash promises in a bid to win votes. In the Mkhambathi case study, government inertia affects the ability of reserve management to fulfil promises.

C, community only; C & C, community and conservation area; NGO, non-governmental organisation; PPWW, People Parks Win-Win Framework; PR, primary research.

 TABLE 2: Layer 2 and components used to build the People Parks Win-Win Framework.

2. Stakeholders components	Origin	Original context and discussion
'Relationships' arrow running across the top of the 'Stakeholders' layer	PR	Not only does each stakeholder's individual characteristics influence the remaining layers of the framework, but the relationships and cooperation between the various stakeholders are also vital in achieving win-win scenarios. The PR revealed that several factors affect relationships, for example, local people's knowledge and experience of the reserve, benefits received and losses incurred as well as their sense of responsibility towards the protected area.
'Constraints' arrow running across the top of the 'Stakeholders' layer	PR	This framework focuses on the positives (components contributing towards win-wins). However, constraints and challenges that work against these are a reality and have a trickle-down effect throughout the other layers. For example, outside Dinokeng, a large constantly changing community comprising many new migrants, complicates awareness initiatives and benefit-sharing. For Mkhambathi management, a low budget is one of the major constraints, while at Phinda, a growing community dilutes benefits and decreases positive perceptions.
Community (SOCIAL)	PR	The PR reveals the centrality of the relationships between community (people) and protected area management (parks). As mentioned under 'Economic' (Table 1), the economic, social and environmental facets of the people-park relationships are distributed throughout PPWW. As a result of a layer being dedicated to 'Stakeholders', the 'Social' component is positioned alongside the 'Community' as a stakeholder.
Community characteristics		
Livelihoods (Stable; Multiple strategies)	LR (Gurung & Seeland 2011; Rahman, Mahmud & Shahidullah 2017; Snyman 2014; Stoll-Kleemann 2005)	This is classified in the LR under 'Other factors' that may influence pro-conservation attitudes and behaviour.
Local governance structures	C & C (Bennett 2016)	Bennett's schema includes local governance structures as a facet that can influence support for conservation. The PPWW uses it to represent governance structures at local community level. In South Africa, it is common for rural areas to have a combination of traditional tribal authority and local government. How the community is governed and by whom can positively or negatively influence relationships with other stakeholders.
Conducive local context	LR (Scanlon & Kull 2009)	Scanlon and Kull refer to conducive local context as one of three conditions required to progress from benefits to positive attitudes and behaviour. The other two are the devolution of power and equitable beneficiation (see Table 3). An example of a conducive context could be a small or well-defined community.
Land ownership structure	LR (Collins 2016; Harihar, Veríssimo & Macmillan 2015; Sachedina & Nelson 2010; Thondhlana et al. 2016)	Depending on the type of land ownership structure and the details of who is responsible for what within the structure, this component can positively or negatively influence local people's attitudes and behaviour towards a protected area.
Socio-demographics	C & C (Mutanga et al. 2015a) C (Scoones 1998) LR (Mutanga et al. 2015b; Snyman 2014)	Mutanga et al. (2015a) include this as a major factor influencing the protected areacommunity relationships because of how age, gender, income, sources of income, education level and household size can affect attitudes. Scoones (1998) includes it under context. In the LR it is classified under 'Other factors' that could have an effect on pro-conservation attitudes and behaviour.
Community development objectives	LR (Berkes 2004)	Berkes (2004) mentions this in the context of risks involved when community development objectives are not aligned with conservation objectives. Stakeholders need to consider how these two can be aligned.
Place attachment (meaning of the land)	LR (Bezerra 2018; Mutanga et al. 2015a; Thondhlana & Cundill 2017)	In the LR, 'Lack of access to the land for cultural, spiritual and historical reasons' emerges as a loss/cost. In PPWW, it is worded as 'Place attachment' – a component that park management need to consider for a win-win situation.
Culture	C & C (Bennett 2016)	Bennett (2016) includes culture as an influence on context. The PPWW Framework includes culture as an influence on the community, for example, certain cultures may not want the intrusion of tourism; others may feel strongly regarding indigenous stewardship of natural resources; and stakeholders may find it easier to work within some cultures than others. These characteristics will influence the role of other stakeholders and the ensuing benefits.
Park management	C & C (Allendorf 2010)	'Park management' refers to those stakeholders who are responsible for managing a conservation area, whether it be a national park, reserve (private or public) or a private game farm.
Park management characterist	tics	
Park management model	C & C (Bennett 2016) PR	The schema by Bennett (2016) shows 'Management models, inputs, actions and managers' as a part of 'Conservation initiative', which in turn generates 'Levels of support for conservation'. In the PR, different park management models produced different results, which in turn influenced community perceptions. For example, the greatest contrast emerging was between the Phinda/ Mnqobokazi case study as opposed to the other two cases, which have government involvement. As a private game reserve offering high-end tourism, with a separate organisation dedicated to working with local communities, more beneficiation programmes are in place. This increases positive attitudes in the community as benefits are seen and experienced. However, it has also resulted in higher expectations.
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TABLE 2 (Continues...): Layer 2 and components used to build the People Parks Win-Win Framework.

2. Stakeholders components	Origin	Original context and discussion
Healthy natural ENVIRONMENT	C & C (Ross & Wall 1999; Tsaur et al. 2006) C (Giampiccoli et al. 2015)	Care of environment is inherent in the CBT E model of Giampiccoli et al. (2015); while the importance of biodiversity as a benchmark for a healthy natural environment that tourists would want to visit is included in Ross and Wall's framework. As indicated in Table 1, the economic, social and environmental facets of the people-park relationships are distributed throughout PPWM. 'Environment' is included within 'Park management', as this is usually their core responsibility.
Conservation objectives	LR (Berkes 2004)	Conservation objectives are important for park management. In PPWW, light is cast on the importance of considering conservation objectives together with community development objectives (refer to next row).
Two-way arrow between 'Community development objectives' and 'Conservation objectives'	LR (Berkes 2004; McShane et al. 2011; Stoll-Kleemann, De La Vega-Leinert & Schultz 2010)	These authors refer to the risks inherent when the objectives of community development and conservation do not align. This arrow therefore indicates the need for this alignment, with action required from both the community and park management as stakeholders.
Tourism management	C & C (Ross & Wall 1999)	Ross and Wall (1999) include 'Tourism' as part of their schema.
Tourism management characte	ristics	
Stage of tourism development	C & C (McCleave et al. 2006) PR	McCleave et al. (2006) developed the 'Model of New-Zealand people-park relationships', from which this component emanated. The PR revealed that well established tourism (e.g. Phinda) may have more benefit flow to communities than a park where tourism is still in its infancy (e.g. Dinokeng) or struggling (e.g. Mkhambathi).
Healthy tourism industry within park	C & C (Ross & Wall 1999)	The importance of tourism as the means to provide benefits is borrowed from the synergistic relationships schema of Ross and Wall (1999).
Two-way arrow between 'Healthy natural environment' and 'Healthy tourism industry within park'	C & C (Ross & Wall 1999)	The focus on 'Biological diversity' and 'Tourism' in Ross and Wall's framework indicates the importance of a healthy environment and healthy tourism, respectively. In the present framework, this relationships is represented differently by demonstrating that a healthy environment and healthy tourism industry are essential for benefits to flow to the community.
Healthy tourism industry within community	PR	The 'SMME development' emerged as a means to improve positivity towards the protected area. If local communities are involved in the creation/management of tourism products and tourism ventures, this can cause an increase in social and economic benefits.
External stakeholders	C & C (Allendorf 2010)	Allendorf (2010) refers to 'NGOs' as an 'Entity'. The PPWW broadens it to 'External stakeholders', which can include NGOs, private individuals, charities, educational institutions and so forth.
External stakeholder character	istics	
 Commitment to community projects Adequate equipping and empowering 	LR (Tolkach & King 2015)	'NGOs withdrawing too soon' can result in losses for the community, according to Tolkach and King (2015). To turn this into a component that external stakeholders should be aware of for win-wins, their longer-term commitment to community projects and adequate equipping and empowering are included in the framework.
Government	C & C (Allendorf 2010)	Allendorf mentions 'Political' as part of 'Context' and 'Government' as an 'Entity'. In the People Parks Win-Win Framework, however, 'Government' is a 'Stakeholder'. This component refers to various levels of government, such as national, provincial and local – whichever is relevant to the case at hand.
Local government characteristi	cs	
Stability	PR	The Dinokeng results in this research indicate that, just prior to the local elections, it was difficult to build on the relationships with the community and projects (e.g. the soup kitchen) remained on hold until after the elections. Stability is therefore a necessary ingredient for a win-win relationships.
Efficiency	PR	Mkhambathi's results reveal frustration with government inertia and complex procedures to procure simple items. This affects the ability of park staff to work effectively. At Dinokeng, lengthy government time frames are a constraint, for example, a school that was promised is yet to be built. Efficiency of local government hence influences peoplepark relationships.
Green and peach coloured block arrows running downwards through framework	PR	The PPWW has two large coloured arrows that run from the upper to lower half, to indicate that: 1. Community characteristics will influence their perception of benefits (green) 2. The other stakeholders (apart from community) are involved in generating benefits (some more than others) and their characteristics will influence the generation of benefits (peach)

C, community only; C & C, community and conservation; LR, literature review; NGO, non-governmental organisation; PPWW, People Parks Win-Win Framework; PR, primary research.

 TABLE 3: Layer 3 and components used to build the People Parks Win-Win Framework.

3. Community beneficiation components	Origin	Original context and discussion
Tangible benefits		The PPWW sub-divides benefits into 'tangible benefits' and 'intangible benefits'.
Formal employment (Avoid employing 'outsiders' as far as possible)	LR (Collins 2016; Lee 2013; Mbaiwa & Stronza 2010; Mutanga et al. 2017; Saufi, O'Brien & Wilkins 2014; Thondhlana et al. 2016) PR	Formal employment is the most common tangible/direct benefit emerging in the LR and PR. On the reverse side, employing outsiders emerges as a factor that negatively influences proconservation attitudes (LR) and as a 'loss' (PR).
Informal employment and entrepreneurship/SMME development	LR (Lee 2013; Roe & Elliott 2006; Stronza & Gordillo 2008; Swemmer, Mmethi & Twine 2017) C (Giampiccoli et al. 2015) PR	'Informal/indirect employment' is a tangible/direct benefit according to the LR and includes entrepreneurship and small business opportunities. Entrepreneurship is one of the 'Es' in the 'CBT E model' by Giampiccoli et al. (2015). The PR revealed that more opportunities to sell and showcase crafts and more awareness around the training opportunities offered by reserve and government would increase positivity towards Dinokeng. At Mkhambathi, participants said they would be more positive towards the reserve if there was more entrepreneurship, microemployment opportunities and training. At Phinda, skills training and SMME development emerged as a means to increase positivity.
Revenue from tourism, park and local government	LR (Lee 2013; Mbaiwa & Stronza 2010; Snyman 2014)	This is amongst the tangible benefits in the LR. This source of revenue can include community levies, gate/entrance fees, rental of land from the community, donations and so forth.

Table 3 continues on the next page →

3. Community beneficiation components	and components used to build the People Parks Origin	Win-Win Framework. Original context and discussion
Sustainable usage of natural resources Sustainable community governance of natural resources Alternative trade-off's	PR LR (Allendorf et al. 2006; Rahman et al. 2017; Stone & Nyaupane 2018; Waylen et al. 2010) C & C (Nyaupane & Poudel 2011; Salafsky & Wollenberg 2000)	'Sustainable harvesting of natural resources for community use' is a tangible benefit emerging from the LR. In support of this, the PR reveals access to natural resources as important. Alternatively, the framework by Nyaupane and Poudel (2011) proposes less dependency on natural resources and Salafsky and Wollenberg's model indicates the value of alternative livelihood options to reduce pressure on the environment. While the options proposed by these authors would be the best in some circumstances, depending on the specific protected area, in others, local people still need to derive livelihood from the land. Furthermore, in certain cases, deriving livelihood from wildlife and permitting local governance of resources can be very successful (Stone & Nyaupane 2018). The PPWW thus indicates all three as possible options.
Payment for conservation actions	LR (Ferse et al. 2010; Sachedina & Nelson 2010; Sommerville et al. 2010)	This, also referred to as 'Payment for Environmental Services', is a tangible/direct benefit in the LR. It refers to payments made to the community for undertaking defined conservation actions.
Infrastructural development: Education Health Amenities	C & C (Nyaupane & Poudel 2011) LR (Kohler & Brondizio 2017; Mehta & Heinen 2001; Swemmer et al. 2017) PR	'Infrastructure/development' as a tangible benefit is a finding from the PR, but the author's differentiation into health, education and amenities is borrowed from the framework by Nyaupane and Poudel (2011). In the LR, 'Community development projects' surface as a tangible benefit, but the bulleted wording chosen for this PPWW component, would, by default, include this.
General community support	LR (Mutanga et al. 2017; Swemmer et al. 2017) PR	In the LR this is discussed as a tangible benefit, for example, the loan of a vehicle/tractor or donations of meat, wood, etc. for community events. In the PR, participants referred to 'General community support' as a benefit, such as Phinda donating meat for community functions.
Resolved land rights (Clear management arrangement)	LR (Bezerra 2018; Thondhlana et al. 2016)	Bezerra (2018) and Thondhlana et al. (2016) discuss the choices available to communities, under South African law, who win a land claim on a protected area. They explain the conflict that can arise, often because of insufficient clarity regarding the co-management agreement. The PPWW therefore includes 'Resolved land rights' as well as the importance of a clear management arrangement. This is also applicable beyond the South African context.
Intangible benefits		
Collective decision-making Collaboration Communication	LR (Niedziałkowski et al. 2018; Thondhlana et al. 2016; Thondhlana & Cundill 2017; Zhang et al. 2017) C (Brook et al. 2009; Garrod et al. 2001 in Garrod 2003)	'Decision-making' is included as an intangible benefit within the LR; and 'Collective decision-making' is one of the steps indicated in the model by Garrod et al. (2001) (in Garrod 2003). The 'Stool Model' by Brook et al. (2009) contains 'Collaboration' as one of four critical supports. In the LR, communication emerges in several different sections and is an important feature of adaptive management (Torquebiau & Taylor 2009).
Information dissemination Interaction Participation	PR LR (Garrod 2003; Simpson 2008; Wali et al. 2017)	In the PR, 'Lack of information' and 'Lack of interaction' emerge as 'Losses'; and 'More information' and 'More involvement and interaction with protected area' arise as means of increasing the positivity of communities towards protected areas. In the LR, 'Participation' is discussed extensively under 'Other factors' that influence attitudes and behaviour, but which the authors do not consider as a benefit or a loss.
Education: • General • Environmental	LR (Burgoyne & Mearns 2017; Imran et al. 2014; Kideghesho et al. 2007; Snyman 2014; Stem et al. 2003; Swemmer et al. 2017; Waylen et al. 2010) PR	In the LR, 'Opportunities to learn about the environment' is discussed as an intangible benefit. In the PR, 'Environmental education' and 'General education to uplift the community' (mainly in the context of schools and learners) emerge as important benefits. Reinforcing this finding, 'More teaching about conservation and environment' and 'General education' surface as a means of increasing positivity. Interestingly, 'General education' is not prominent as a benefit in the literature reviewed. Conversely, based on the PR findings and a few recent studies in Africa, 'General education' appears to be of vital benefit in the African context. It includes supporting educational institutions and can involve infrastructure, provision of materials, funding programmes and so forth.
Capacity building/ empowerment	LR (Collins 2016; Mbaiwa & Stronza 2010; Saufi et al. 2014; Stem et al. 2003) C (Giampiccoli et al. 2015)	'Learning new skills (capacity building)' as an intangible benefit became apparent in the LR. Within the schemata that focus on the community, the 'Community-Based Tourism E-model' incorporates 'Empowerment'.
Business, management and leadership skills	LR (Mbaiwa & Stronza 2010; Stronza & Gordillo 2008)	In the LR, 'Personal growth in business, management and leadership' emerges as an intangible benefit.
Access for community to visit park as tourists	LR (Lee 2013; Strickland-Munro & Moore 2014) PR	Although scarce in literature, this comes forward as an intangible benefit in the PR. Participants mentioned 'Visiting PA' as a benefit and 'More opportunities to visit the neighbouring protected area' as a means of increasing positivity. This is a key finding that was not found in the schemata consulted.
Community custodianship of environment	LR (Spenceley et al. 2016) PR	While hardly emergent in the literature consulted for this LR, 'Responsibility towards the protected area' emerges clearly in the PR as one of the 'Other factors' affecting attitudes and behaviour towards the environment. Participants felt a distinct responsibility to protect the nearby protected area. This is another key finding, and its inclusion within this framework is novel.
Intrinsic appreciation of nature	LR (Campbell, Haalboom & Trow 2007; Cobbinah, Black & Thwaites 2015; Gadd 2005; Tessema et al. 2007; Thondhlana et al. 2016) PR	From the LR, 'Intrinsic appreciation of nature' is presented as an intangible benefit, while the PR shows that locals appreciate the protected area and the importance of conservation. Participant quotes across all three case studies pointed to appreciation of nature, animals and conservation.
Improved social capital	LR (Cetas & Yasué 2017; De los Angeles Somarriba-Chang & Gunnarsdotter 2012; Pretty & Smith 2004)	'Social capital' empowers and strengthens local communities. It is discussed as an 'Intangible benefit' in the LR.
Pride in cultural identity	LR (Cobbinah et al. 2015; Collins 2016; Lee 2013; Pfueller, Lee & Laing 2011; Stone & Nyaupane 2018)	'Heightened cultural identity, cultural activities, pride and self-esteem' are 'Intangible benefits' in the LR.
Cultural exchange with tourists	LR (Lee 2013; Stronza & Gordillo 2008; Tolkach & King 2015)	The LR reveals 'Chances to learn from and interact with people from other cultures/cultural exchange' as an intangible or indirect benefit.
Other internal influences		These are not benefits but do influence people-park relationships and are hence included in the PPWW Framework.
Build up trust over time	LR (De Pourcq et al. 2015; Ferse et al. 2010; Tolkach & King 2015)	This is discussed under 'Other Factors' in the LR. Good benefits may be in place, but without trust built up over time, local people may not overcome their suspicion of external stakeholders, park management or tourism management, which can impact relationships.

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3. Community beneficiation components	Origin	Original context and discussion
Mitigate human–wildlife conflict Consider compensation schemes	LR (Cobbinah et al. 2015; Gadd 2005; Ghoddousi et al. 2018; Infield & Namara 2001; Mutanga et al. 2017; Nyaupane & Poudel 2011; Pechacek et al. 2013; Snyman 2012). PR	In the literature reviewed, 'Human-wildlife' conflict is a clear 'Loss' and causes negative attitudes towards conservation and negative behaviour. 'Fear of wild animals' emerges as a theme in the PR under 'Losses'. The LR also reveals the importance of compensation schemes as mitigation.
Acknowledge perception of losses and address them	PR	In the analysis of the primary data, the importance of acknowledging the perception of losses and addressing these as a solution to increase positivity, emerges.
Have local champions drive initiatives	C (Brook et al. 2009) PR	The 'Stool Model' of Brook et al. indicates the importance of having local champions. In the PR, Phinda was found to have success working together with local champions. If projects have a champion within the local community driving it at grassroots level and supported by other stakeholders, the chances of success are greater.
Incorporate local culture into design of tourism products and activities	LR (Saufi et al. 2014)	In the LR, 'Exclusion of local symbols' is observed as a factor that negatively influences attitudes and behaviour. For the PPWW Framework, however, it is phrased positively, in the sense of incorporating local culture as a means towards achieving a win-win scenario. This concept was then also extended to 'activities'.
Devolve power	LR (Krűger 2005; Lucas et al. 2008; Niedziałkowski et al. 2018; Thondhlana & Cundill 2017)	Devolution of power entrenches communities as active partners and can encourage improved attitudes and behaviour towards conservation.
Equip staff with skills required to train, empower and interact with local people	LR (Stoll-Kleemann 2005)	This component arises in the context of staff needing to build capacity among local people (as an intangible benefit) and work closely with the community. However, staff often lack the requisite skills and may themselves require training in order to work optimally with the community.
Beneficiation principles		These principles need to be considered in conjunction with the tangible and intangible benefits that are included in PPWW and have been discussed in this table.
Determine which benefits matter most to the community and optimise them	PR	In the PR findings, there is non-alignment between the benefits that mattered most to communities, and the benefits that protected area management thought mattered most to communities. Hence, there is a clear need to include this principle in the PPWW.
Offer a mix of tangible and intangible benefits	LR (Cetas & Yasué 2017; Stem et al. 2003; Stronza & Gordillo 2008) PR	In the literature reviewed, these authors note that a combination of tangible and intangible benefits is critical. This is confirmed in the PR, emerging as a solution to increase positive attitudes.
Aim for equitable benefit distribution	LR (Giampiccoli et al. 2015; Gurung & Seeland 2011; Larson et al. 2016; Scanlon & Kull 2009)	These authors observed the importance of equitable benefit distribution.
Listen to community and provide choices regarding benefits	LR (Harihar et al. 2015; Wali et al. 2017)	Listening to the community regarding their specific needs, shaping benefits based on this and providing choices to communities regarding benefits they would like to receive, is discussed in the LR under 'Other factors' which can influence attitudes and behaviour.
Communicate all benefits to community	PR	The PR revealed this to be a solution to increase positive attitudes and can be relatively simple to implement.
 Be transparent and openly discuss benefit limitations Discuss expectations and realistic timeframes 	LR (Collins 2016; Spenceley 2008; Spenceley et al. 2016; Thondhlana & Cundill 2017)	This is first observed in the LR in the context of being realistic regarding the benefits that can result from tourism and as a principle that should apply to benefit distribution. This beneficiation principle includes setting realistic timeframes and expectations, for example, benefits are often insufficient for large communities and those living further from the park. This needs to be openly acknowledged.
Link tourism to benefits: Use tourism income for benefits Communicate that tourism brings benefits	LR (Gadd 2005; Matarrita-Cascante, Brennan & Luloff 2010) PR	The literature reviewed includes 'The presence of tourism and using tourism to its full potential' as one of the 'Other factors' that influences pro-conservation behaviour. When locals recognise the value of tourism, it can lead to tangible protective actions towards the environment. The PR revealed that when local people do not link tourism to benefits, it detracts from pro-conservation attitudes and behaviour. In the present framework it is included as a component necessary for a win-win scenario – stakeholders should actively point out to communities the benefits realised through tourism.
Vertical two-way arrow running across all four layers, labelled 'Influence relationships'		This arrow indicates that circumstances and activity in each layer will influence relationships. While the final 'Outputs' layer (Table 4) focuses on the people-park relationships, what happens in this final layer could also feed back into preceding layers. For example, pro-conservation behaviour results in a better relationships and the environment is improved. A healthier natural environment could in turn contribute to a healthier tourism industry, thus causing more tourists to visit and creating more capacity for beneficiation, which improves attitudes further, and so the cycle continues.

C, community only; C & C, community and conservation; LR, literature review; PPWW, People Parks Win-Win Framework; PR, primary research.

 TABLE 4: Layer 4 and components used to build the People Parks Win-Win Framework.

4. Outputs components	Origin	Original context and discussion
Green and peach coloured arrows in lower half of framework	LR (see Table 3: `Community beneficiation components') PR	The support in literature for the progression from benefits to attitudes to behaviour is demonstrated in Table 3. In addition, the progression from 'perceptions' to 'level of support for conservation' appears in the schema by Bennett (2016). Finally, the PR indicates how benefits and losses influence relationships, and that through community beneficiation and by following beneficiation principles, win-wins can be reached. Hence, in PPWW, the researcher uses coloured arrows in the framework's lower half to represent the following: 1. Green: When the community receives these benefits (Layer 3), it generates pro-conservation attitudes. The solid border on this arrow indicates that this is widely accepted. This in turn can generate pro-conservation behaviour. The dotted border of this next arrow indicates that this link may not always be evident. The final green arrow indicates that this progression (for the community) can result in a win-win situation. 2. Peach: The provision of these benefits (Layer 3) by the other stakeholders, together with following the principles of beneficiation (Layer 3) could result in a win-win situation.
Two-way arrow within the double circle	C & C (Tsaur et al. 2006)	This arrow illustrates that the people-park relationships is an active two-way relationships. The community are not merely passive subjects receiving from the park and relevant stakeholders. Community members need to reciprocate. To achieve a win-win, this relationships needs to be dynamic, adaptive, interactive and have a balance of power. While the need for this type of relationships emerges clearly in this research and PPWW constitutes a holistic compilation of the components that play a part in this relationships – the concept of the two-way arrow comes from the adaptation by Tsaur et al. (2006:642) of the framework by Ross and Wall (1999). In PPWW, this two-way arrow is inserted within the two overlapping circles.

C & C, community and conservation; LR, literature review; PPWW, People Parks Win-Win Framework; PR, primary research.

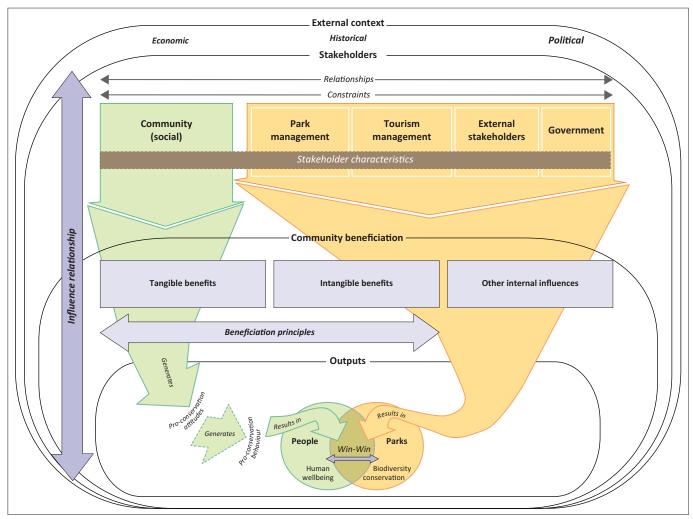


FIGURE 3: Simplified People Parks Win-Win Framework.

Conclusion

The biodiversity and poverty crises are realities and impact each other. In the African context, protected area management confronts very real constraints in terms of budgets and a limited number of staff, who need to accomplish a multitude of tasks. Communities bordering these parks are often impoverished and may not share the sentiment that these parks should be protected. The conservation of this crucial biodiversity thus depends on good relationships with surrounding communities and finding win-win solutions. Yet, there are gaps regarding what influences local communities to have, or not to have, pro-conservation attitudes and behaviour and regarding people-park relationships. Furthermore, an extensive framework that captures the multiple influences on this relationships did not exist.

The People Parks Win-Win Framework was constructed from literature, existing schema and primary research to illustrate the components that can influence the people-park relationships. The framework provides a more complex, multidimensional type of framework. It deviates from others in terms of its structure and arrangement; detailed focus on beneficiation; incorporation of more

stakeholders, as well as their characteristics; strong focus on community well-being being equally important to biodiversity conservation; centrality of the people-park relationships; and inclusion of an output layer, which demonstrates how the preceding layers could culminate in a win-win scenario, and also how pro-conservation attitudes and behaviour fit into this.

While the primary research was carried out in the South African context, the literature and schemata that contributed to the framework come from various authors worldwide. The resultant framework has global applicability to other settings where people live side by side with parks and can be adapted to suit different contexts. It can be used by stakeholders to: understand the multiple forces at play regarding the people-park relationships; consider the range of benefits and customise these to their own context and particular constraints faced; and consider the other internal influences and beneficiation principles which can maximise a good relationships and contribute to win-wins. This framework could be a practical tool for protected area management, communities and other stakeholders when developing strategies and plans for the future. It may also be of interest to academics - testing, customising or adding to it.

Rode et al. (2016:46) suggest that "win-win solutions" that can combine conservation and livelihoods benefits may not always be found, but that it is worth looking for them'. Winwins are indeed a complex process involving negotiations between different stakeholders with different agendas and clarity in planning as well as implementation. With commitment from government, conservation agencies, tourism bodies and other stakeholders, as well as informed realistic expectations from local communities recognition of their role and responsibilities, there is potential for tangible and intangible benefit provision within a healthy context. This could foster positive attitudes that could lead to pro-conservation behaviour and the instilling of robust reciprocate relationships between the park and the people living nearby - where communities benefit from the wildlife on their doorstep and are part of its conservation. The alternative of not investing in this crucial relationships and not ensuring a healthy sustainable flow of benefits (i.e. not looking for 'win-win solutions') could result in significant losses on both sides, with the final score being lose-lose.

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Competing interests

The author declares that she has no financial or personal relationships that may have inappropriately influenced her in writing this article.

Author's contributions

D.R.Q. is the sole author of this article.

Ethical considerations

Ethical clearance was issued by the University of South Africa (Unisa) (reference number: 2015/CAES/016) and permission obtained from the participating reserves. Informed consent was obtained from each chief or community leader, protected area manager as well as all participants.

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Data availability

The primary data analysed to construct the framework is available in Queiros (2020), but the original transcripts are protected by the ethics rules of the university.

Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

References

- &Beyond, 2018, Luxury experiential travel in Africa, Asia and South America, viewed 02 August 2018, from https://www.andbeyond.com/.
- Abel, N. & Blaikie, P., 1986, 'Elephants, people, parks and development: The case of the Luangwa Valley, Zambia', *Environmental Management* 10(6), 735–751. https://doi.org/10.1007/BF01867727
- Abrams, R.W., Anwana, E.D., Ormsby, A., Dovie, D., Ajagbe, A. & Abrams, A., 2009, 'Integrating top-down with bottom-up conservation policy in Africa', *Conservation Biology* 23(4), 799–804. https://doi.org/10.1111/j.1523-1739.2009.01285.x
- Adams, W.M., 2013, 'Conservation in the anthropocene: Biodiversity, poverty and sustainability', in M. Roe, D. Elliott, J. Sandbrook & C. Walpole (eds.), *Biodiversity conservation and poverty alleviation: Exploring the evidence for a link*, pp. 304–315, John Wiley & Sons, Ltd., Chichester.
- African Development Report, 2015, Africa's youth in the labour market, African Development Bank Group, Abidjan.
- Allen, L., Holland, K.K., Holland, H., Tome', S., Nabaala, M., Seno, S. et al., 2019, 'Expanding staff voice in protected area management effectiveness assessments within Kenya's Maasai Mara National Reserve', *Environmental Management* 63(1), 46–59. https://doi.org/10.1007/s00267-018-1122-6
- Allendorf, T., Swe, K.K., Oo, T., Htut, Y., Aung, M., Aung, M. et al., 2006, 'Community attitudes toward three protected areas in Upper Myanmar (Burma)', Environmental Conservation 33(4), 344–352. https://doi.org/10.1017/S0376892906003389
- Allendorf, T.D., 2010, 'A framework for the park-people relationships: Insights from protected areas in Nepal and Myanmar', International Journal of Sustainable Development and World Ecology 17(5), 417–422. https://doi.org/10.1080/13504501003788180
- Anthony, B.P., 2021, 'Paying for the past: the importance of fulfilling promises as a key component to resolving human–wildlife conflict', *Sustainability* 13(7407), 1–20. https://doi.org/10.3390/su13137407
- Baker, A., 2015, 'Let's prepare for Africa's population surge now Or face the consequences', *TIME Magazine*, 22 June, p. 44.
- Bann, E., 2001, 'Effects of media representations of a cultural ideal of feminine beauty on self body image in college-aged women: An interactive qualitative analysis', PhD thesis, The University of Texas at Austin, Austin, TX.
- Bennett, N.J., 2016, 'Using perceptions as evidence to improve conservation and environmental management', *Conservation Biology* 30(3), 1–11. https://doi.org/10.1111/cobi.12681
- Berkes, F., 2004, 'Rethinking community-based conservation', Conservation Biology 18(3), 621–630. https://doi.org/10.1111/j.1523-1739.2004.00077.x
- Bezerra, J., 2018, 'Land claims in South Africa: It's about the meaning of the land, not just money', *The Conversation: Academic Rigour, Journalistic Flair,* 10 August 2018, n.p.
- Biodiversity Conservation Network, 1999, Evaluating linkages between business, the environment, and local communities: Final stories from the field, Biodiversity Support Program, Washington, DC.
- Black, R., 2015, Social and economic impacts of tourist lodges on local communities: Case studies from Rwanda and Botswana, A report for the African Wildlife Foundation, Institute for Land, Water and Society, Albury.
- Brook, R.K., Kutz, S.J., Veitch, A.M., Popko, R.A., Elkin, B.T. & Guthrie, G., 2009, 'Fostering community-based wildlife health monitoring and research in the Canadian North', *EcoHealth* 6(2), 266–278. https://doi.org/10.1007/s10393-009-0256-7
- Burgoyne, C. & Mearns, K., 2017, 'Managing stakeholder relations, natural resources and tourism: A case study from Ololosokwan, Tanzania', *Tourism and Hospitality Research* 17(1), 68–78. https://doi.org/10.1177/1467358416639088
- Campbell, L.M., Haalboom, B.J. & Trow, J., 2007, 'Sustainability of community-based conservation: Sea turtle egg harvesting in Ostional (Costa Rica) ten years later', *Environmental Conservation* 34(2), 122–131.
- Ceballos, G., Ehrlich, P., Barnosky, A.D., Garcia, A., Pringle, R. & Palmer, T.M., 2015, 'Accelerated modern human-induced species losses: Entering the sixth mass extinction', *Science Advances* 1(5), 1–6. https://doi.org/10.1126/sciadv.1400253
- Cetas, E.R. & Yasué, M., 2017, 'A systematic review of motivational values and conservation success in and around protected areas', Conservation Biology 31(1), 203–212. https://doi.org/10.1111/cobi.12770

- Cobbinah, P.B., Black, R. & Thwaites, R., 2015, 'Biodiversity conservation and livelihoods in rural Ghana: Impacts and coping strategies', *Environmental Development* 15, 79–93. https://doi.org/10.1016/j.envdev.2015.04.006
- Collins, S., 2016, 'No easy road: An evaluation of the Makuleke community conservation model', in African Wildlife Foundation, Nairobi', African Conservancies: Towards Best Practices 1, 74–81.
- Coria, J. & Calfucura, E., 2012, 'Ecotourism and the development of indigenous communities: The good, the bad, and the ugly', *Ecological Economics* 73, 47–55. https://doi.org/10.1016/j.ecolecon.2011.10.024
- Creswell, J.W., 2014, Research design: Qualitative, quantitative and mixed methods approaches, 4th edn., Sage, CA.
- Davies, T.E., Fazey, I.R.A., Cresswell, W. & Pettorelli, N., 2014, 'Missing the trees for the wood: Why we are failing to see success in pro-poor conservation', *Animal Conservation* 17(4), 303–312. https://doi.org/10.1111/acv.12094
- De los Angeles Somarriba-Chang, M. & Gunnarsdotter, Y., 2012, 'Local community participation in ecotourism and conservation issues in two nature reserves in Nicaragua', *Journal of Sustainable Tourism* 20(8), 1–19. https://doi.org/10.1080/09669582.2012.681786
- De Pourcq, K., Thomas, E., Arts, B., Vranckx, A., Léon-Sicard, T. & Van Damme, P., 2015, 'Conflict in protected areas: Who says co-management does not work?', *PLoS One* 10(12), 1–15. https://doi.org/10.1371/journal.pone.0144943
- Diedrich, A., 2007, 'The impacts of tourism on coral reef conservation awareness and support in coastal communities in Belize', *Coral Reefs* 26(4), 985–996. https://doi.org/10.1007/s00338-007-0224-z
- Dinokeng, 2017, *The hub of Dinokeng Game Reserve*, viewed 10 April 2017, from http://www.gauteng.net/dinokeng/hubs/dinokeng-game-reserve.
- Ferse, S.C.A., Máñez Costa, M., Máñez, K.S., Adhuri, D.S. & Glaser, M., 2010, 'Allies, not aliens: Increasing the role of local communities in marine protected area implementation', *Environmental Conservation* 37(1), 23–34. https://doi.org/10.1017/S0376892910000172
- Firey, W., 1960, Man, mind and land, The Free Press, Glencoe, IL.
- Gadd, M.E., 2005, 'Conservation outside of parks: Attitudes of local people in Laikipia, Kenya', Environmental Conservation 32(1), 50–63. https://doi.org/10.1017/ S0376892905001918
- Garrod, B., 2003, 'Local participation in the planning and management of ecotourism: A revised model approach', *Journal of Ecotourism* 2(1), 33–53. https://doi.org/10.1080/14724040308668132
- Ghoddousi, S., Pintassilgo, P., Mendes, J., Ghoddousi, A. & Sequeira, B., 2018, 'Tourism and nature conservation: A case study in Golestan National Park, Iran', *Tourism Management Perspectives* 26, 20–27. https://doi.org/10.1016/j.tmp.2017.12.006
- Giampiccoli, A., Jugmohan, S. & Mtapuri, O., 2015, 'Community-based tourism in rich and poor countries: Towards a framework for comparison', *African Journal for Physical Health Education, Recreation and Dance* 21(4), 1200–1216.
- Gurung, D.B. & Seeland, K., 2011, 'Ecotourism benefits and livelihood improvement for sustainable development in the nature conservation areas of Bhutan', Sustainable Development 19(5), 348–358. https://doi.org/10.1002/sd.443
- Hackel, J.D., 1999, 'Community conservation and the future of Africa's wildlife', Conservation Biology 13(4), 726–734. https://doi.org/10.1046/j.1523-1739.1999.98210.x
- Harihar, A., Veríssimo, D. & Macmillan, D.C., 2015, 'Beyond compensation: Integrating local communities' livelihood choices in large carnivore conservation', Global Environmental Change 33, 122–130. https://doi.org/10.1016/j.gloenvcha. 2015.05.004
- Hulme, D. & Murphree, M., 1999, 'Communities, wildlife and the 'new conservation' in Africa', *Journal of International Development* 11(2), 277–285. https://doi.org/10.1002/(SICI)1099-1328(199903/04)11:2<277::AID-JID582>3.0.CO;2-T
- Imran, S., Alam, K. & Beaumont, N., 2014, 'Environmental orientations and environmental behaviour: Perceptions of protected area tourism stakeholders', *Tourism Management* 40, 290–299. https://doi.org/10.1016/j.tourman.2013. 07.003
- Infield, M. & Namara, A., 2001, 'Community attitudes, and behaviour towards conservation: An assessment of a community conservation programme around Lake Mburo, National Park, Uganda', ORYX 35(1), 48–60. https://doi.org/10.1046/ j.1365-3008.2001.00151.x
- Kideghesho, J.R., Røskaft, E. & Kaltenborn, B.P., 2007, 'Factors influencing conservation attitudes of local people in Western Serengeti, Tanzania', *Biodiversity and Conservation* 16(7), 2213–2230. https://doi.org/10.1007/s10531-006-9132-8
- Kiss, A., 2004, 'Is community-based ecotourism a good use of biodiversity conservation funds?', Trends in Ecology and Evolution 19(5), 232–237.
- Kohler, F. & Brondizio, E.S., 2017, 'Considering the needs of indigenous and local populations in conservation programs', Conservation Biology 31(2), 245–251. https://doi.org/10.1111/cobi.12843
- Krantz, L., 2001, The sustainable livelihood approach to poverty reduction: An introduction, Swedish International Development Cooperation Agency, Stockholm.
- Krűger, O., 2005, 'The role of ecotourism in conservation: Panacea or Pandora's box?', Biodiversity and Conservation 14, 579–600. https://doi.org/10.1007/s10531-004-3917-4
- Larson, L.R., Conway, A.L., Krafte, K.E., Hernandez, S.M. & Carroll, J.P., 2016, 'Community-based conservation as a potential source of conflict around a protected area in Sierra Leone', Environmental Conservation 43(3), 242–252.
- Lee, T.H., 2013, 'Influence analysis of community resident support for sustainable tourism development', *Tourism Management* 34, 37–46. https://doi.org/10.1016/j.tourman.2012.03.007

- Liu, J., Qu, H., Huang, D., Chen, G., Yue, X., Zhao, X. et al., 2014, 'The role of social capital in encouraging residents' pro-environmental behaviors in communitybased ecotourism', Tourism Management 41, 190–201. https://doi.org/10.1016/j. tourman.2013.08.016
- Lucas, K., Brooks, M., Darnton, A. & Jones, J.E., 2008, 'Promoting pro-environmental behaviour: Existing evidence and policy implications', *Environmental Science and Policy* 11(5), 456–466. https://doi.org/10.1016/j.envsci.2008.03.001
- Lune, H. & Berg, B.L., 2017, *Qualitative research methods for the social sciences,* 9th edn., Pearson Education Limited, Harlow.
- Matarrita-Cascante, D., Brennan, M.A. & Luloff, A.E., 2010, 'Community agency and sustainable tourism development: The case of La Fortuna, Costa Rica', *Journal of SustainableTourism*18(6),735–756.https://doi.org/10.1080/09669581003653526
- Maxwell, J.A., 2013, *Qualitative research design: An interactive approach,* 3rd edn., California, Sage, CA.
- Mbaiwa, J., 2005, 'Wildlife resource utilization at Moremi Game Reserve and Khwai community area in the Okavango Delta, Botswana', *Journal of Environmental Management* 77(2), 144–156. https://doi.org/10.1016/j.jenvman.2005.03.007
- Mbaiwa, J.E. & Stronza, A.L., 2010, 'The effects of tourism development on rural livelihoods in the Okavango Delta, Botswana', *Journal of Sustainable Tourism* 18(5), 635–656. https://doi.org/10.1080/09669581003653500
- McCleave, J., Espiner, S. & Booth, K., 2006, 'The New Zealand people-park relationships: An exploratory model', *Society and Natural Resources* 19(6), 547–561.
- McShane, T.O., Hirsch, P.D., Trung, T.C., Songorwa, A.N., Kinzig, A., Monteferri, B. et al., 2011, 'Hard choices: Making trade-offs between biodiversity conservation and human well-being', *Biological Conservation* 144(3), 966–972.
- Mehta, J.N. & Heinen, J.T., 2001, 'Does community-based conservation shape favorable attitudes among locals? An empirical study from Nepal', Environmental Management 28(2), 165–177. https://doi.org/10.1007/s002670010215
- Mutanga, C.N., Muboko, N. & Gandiwa, E., 2017, 'Protected area staff and local community viewpoints: A qualitative assessment of conservation relationships in Zimbabwe', *PLoS One* 12(9), 1–21. https://doi.org/10.1371/journal.pone.0184779
- Mutanga, C.N., Vengesayi, S., Muboko, N. & Gandiwa, E., 2015a, 'Towards harmonious conservation relationships: A framework for understanding protected area staff-local community relationships in developing countries', *Journal for Nature Conservation* 25, 8–16. https://doi.org/10.1016/j.jnc.2015.02.006
- Mutanga, C.N., Vengesayi, S., Gandiwa, E. & Muboko, N., 2015b, 'Community perceptions of wildlife conservation and tourism: A case study of communities adjacent to four protected areas in Zimbabwe', Tropical Conservation Science 8(2), 564–582.
- Niedziałkowski, K., Komar, E., Pietrzyk-Kaszyńska, A., Olszańska, A. & Grodzińska-Jurczak, M., 2018, 'Discourses on public participation in protected areas governance: Application of Q Methodology in Poland', *Ecological Economics* 145, 401–409. https://doi.org/10.1016/j.ecolecon.2017.11.018
- Nyaupane, G.P. & Poudel, S., 2011, 'Linkages among biodiversity, livelihood, and tourism', *Annals of Tourism Research* 38(4), 1344–1366. https://doi.org/10.1016/j.annals.2011.03.006
- Odindi, J.O. & Ayirebi, G.K., 2010, 'Communities and conservation: In search for a winwin situation in the Great Fish River Reserve', *Journal of Sustainable Development* in Africa 12(1), 13–26.
- Ogunbode, C.A., 2013, 'The NEP scale: Measuring ecological attitudes/worldviews in an African context', *Environment, Development and Sustainability* 15(6), 1477–1494. https://doi.org/10.1007/s10668-013-9446-0
- Pechacek, P., Li, G., Li, J., Wang, W., Wu, X. & Xu, J., 2013, 'Compensation payments for downsides generated by protected areas', *AMBIO* 42(1), 90–99. https://doi.org/10.1007/s13280-012-0330-1
- Pfueller, S.L., Lee, D. & Laing, J., 2011, 'Tourism partnerships in protected areas: Exploring contributions to sustainability', *Environmental Management* 48(4), 734–749. https://doi.org/10.1007/s00267-011-9728-y
- Pretty, J. & Smith, D., 2004, 'Social capital in biodiversity conservation and management', Conservation Biology 18(3), 631–638. https://doi.org/10.1111/j.1523-1739.2004.00126.x
- Queiros, D.R., 2000, 'Implementing the fundamentals of ecotourism: The case of Mkambati Nature Reserve, Wild Coast, South Africa', unpublished master's dissertation, University of Pretoria.
- Queiros, D.R., 2020, 'Towards pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa', unpublished PhD thesis, University of South Africa, Pretoria.
- Rahman, M.M., Mahmud, M.A.L. & Shahidullah, M., 2017, 'Socioeconomics of biodiversity conservation in the protected areas: A case study in Bangladesh', International Journal of Sustainable Development & World Ecology 24(1), 65–72. https://doi.org/10.1080/13504509.2016.1169453
- Reimer, J.K.K. & Walter, P., 2013, 'How do you know it when you see it? Community-based ecotourism in the Cardamom Mountains of southwestern Cambodia', *Tourism Management* 34, 122–132. https://doi.org/10.1016/j.tourman.2012.04.002
- Rode, J., Wittmer, H., Emerton, L. & Schröter-Schlaack, C., 2016, 'Ecosystem service opportunities': A practice-oriented framework for identifying economic instruments to enhance biodiversity and human livelihoods', *Journal for Nature Conservation* 33, 35–47. https://doi.org/10.1016/j.jnc.2016.07.001
- Roe, D. & Elliott, J., 2006, 'Pro-poor conservation: The elusive win-win for conservation and poverty reduction?', *Policy Matters* 14, 53–63.
- Ross, S. & Wall, G., 1999, 'Ecotourism: Towards congruence between theory and practice', Tourism Management 20(1), 123–132.

- Roulston, K., 2014, 'Analysing interviews', in U. Flick (ed.), *The SAGE handbook of qualitative data analysis*, pp. 297–312, Sage, London.
- Sachedina, H. & Nelson, F., 2010, 'Protected areas and community incentives in savannah ecosystems: A case study of Tanzania's Maasai Steppe', *Oryx* 44(3), 390–398. https://doi.org/10.1017/S0030605310000499
- Salafsky, N. & Wollenberg, E.V.A., 2000, 'Linking livelihoods and conservation: A conceptual framework and scale for assessing the integration of human needs and biodiversity', World Development 28(8), 1421–1438. https://doi.org/10.1016/S0305-750X(00)00031-0
- Saufi, A., O'Brien, D. & Wilkins, H., 2014, 'Inhibitors to host community participation in sustainable tourism development in developing countries', *Journal of Sustainable Tourism* 22(5), 801–820. https://doi.org/10.1080/09669582.2013.861468
- Scanlon, L.J. & Kull, C.A., 2009, 'Untangling the links between wildlife benefits and community-based conservation at Torra Conservancy, Namibia', *Development Southern Africa* 26(1), 75–93. https://doi.org/10.1080/03768350802640107
- Scoones, I., 1998, Sustainable rural livelihoods: A framework for analysis, Institute of Development Studies (IDS), Brighton.
- Shibia, M.G., 2010, 'Determinants of attitudes and perceptions on resource use and management of Marsabit National Reserve , Kenya', Journal of Human Ecology 30(1), 55–62. https://doi.org/10.1080/09709274.2010.11906272
- Simpson, M.C., 2008, 'Community benefit tourism initiatives: A conceptual oxymoron?', Tourism Management 29(1), 1–18. https://doi.org/10.1016/j.tourman.2007.06.005
- Snyman, S., 2012, 'The role of tourism employment in poverty reduction and community perceptions of conservation and tourism in southern Africa', *Journal of Sustainable Tourism* 20(3), 395–416. https://doi.org/10.1080/09669582.2012.657202
- Snyman, S., 2014, 'Assessment of the main factors impacting community members' attitudes towards tourism and protected areas in six southern African countries', Koedoe 56(2), 1–12. https://doi.org/10.4102/koedoe.v56i2.1139
- Sommerville, M., Jones, J.P.G., Rahajaharison, M. & Milner-Gulland, E.J., 2010, 'The role of fairness and benefit distribution in community-based Payment for Environmental Services interventions: A case study from Menabe, Madagascar', Ecological Economics 69(6), 1262–1271. https://doi.org/10.1016/j.ecolecon.2009.11.005
- South Africa, 2003, National Environmental Management: Protected Areas Act (Act no. 57 of 2003), Government Notice No. 181, Government Gazette 26025, February 2003.
- South Africa, 2004, National Environmental Management: Biodiversity Act (Act no. 10 of 2004), Government Notice No. 700, Government Gazette 26436, June 2004.
- South Africa, 2016, National Environmental Management: Protected Areas Act, 2003 (Act no. 57 of 2003): Norms and Standards for the Management of Protected Areas in South Africa, Government Notice No. 382, Government Gazette 39878, March 2016.
- Spenceley, A., 2008, 'Local impacts of community-based tourism in southern Africa', in A. Spenceley (ed.), Responsible tourism: Critical issues for conservation and development, pp. 285–304, Earthscan, London.
- Spenceley, A., Rylance, A., Nanabhay, S. & Van der Watt, H., 2016, *Operational guidelines for community-based tourism in South Africa*, Department of Tourism, Pretoria.
- Stem, C.J., Lassoie, J.P., Lee, D.R., Deshler, D.D. & Schelhas, J.W., 2003, 'Community participation in ecotourism benefits: The link to conservation practices and perspectives', *Society & Natural Resources* 16(5), 387–413. https://doi.org/10.1080/08941920309177
- Stoll-Kleemann, S., 2005, 'Voices for biodiversity management in the 21st century', Environment: Science and Policy for Sustainable Development 47(10), 24–36. https://doi.org/10.3200/ENVT.47.10.24-36
- Stoll-Kleemann, S., De La Vega-Leinert, A.C. & Schultz, L., 2010, 'The role of community participation in the effectiveness of UNESCO Biosphere Reserve management: Evidence and reflections from two parallel global surveys', Environmental Conservation 37(3), 227–238. https://doi.org/10.1017/S037689291000038X

- Stone, M.T. & Nyaupane, G.P., 2018, 'Protected areas, wildlife-based community tourism and community livelihoods dynamics: Spiraling up and down of community capitals', *Journal of Sustainable Tourism* 26(2), 307–324. https://doi.org/10.1080/09669582.2017.1349774
- Strickland-Munro, J. & Moore, S., 2014, 'Exploring the impacts of protected area tourism on local communities using a resilience approach', Koedoe 56(2), 1–10. https://doi.org/10.4102/koedoe.v56i2.1161
- Stronza, A. & Gordillo, J., 2008, 'Community views of ecotourism', Annals of Tourism Research 35(2), 448–468. https://doi.org/10.1016/j.annals.2008.01.002
- Swemmer, L., Mmethi, H. & Twine, W., 2017, 'Tracing the cost/benefit pathway of protected areas: A case study of the Kruger National Park, South Africa', Ecosystem Services 28(Part B), 62–172. https://doi.org/10.1016/j.ecoser.2017.09.002
- Tessema, M.E., Ashenafi, Z.T., Lilieholm, R.J. & Leader-Williams, N.L., 2007, 'Community attitudes towards wildlife conservation in Ethiopia', in Proceedings of the 2007 George Wright Society Conference, Assessing public attitudes and experiences, St Paul, The George Wright Society, Minnesota, April 16–20, 2007, pp. 287–292.
- Thondhlana, G. & Cundill, G., 2017, 'Local people and conservation officials' perceptions on relationships and conflicts in South African protected areas', *International Journal of Biodiversity Science, Ecosystem Services & Management* 13(1), 204–215. https://doi.org/10.1080/21513732.2017.1315742
- Thondhlana, G., Cundill, G. & Kepe, T., 2016, 'Co-management, land rights, and conflicts around South Africa's Silaka Nature Reserve', Society and Natural Resources 29(4), 403–417.
- Tolkach, D. & King, B., 2015, 'Strengthening Community-Based Tourism in a new resource-based island nation: Why and how?', Tourism Management 48, 386–398. https://doi.org/10.1016/j.tourman.2014.12.013
- Torquebiau, E. & Taylor, R.D., 2009, 'Natural resource management by rural citizens in developing countries: Innovations still required', *Biodiversity and Conservation* 18(10), 2537–2550. https://doi.org/10.1007/s10531-009-9706-3
- Tran, L. & Walter, P., 2014, 'Ecotourism, gender and development in northern Vietnam', Annals of Tourism Research 44(1), 116–130. https://doi.org/10.1016/j. annals.2013.09.005
- Tsaur, S.H., Lin, Y.C. & Lin, J.H., 2006, 'Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism', *Tourism Management* 27(4), 640–653. https://doi.org/10.1016/j.tourman.2005.02.006
- United Nations, 2021, Global Population Growth and Sustainable Development (Report by United Nations Department of Economic and Social Affairs, Population Division), viewed 03 June 2022, from https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2022_global_population_growth.pdf.
- Wali, A., Alvira, D., Tallman, P.S., Ravikumar, A. & Macedo, M.O., 2017, 'A new approach to conservation: Using community empowerment for sustainable well-being', *Ecology and Society* 22(4), 1–14. https://doi.org/10.5751/ES-09598-220406
- Walpole, M.J. & Goodwin, H.J., 2001, 'Local attitudes towards conservation and tourism around Komodo National Park, Indonesia', *Enviromental Conservation* 28(2), 160–166. https://doi.org/10.1017/S0376892901000169
- Waylen, K.A., Fischer, A., Mcgowan, P.J.K., Thirgood, S.J. & Milner-Gulland, E.J., 2010, 'Effect of local cultural context on the success of community-based conservation interventions', Conservation Biology 24(4), 1119–1129. https://doi.org/10.1111/j.1523-1739.2010.01446.x
- World Economic Forum, 2019, How can South Africa reduce working poverty?, viewed 09 November 2019, from https://www.weforum.org/agenda/2015/08/how-cansouth-africa-reduce-working-poverty.
- Zhang, L., Luo, Z., Mallon, D., Li, C. & Jiang, Z., 2017, 'Biodiversity conservation status in China's growing protected areas', *Biological Conservation* 210(Part B), 89–100. https://doi.org/10.1016/j.biocon.2016.05.005
- Zube, E.H. & Busch, M.L., 1990, 'Park-people relationships: An international review', Landscape and Urban Planning 19(2), 117–131. https://doi.org/10.1016/0169-2046(90)90030-6