ECOTOURISM IMPACT ON LIVELIHOODS AND WELLBEING

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Introduction

Since the introduction of the ecotourism concept in the 1980s, it has experienced tremendous growth in application and scholarship (Fennell, 2008). Developing countries, in particular, have embraced ecotourism due to its ability to generate social, economic, and environmental benefits (Mbaiwa, 2015). The literature verifies that in Africa, over the years, ecotourism has arguably empowered most tourism countries (Backman & Munanura, 2017). The opportunities associated with ecotourism in developing countries have led to substantial investment in ecotourism-based livelihoods improvement programs in local communities, with the added expectation of benefits for wildlife conservation (Mbaiwa & Stronza, 2010). Some, however, have empirically challenged the actual realisation of the potential of ecotourism to substantially improve livelihoods and benefit wildlife (Archabald & Naughton-Treves, 2001). Specifically, Archabald and Naughton-Treves (2001) attribute this deficiency of actual realisation of the benefits of ecotourism to various constraints including mismanagement, inadequate tourism revenue, and inequity in benefit distribution. These constraints represent the operational limitations of ecotourism. There is yet another set of constraints distinct from operational constraints. Namely, constraints that are related to the complexities of livelihoods at the household level. Operational ecotourism constraints cannot be improved without enabling ecotourism to enhance the livelihoods of local communities and expect to achieve the full potential of ecotourism. Narrowing the gap between ecotourism operational constraints and livelihood constraints is a worthwhile endeavor.

This chapter addresses this gap by exploring the various aspects of the livelihoods concept which can be strengthened by ecotourism initiatives. This approach aims to demonstrate the diverse potential of ecotourism to sustain the wellbeing of people living in tourism destinations. Conceptually, the literature examines the impact of ecotourism using diverse theoretical frameworks: 1) sustainable livelihoods (Bennett, Lemelin, Koster, & Budke, 2012; Munanura, Backman, Hallo, & Powell, 2016); 2) capital assets (Duffy, Kline, Swanson, Best, & McKinnon, 2017); 3) community empowerment (Boley, McGeehe, Perdue, & Long, 2014; Scheyvens, 1999); 4) social exchange theory (Faulkner & Tideswell, 1997); and other frameworks (e.g., political ecology, see Mathis & Rose, 2016). These frameworks have contributed to our understanding of ecotourism benefits from the traditional welfare economics perspective.
However, these frameworks lack much of the ecotourism impact opportunities embedded in the poorly understood livelihood processes. Current theoretical frameworks typically used in assessing the impact of ecotourism, such as the sustainable livelihoods frameworks, do not provide clarity on what constitutes the livelihood process. This missed clarity in turn creates a missed opportunity for realising the full potential of ecotourism. Moreover, most of the above frameworks, when applied to evaluating ecotourism constraints, focus on community-level analyses. However, De Sherbinin et al. (2008) argue that livelihoods are produced and reproduced at the household level. Thus, in our opinion, household-level analyses have the most potential to reveal underlying constraints for livelihoods. A conceptual model is proposed in this chapter to overcome the knowledge gap just stated. This model integrates multiple theoretical frameworks to broaden the concept of livelihoods and to provide diverse ways to view ecotourism opportunities for local communities.

**Ecotourism opportunities for local communities**

The definition of the ecotourism concept is still debatable (Sharpley, 2006). In this chapter, however, a working definition is one adapted from Fennell (2008), suggesting that ecotourism is a form of non-consumptive and low adverse impact tourism, which aims to advance tourists’ experience and knowledge about nature while creating tangible and intangible opportunities for local communities. The substantial growth of ecotourism since the 1990s (Sharpley, 2006), is arguably a result of increasing tourists’ concern for the negative impact of their travel (Mieczkowski, 1995). The growth of ecotourism also results from its potential to generate economic opportunities for local communities without eroding their natural and cultural heritage (Mbaiwa, 2015). The potential of ecotourism to create opportunities for local communities is of interest in this chapter. This potential is illustrated in the literature. For example, according to Vivanco (2002), ecotourism empowers local communities to improve their living conditions. Scheyvens (1999), has argued that ecotourism has the potential to strengthen the local community’s economic, social, political, and psychological conditions. Similarly, Simpson (2007) has indicated that ecotourism has enhanced local community livelihoods through the creation of opportunities for local communities to own, control, and influence tourism functions.

The empowerment framework suggested by Scheyvens (1999), however, enables observation of both tangible and intangible opportunities of ecotourism, and therefore it is the most inclusive approach to conceptualise ecotourism opportunities. According to the empowerment framework, local communities are likely to draw economic, social, psychological, and political opportunities from tourism (Scheyvens, 1999). The economic opportunities include employment of community residents in formal and informal sectors of ecotourism, which generates income for residents (Scheyvens, 1999). Economic opportunities also include revenue from ecotourism enterprises that are wholly or partially owned by local community residents. However, access to jobs and business opportunities are insufficient indicators of the tangible economic benefits of ecotourism. Therefore, additional indicators of economic opportunities from ecotourism include reliable income, recurring revenue, equity in income distribution, and compensation for the opportunity cost of protecting ecotourism resources. Together such indicators represent tangible benefits of ecotourism for local communities.

According to Scheyvens (1999), the intangible benefits of ecotourism occur in the form of psychological, social, and political opportunities. Psychological empowerment opportunities of ecotourism encompass the creation of cultural tourism activities and services linked to local traditions, enabling the active involvement of residents, which potentially generates pride in
culture and self-esteem (Scheyvens, 1999; Simpson, 2007). The extent to which cultural tourism activities are owned, controlled, and operated by local communities, determines the strength of their psychological empowerment (Simpson, 2007). According to Scheyvens (1999), social empowerment opportunities of ecotourism occur when ecotourism activities enable the creation and sustenance of active community groups, particularly the most disadvantaged groups such as the youth groups, women groups, artisan groups, cultural dancing groups, traditional healer’s group, and tourist guides groups. It also occurs through the establishment of social infrastructure (e.g., schools, hospitals, roads) and other indicators, including the reduction of crime. Political empowerment opportunities occur when local community residents are represented at all levels of decision-making related to ecotourism. Indicators of political empowerment opportunities may include representation and active involvement of community groups such as grassroots community organisations and indigenous institutions in tourism planning and management. Lastly, Buckley (1994) indicates ecotourism’s potential to improve environmental conservation education and awareness among local communities, which is likely to create positive attitudes toward, and support for, environment among local communities. (Figure 13.1)

Ecotourism and the UN Sustainable Development Goals

Ecotourism as a strategy to improve community wellbeing advanced with international recognition of the sustainable development concept (Honey, 2008). The sustainable development concept emerged in tourism literature following the 1987 Brundtland Commission report Our Common Future (World Commission on Environment and Development (WCED), 1987). The Brundtland Commission defined sustainable development as one that meets present needs without compromising future needs (World Commission on Environment and Development (WCED), 1987). According to Müller (1994), sustainable development encompasses growth that balances economic, social, and environmental goals. Given the potential of ecotourism to advance social, economic, and environmental benefits (Fennell, 2008), ecotourism has become an essential tool to advance sustainable development (Butcher, 2006). For example, the United Nations declared the year 2002 as the International Year of Ecotourism in recognition of its potential to facilitate sustainable development, especially in developing countries (Butcher, 2006). The importance of ecotourism in advancing sustainable development has been reaffirmed by the emergence of UN Sustainable Development Goals (SDGs), aimed to reduce poverty and sustain wellbeing globally (Griggs et al., 2013).

In 2015, the United Nations introduced SDGs, following the 2012 Rio+20 summit in Brazil (Griggs et al., 2013). The SDGs refocus the global community attention toward reducing poverty and sustaining social, economic, and environmental wellbeing by 2030 (Griggs et al., 2013). The SDGs emerged following the end of the Millennium Development Goals 2015 deadline (Griggs et al., 2013). The parallels of ecotourism goals in each of the 17 Sustainable Development Goals (SDGs) as follows:
Development Goals (see Costanza et al., 2016) are striking. For example, some of the SDGs aimed to advance economic growth, improve health and education, and reduce inequity (Griggs et al., 2013), are also important goals of ecotourism (Fennell, 2008; Honey, 2008). Considering the SDGs means–ends spectrum framework suggested by Costanza, McGlade, Lovins, and Kubiszewski (2014) and Costanza et al. (2016), the SDGs are means to achieve an overarching goal of sustainable wellbeing (see Figure 13.2). Ecotourism, therefore, not only facilitates the achievement of SDGs but also leads to SDGs’ overarching goal of improving the sustainable wellbeing of communities in tourism-dependent countries. According to the means–ends spectrum framework (Costanza et al., 2014, 2016), achievement of sustainable wellbeing, the overarching goal of SDGs, is hierarchically shaped by: 1) sustainable scale shown in this chapter as securing natural capital or ecosystem services (e.g., SDGs 13 and 15—see Figure 13.2 for SDG statements); 2) efficient allocation of resources (e.g., SDGs 8 and 12); and 3) fair distribution of resources (e.g., SDGs 1 and 5). These examples of SDGs, based on the ecotourism literature (Scheyvens, 1999; Fennell, 2008), demonstrate that ecotourism and UN Sustainable Development Goals, share the overarching goal of improving sustainable wellbeing of communities. They also show that ecotourism is likely to substantively contribute toward the attainment of SDGs.

Ecotourism impact on means of Sustainable Development Goals

It has been indicated in Figure 13.2 that ecotourism has a positive impact on the ultimate means, intermediate means, and ultimate ends of SDGs, according to the hierarchical means–
The ecotourism literature has revealed the potential of ecotourism to strengthen natural capital and attainment of the ultimate means of SDGs (Buckley, 1994; Fennell, 2008; Stronza, 2007). Buckley (1994) provides a framework through which the impact of ecotourism on the ultimate means of SDGs can be viewed. For example, ecotourism has the potential to generate revenue, which provides direct and indirect financial contributions to the conservation of the environment (Buckley, 1994). The financial benefits of ecotourism have also been linked to improved political support for conservation (Gössling, 1999). Ecotourism also has the potential to improve environmental conservation awareness (Buckley, 1994). Environmental awareness is likely to create positive attitudes toward the environment and enables ecotourism service providers to minimise the adverse impact of their operations on the environment (Buckley, 1994; Fennell, 2008).

Figure 13.2 indicates that ecotourism has the potential to impact the intermediate means of SDGs, by contributing toward the efficient allocation of resources and fair distribution of resources, according to the means-ends spectrum framework (Costanza et al., 2014). However, efficient and fair resource allocations are secondary intermediary means, and it is argued in this chapter that access to livelihood resources regardless of whether access is fair and equitable represents primary intermediary means of SDGs. As indicated in Figure 13.3, primary and secondary intermediary means of SDGs interact to influence the SDGs overarching goal of sustainable wellbeing.

The literature reveals that the improvement of wellbeing is likely a function of access to livelihood assets that are vital for human life (Bebbington, 1999; Bennett et al., 2012). Bennett et al. (2012) have argued that access to livelihood assets is critical to a household’s potential to produce and maintain livelihoods. According to the concept of capital assets, livelihood assets are diverse and encompass elements such as financial capital, social capital, human capital, natural capital, and built capital (Bebbington, 1999; Bennett et al., 2012). However, according to the sustainable livelihoods framework (Bebbington, 1999), access to such diverse livelihood assets is a means to improved wellbeing (see primary intermediate means in Figure 13.3). Further, according to the and the means-ends spectrum framework (Costanza et al., 2014), wellbeing is not sustainable, unless access to livelihood assets is fair and efficient (see intermediate means in Figure 13.3).

The potential for ecotourism to enable access to, and strengthen, livelihood assets, has been documented in the literature. Mbaiwa and Stronza (2010), for example, indicated that ecotourism, especially in developing countries, is perceived as a means to facilitate access to essential livelihood assets. Research shows that ecotourism facilitates access to financial capital (Scheyvens, 1999; Snyman, 2014). In most developing countries, ecotourism opportunities are created through employment, revenue, tax, philanthropic financial contributions, community development programs, as well as grants and loans which capitalise small-scale community-led tourism enterprises (Gössling, 1999). Social capital is strengthened through the creation of strong relational networks and cohesion in communities empowered by ecotourism activities (Scheyvens, 1999). Similarly, Scheyvens (1999) and Simpson (2007) indicate that tourism provides opportunities for people to collaborate in pursuit of shared interests, such as tourism revenue, and a strong sense of trust, belonging, and integrity. Ecotourism also strengthens natural capital through raising awareness of the opportunity cost for losing natural systems and strengthening environmental stewardship in host communities (Gössling, 1999). In fact, Gössling (1999) argues that economic gains from ecotourism opportunities typically help to create incentives for local people and governments to protect wildlife.

Further, ecotourism-supported programs are aimed to improve knowledge, skills, and competencies needed by the host communities to optimise benefits derived from ecotourism.
opportunities arguably strengthen human capital (Snyman, 2014; Stronza, 2007). As a result, ecotourism enhances access to built capital through direct and indirect financing of vital social infrastructures (Duffy et al., 2017). The social infrastructure programs, typically funded through tourism revenue or government investment are aimed to improve tourism services, such as roads, bridges, telecommunications, electricity, water supply, and sewage systems. Together, these arguments illustrate the potential of ecotourism to strengthen the ultimate and intermediate means of improving SDGs’ overall aim of sustaining wellbeing (see Figure 13.3).

Ecotourism impact on ultimate ends of Sustainable Development Goals

The ultimate outcome of SDGs is the achievement of sustainable wellbeing (Costanza et al., 2016). The concept of wellbeing, however, is nuanced in the literature to render a clear understanding of links to ecotourism. Using the means–ends spectrum framework, Costanza et al. (2014, 2016), indicate that sustainable wellbeing is a function of ultimate means or access to natural capital, and intermediary means or efficient and fair access to productive resources such as financial capital (see Figure 13.4). The hierarchical nature of the means–ends spectrum approach used to conceptualise sustainable wellbeing is supported by the bottom-up situational
Figure 13.4 Ecotourism impact on vulnerabilities in livelihoods and SDGs processes (Adgers, 2006; Berrouet, Machado, & Villegas-Palacio, 2018; Hahn, Riederer, & Foster, 2009)

Note: Dotted lines represent ecotourism impact, SDG 1 = End poverty in all its forms everywhere, SDG 2 = End hunger, achieve food security and improved nutrition, and promote sustainable agriculture, SDG 3 = Ensure healthy lives and promote well-being for all at all ages, SDG 4 = Ensure inclusive and equitable quality education and promote life-long learning opportunities for all, SDG 5 = Achieve gender equality and empower all women and girls, SDG 8 = Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, SDG 10 = Reduce inequality within and among countries, SDG 11 = Make cities and human settlements inclusive, safe, resilient and sustainable, SDG 12 = Ensure sustainable consumption and production patterns, SDG 13 = Take urgent action to combat climate change and its impacts, SDG 15 = Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
influences approach suggested by Diener, Suh, Lucas, and Smith (1999). The bottom-up situational influences approach indicates that subjective wellbeing, or one’s perception of the quality of life, is influenced by bottom-up factors, which represent access to universal and basic needs of life (Diener et al., 1999). It is indicated that when the basic needs of life are attained, one’s cognitive evaluation of the quality of life is positive (Diener et al., 1999). Most ecotourism studies evaluating the impact of ecotourism on wellbeing have paid more attention to the impact on objective wellbeing aspects, or the means to sustaining wellbeing (Snyman, 2014). This body of knowledge has demonstrated evidence of ecotourism’s potential to strengthen environmental awareness and protection, economic vitality, and social capital in tourism destinations.

However, the literature indicates that wellbeing is a state of one’s life, and it conceptually encompasses objective and subjective dimensions (Summers, Smith, Case, & Linthurst, 2012). It is also indicated that subjective wellbeing condition is a function of objective wellbeing (Kahneman & Deaton, 2010). Objective wellbeing encompasses access to basic material needs, and therefore represent means to sustainable wellbeing, as shown in Figure 13.4 (Summers et al., 2012). Subjective wellbeing, on the other hand, represents one’s perception of the quality of life, that is, the ultimate ends, as shown in Figure 13.4 (Organisation for Economic Co-operation and Development, 2013). Therefore, understanding the impact of ecotourism on objective and subjective wellbeing aspects broadens understanding of links between ecotourism and wellbeing. In fact, the literature calls for integrating objective and subjective wellbeing in research models to fully grasp the impact of tourism on wellbeing (Uysal, Sirgy, Woo, & Kim, 2016). Research linking ecotourism to subjective wellbeing is emerging in the current literature (Uysal et al., 2016). This body of knowledge shows evidence that tourism positively impacts people’s perceived quality of life.

The concept of subjective wellbeing encompasses three dimensions; evaluative, eudaimonic, and affective feelings (Organisation for Economic Co-operation and Development, 2013). The evaluative dimension represents an individual’s perceived satisfaction with life (Organisation for Economic Co-operation and Development, 2013). According to Diener et al. (1999), life satisfaction is a cognitive evaluation of an individual’s quality of life. It is a cognitive judgment process that is dependent on the comparison of an individual’s life circumstances with what is perceived to be a desired standard of life (Diener et al., 1999). The eudaimonic dimension represents an individual’s perceived psychological wellbeing condition (Diener et al., 2009; Organisation for Economic Co-operation and Development, 2013). Psychological wellbeing refers to an individual’s perceived socio-psychological prosperity, encompassing psychological needs of competence, relatedness, self-acceptance, and other life fulfillment factors (Ryan & Deci, 2001). The affective dimension represents an individual’s emotional wellbeing conditions that influence emotions and functioning (Diener et al., 2009). According to Kahneman and Deaton (2010), emotional wellbeing encompasses the emotional quality of experiences of joy, sadness, and other emotions that inform pleasantness or unpleasantness of one’s life. Together, these aspects of subjective wellbeing are likely to demonstrate the extent to which ecotourism positively impacts diverse aspects of people’s lives.

**Socio-ecological vulnerability and the impact of ecotourism**

The potential for ecotourism to strengthen SDGs’ ultimate means (i.e., natural capital), intermediate means (i.e., access to livelihood resources), and ultimate ends (i.e., sustainable wellbeing) has been demonstrated earlier. However, the above suggested positive impact of ecotourism assumes that the system in which ecotourism interacts with livelihood processes is
free from shock, stress, and turbulence. According to the literature, this assumption is not likely, and in fact, it is argued that livelihoods processes typically experience, and are constrained by, shocks and stresses. Devereux (2002) has argued that vulnerability to shocks and stresses is likely responsible for chronic poverty in the developing world. Therefore, notwithstanding the opportunities that ecotourism presents to SDGs’ aim of sustaining well-being, one of the remaining limitations of SDGs is the socio-ecological vulnerability in livelihood processes.

Vulnerability refers to the extent to which a system is likely to be adversely affected by risk (Turner, 2010). As indicated in Figure 13.4, the vulnerability in livelihood processes can be viewed from two distinct but complementary perspectives. For example, in the initial phase of livelihood processes where natural capital or ecosystem services provision livelihoods, according to the means–ends spectrum framework (Costanza et al., 2014), vulnerabilities are shaped by risks within a coupled human–environment system (Turner, 2010). Within a coupled human–environment system, vulnerability, according to the vulnerability risk framework (Adger, 2006; Berrouet et al., 2018), encompasses social and ecological dimensions. Social vulnerability refers to the disruption of a social system (Adger, 2000) due to changes in ecosystem service provisions (Berrouet et al., 2018). The literature shows that the extent to which changes in the ecosystem services disrupt a social system depends on sensitivity risk (e.g., high level of people’s dependency on the ecosystem service provisions), and adaptive capacity risk (e.g., limited capacity to adapt to changes in ecosystem services) (Adger, 2006; Berrouet et al., 2018).

Ecological vulnerability, on the other hand, refers to the extent to which an ecosystem fails to maintain its functions or experiences changes that diminish its capacity to provision ecosystem services (Berrouet et al., 2018). Ecological vulnerability, typically, is a function of exposure to endogenous risk factors (e.g., vegetation cover change) or exogenous risk factors (e.g., change in land use or excessive extractive use) (Adger, 2006; Berrouet et al., 2018). Exogenous risk factors are arguably the most immediate and impactful to environmental vulnerability (Baynham–Herd, Redpath, Bunnefeld, Molony, & Keane, 2018). For example, Adgers (2006) attributes ecological vulnerability to inadvertent or deliberate human activities such as, overuse of natural resources for subsistence and commercial interests, and retaliatory killing of wildlife, to be responsible for ecological vulnerability. Similarly, the level of the impact of exogenous and endogenous risk factors on the ecological system depends on the sensitivity risk (e.g., the low threshold at which the ecological system is unable to maintain ecosystem functioning when exposed to risk factors), and the adaptive capacity risk (e.g., poor wildlife governance and protection) (Adger, 2006; Berrouet et al., 2018).

The potential of ecotourism to mitigate ecological risk factors responsible for social vulnerability has already been demonstrated in the literature (Hornoiu, 2016; Gössling, 1999; Stronza, 2007; Stone & Nyaupane, 2017). For example, Hornoiu (2016) has indicated that ecotourism has strengthened resilience to climate change. Further, the literature has indicated the potential for ecotourism to create alternative livelihood opportunities for communities whose livelihoods are dependent on, and threaten, natural systems (Hornoiu, 2016; Mbaia & Stronza, 2010; Stronza, 2007). Stronza (2007) has also indicated that ecotourism has minimised illegal and unsustainable extractive forest use practices. Similarly, Sabuhoro, Wright, Munanura, Nyakabwa, and Nibigira (2017) have indicated that ecotourism opportunities have dissuaded poachers at Volcanoes National Park in Rwanda.

The literature also reveals potential of ecotourism to mitigate social risks linked to drivers of ecological vulnerability (Stronza, 2007; Fennell, 2008; Stone & Nyaupane, 2017). For example, in Botswana, ecotourism has contributed positively toward the preservation and protection of natural land, hence minimising ecological adaptive capacity risk (Stone & Nyaupane, 2017).
Similarly, the literature has shown the potential of ecotourism to strengthen human and institutional capacity for wildlife protection (Buckley, 1994; Fennell, 2008; Gössling, 1999). Ecotourism has also raised environmental awareness and support for conservation (Buckley, 1994). At the same time however, ecotourism is also likely to impact the environment negatively through: 1) increase in demand for agricultural land due to increased access to financial capital (Stone & Nyuupane, 2017), development of ecotourism in fragile ecosystems (Das & Chatterjee, 2015); 2) unfair distribution of socio-economic benefits where the most natural resource-dependent groups do not access ecotourism opportunities (Goodwin, 2002); and 3) loss of ancestral use rights (Das & Chatterjee, 2015). Such negative impacts of ecotourism are likely to increase sensitivity and adaptive capacity risks in the social system, which arguably leads to increased exposure of the ecological system to exogenous risk factors (e.g., excessive extractive use).

**Livelihood vulnerability and the impact of ecotourism**

According to Adgers (2006), the third aspect of vulnerability, distinct from the vulnerability of a coupled socio-ecological system, is poverty vulnerability. Poverty vulnerability is embedded in the sustainable livelihoods system, and framed in the sustainable livelihoods framework (Adgers, 2006; Hahn et al., 2009). In this chapter, poverty vulnerability is considered as livelihoods vulnerability for conceptual alignment with the livelihood’s literature (Hahn et al., 2009). According to the sustainable livelihoods’ framework, livelihood vulnerability occurs when an individual or household experiences shocks and stress and is unable to sustain livelihoods due to limitations in coping capabilities (Bebbington, 1999) and livelihood resources constraints (Hahn et al., 2009). Such risks to livelihoods can be observed at three levels: the level of exposure to risk, sensitivity to risk, and adaptive capacity to adverse livelihood changes (Adgers, 2006; Hahn et al., 2009).

Sensitivity and adaptive capacity risks to livelihood stressors are described in Hahn et al. (2009). For example, adaptive capacity risks are reflected in the socio-economic characteristics and constraints (Hahn et al., 2009). As shown in Figure 13.4, the adaptive capacity risk is likely linked to constraints within the SDGs’ intermediary means. Such constraints, arguably, include limited access to financial and social capital. These adaptive capacity risks are also likely to influence ecological vulnerability risks (Gössling, 1999; Munanura, Backman, Hallo, Powell, & Sabuhoro, 2018). Sensitivity risks to livelihood shocks and stress encompass poor health, food insecurity, and limited access to clean water (Hahn et al., 2009). Poor health, coupled with limited access to food and water, are likely to increase livelihood vulnerability, and arguably limits the potential of attaining the SDGs’ ultimate aim of sustaining wellbeing. Sensitivity risks are also likely to increase the ecological vulnerability risks, especially when people opt to rely on natural systems for food, water, and medicine (Hahn et al., 2009; Munanura et al., 2018).

The potential for ecotourism to mitigate both the sensitivity and adaptive capacity risks responsible for livelihood vulnerability has been explored in the ecotourism literature (Duffy et al., 2017; Fennell, 2008; Mbaiwa & Stronza, 2010; Scheyvens, 1999; Stronza, 2007; Snyman, 2014). For example, Scheyvens (1999) pointed out the potential of ecotourism to strengthen tangible means (e.g., financial capital), and intangible means (e.g., social capital) of producing livelihoods. Das and Chatterjee (2015) and Munanura et al. (2018) have also demonstrated that ecotourism has improved the livelihoods of communities near protected areas. Such links between livelihood constraints, ecological vulnerability risk, and the mitigation potential of ecotourism have also been consistently suggested in the literature (Fennell, 2008; Gössling, 1999; Das & Chatterjee, 2015; Mbaiwa & Stronza, 2010). Mbaiwa and Stronza (2010) have
indicated that ecotourism has improved the livelihoods of communities in the Okavango Delta, and has reduced the environmental vulnerability risk attributed to livelihood constraints (Mbaiwa & Stronza, 2010).

**Broadening the perspective of livelihood vulnerability and ecotourism impact potential**

Exposure risk to livelihood shocks and stress, unlike sensitivity and adaptive capacity risks, has been narrowly examined in the livelihoods’ literature. Yet, if exposure risk to livelihood shocks and stress is not clearly understood, the potential to strengthen the resiliency of livelihoods, and attain SDGs’ ultimate goal of sustaining wellbeing will be unlikely. For example, Hahn et al. (2009) have conceptualised exposure risks to livelihood vulnerability as natural disasters and climate variability. However, from the family stress and resilience perspective, natural disaster and climate variability exposure risks represent external shocks and stress conditions responsible for adversity.

According to family stress theory (Boss, 2002), households are typically exposed to diverse adversity risk factors in the process of transforming and producing livelihoods. Such adversity risk factors are two-dimensional conceptually and include intra-household risk factors and external risk factors. The intra-household risk factors encompass stressful events such as the loss of a family income earner, divorce, chronic illness, death in the family, and other similar stressful events within a household (Boss, 2002). External adversity risk factors are typically beyond the control of households and include stressor events such as natural disasters (e.g., the 2005 hurricane Katrina), disease outbreak (e.g., the COVID-19 pandemic), human-made disasters (e.g., the 1994 genocide in Rwanda), economic instability (e.g., the 2008 economic recession), and climate variability (Hahn et al., 2009). Both internal and external adversity risk factors are likely to create exposure to livelihood shocks and stress, which could lead to livelihood vulnerability and increased human threat to the socio-ecological system (Das & Chatterjee, 2015).

The external and internal adversity risk factors introduced earlier, arguably give meaning to human response to adversity (McCubbin, 2001). According to family resilience theory, when exposure to adversity risks occurs, people respond by drawing from available protective factors to cope or overcome adversity (Benzies & Mychasiuk, 2009; Patterson, 2002). Such protective factors are typically drawn from adaptive capacity, that is, available livelihood resources such as financial capital (e.g., use of savings during financial strain) social capital (e.g., support from social network) (Benzies & Mychasiuk, 2009). In addition, the potential to cope with exposure to adversity risk factors, is also influenced by a household’s sensitivity risks outlined in Hahn et al. (2009).

Further, potential to cope with exposure to adversity depends on a households’ resilience capacity (McCubbin, 2001). For example, despite available resources, a household that is less hardy or resilient cognitively, and therefore less optimistic about life, is likely to maladapt and experience livelihood vulnerability when exposure to adversity occurs (Walsh, 2016). It is also argued that when resilience capacity exceeds adversity, livelihoods are likely to be resilient (Patterson, 2002). Therefore, in addition to exposure and sensitivity risk factors suggested by Hahn et al. (2009), this chapter suggests consideration of internal stress risk factors and broadening the scope of external stress factors beyond climate variability and natural disasters suggested by Hahn et al. (2009). According to Walsh (2016), a household’s ability to overcome adversity is dependent on a household’s belief systems (e.g., making sense of adversity), organisational patterns (e.g., connectedness), and communication processes (e.g., clarity of
information on adversity). Other scholars have linked adversity coping capability to intra-household hardiness (Funk, 1992), and sense of coherence (Antonovsky, 1993). Research aiming to understand the positive impact of ecotourism on local community livelihoods is likely to benefit from considering the potential of ecotourism to strengthen resilience factors that may enable local communities to cognitively minimise the impact of exposure to adversity.

Summary

This chapter has integrated a diverse set of theoretical frameworks to propose a model that conceptually presents antecedents of livelihoods (referred to as the ultimate means of SDGs in Figure 13.4), livelihood resources (referred to as the intermediary means of SDGs in Figure 13.4), and sustainable wellbeing (referred to as ultimate ends of SDGs in Figure 13.4). The measures for the ultimate means can be adapted from the ecosystem services literature (e.g., Boyd & Banzhaf, 2007; Millennium Ecosystem Assessment, 2005). The measures for the livelihood resources may be adapted from capital assets literature (e.g., Akamani & Hall, 2015; Bennett et al., 2012). The measures for subjective wellbeing aspects, such as the perceptions of satisfaction with life, emotional wellbeing, and psychological wellbeing, can be adapted from the subjective wellbeing literature (e.g., Diener et al., 2009). In addition, the proposed model illuminates the process of producing livelihoods, which remains conceptually abstract in the literature. Informed by the vulnerability in the coupled socio-ecological systems (Adgers, 2006), and sustainable livelihood systems (Hahn et al., 2009), the model suggests consideration of vulnerability in livelihood processes and in the efforts to achieve the SDGs. The measures for livelihood vulnerability can be adapted from Hahn et al. (2009), measures for socio-ecological vulnerability can be adapted from Berrouet et al. (2018).

Drawing from the family stress and resilience theories, the model suggests consideration of intra-household and other external risk factors imbedded in the socio-political environment in which livelihoods are produced. The model indicates that inattention to resilience to adversity likely leads to livelihood vulnerability, which may have negative socio-ecological implications. These vulnerabilities in the livelihood processes, arguably, diminish the potential to attain SDGs. The measures for households’ resilience capacity may be adapted from family resilience literature (e.g., Antonovsky, 1993; Bartone, 1995; Chew & Haase, 2016). Overall, the suggested model broadens the understanding of livelihood constraints for local communities in tourism destinations and argues for consideration of constraints and opportunities in the livelihood processes when designing ecotourism programs. Further, the model demonstrates the diverse potential of ecotourism to strengthen livelihoods beyond enabling access to livelihood assets such as financial capital. Until the complexity of livelihood processes is conceptually unpacked, the potential of ecotourism to strengthen local community livelihoods in tourism destinations will remain partially understood. Empirical evidence is needed to advance research on the links between ecotourism and vulnerability in the livelihood processes and SDGs. Hopefully, this chapter will initiate a scholarly discourse about diverse ways ecotourism can strengthen the livelihoods of local communities and facilitate the achievement of SDGs, particularly in developing countries.

References

Ecotourism Impact


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