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KNOWLEDGE AND INTERPRETATION OF SUSTAINABLE TOURISM IN THE ANNAPURNA CONSERVATION AREA, NEPAL: A COMPARISON OF KEY STAKEHOLDER GROUPS AND IMPLICATIONS FOR SUSTAINABLE TOURISM MANAGEMENT

by

Caroline Wrobel, BSc, University of Guelph, 2006

A Thesis Presented to Ryerson University in partial fulfillment of the requirements for the degree of Master of Applied Science in the Program of Environmental Applied Science and Management

Toronto, Canada, 2013

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Master of Applied Science Environmental Applied Science and Management Ryerson University

Abstract

The concept of sustainable tourism (ST) has emerged as an alternative to mass tourism and it is increasingly applied to protected areas given the dual challenges of protecting the natural resource base while also meeting the demands of tourism. For its success, however, tourism stakeholders should have access to ST information and a shared understanding of the concept's meaning.

This study examines the knowledge and interpretation of the ST concept and the important channels and sources of ST information of four key stakeholder groups in the Annapurna Conservation Area, Nepal. Semi-structured interviews were conducted with 55 participants in three sites located along the most popular trekking routes with economies heavily reliant on tourism. Qualitative analysis revealed important differences in knowledge and interpretations of ST among stakeholders and identified how these differences are shaped by available channels of ST information. The implications on ST development and management are explored and discussed.

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Abbreviations

AC	Annapurna Circuit
ACA	Annapurna Conservation Area
ACAP	Annapurna Conservation Area Project
ASL	Above sea level
CAMC	Conservation Area Management Committee
СС	Constant comparison
GTW	Greater-than-weakest
HMG	His Majesty's Government of Nepal
ICDP	Integrated Conservation and Development Program
ICIMOD	International Centre for Integrated Mountain Development
IUCN	International Union for the Conservation of Nature
KMNTNC	King Mahendra National Trust for Nature Conservation
NTNC	National Trust for Nature Conservation
РА	Protected area
QCA	Qualitative content analysis
SAARC	South Asian Association for Regional Cooperation
ST	Sustainable tourism
TMsC	Tourism Management sub-Committee
UCO	Unit Conservation Office
VDC	Village Development Committee
WG	Women's Group

1. INTRODUCTION

1.1. Background and Overview

Tourism has become the world's largest service sector industry and international tourist arrivals are projected to reach one billion in 2012 (UNWTO, 2012). Contemporary tourism trends suggest an increasing number of tourists are visiting natural or protected areas, particularly those in developing countries. These areas generally have high levels of biodiversity and unique natural and cultural attractions. These unique attractions, however, are often threatened by poorly managed tourism, which has led to the development of various alternative forms of tourism, including eco-tourism, nature-based tourism, responsible tourism, and sustainable tourism (ST).

The concept of ST has emerged as an alternative to mass tourism and it aims to minimize the negative impacts of tourism while maximizing the benefits through environmentally and socially aware practices. As such, it has become particularly relevant in the context of protected areas (PAs) given the need to conserve biodiversity and protect natural and cultural resources while maximizing economic benefits to local communities.

Nepal has an extensive PA network that attracts an increasing number of international tourists annually and tourism has rapidly become one of the country's most important sectors and sources of foreign exchange (Nyaupane & Budruk, 2009). In 2011, almost 50% of international tourists entering the country visited at least one PA and, of these, a third visited the Annapurna Conservation Area (Ministry of Culture, Tourism & Civil Aviation, 2011).

The Annapurna Conservation Area (ACA) is the largest PA in Nepal and it is the most popular mountain destination in the country, visited by over 60% of total trekking tourists in Nepal. Situated in the Himalayan landscape, it is home to over 120,000 people from 10 distinct ethnic groups (ACAP, 2009). The area is managed by the Annapurna Conservation Area Project (ACAP), which was established in 1986 due to increasing levels of environmental degradation caused by unregulated tourism. ACAP utilizes an innovative management approach based on community-based participation. This is facilitated through the development of local-level institutions and the implementation of various conservation and development programmes, including the Sustainable Tourism Management Programme. ACAP has also focussed on the capacity building of the local-level institutions with the aim of handing over ownership and management responsibility to the local communities in the future.

Although the environmental quality of the region was once in jeopardy, the current situation in the ACA has been regarded by some as a win-win-win scenario in which the local communities, tourists, and the environment are benefitting (e.g. Bajracharya, 2011).

1.2. Problem and Research Objectives

Sustainable tourism has been increasingly incorporated into PA management plans worldwide (Eagles *et al.*, 2002). One of the biggest challenges facing the operationalization of ST, however, is the multitude of definitions and diverse interpretations of the concept. Butler (1999) suggests that one of the key problems with the ST concept is the inability of stakeholders to cooperatively define what it means.

Community-based ST is the primary focus of ACAP in all major trekking areas in the ACA (Bajracharya, 2011) and one of the management plan's primary objectives is ST. The likelihood of this being an achievable objective, however, is dependent upon the level of understanding that key stakeholders have of this concept and whether this understanding is shared by stakeholders. A lack of a common understanding of the ST concept among key tourism stakeholders at a destination is likely to create confusion in the implementation and management of ST (Choi & Sirakaya, 2006; Ko, 2005). Furthermore, although ACAP's management term has recently been extended, it is expected to hand over management responsibility to the local-level institutions and communities by 2013. Thus in order to ascertain the ability of the local institutions to manage tourism in a sustainable fashion, insight into what they understand the ST concept to entail is required.

The research objectives for this thesis are to determine:

- 1. If key stakeholders have knowledge of ST;
- 2. How key stakeholder groups in the ACA interpret the ST concept; and
- 3. How interpretations of the concept differ among stakeholders and stakeholder groups.

4. The most important channels and sources of ST knowledge and information for stakeholders. It is argued that unless key tourism stakeholders in the ACA have a shared understanding of the ST concept and access to ST information, it is unlikely that they will be successful in achieving or moving towards and managing ST.

2. LITERATURE REVIEW

This chapter presents the comprehensive literature review that was undertaken for this thesis. It begins with an outline of some important contemporary tourism trends and focusses in on the trend of increasing visitation to developing countries, largely of which occurs in PAs. A discussion of PAs follows, including origins, management approaches and tourism within these areas. Mountain PAs in particular are discussed given the nature of the study area in this thesis. The concept of ST is then introduced and discussed in the context of interpretation, followed by a detailed discussion of tourism in PAs in Nepal and in the study area in particular.

2.1. Contemporary Tourism Trends

Tourism has become one of the largest service sector industries in the world economy. In the context of global exports, tourism ranks fourth after fuels, chemicals and food. International tourist arrivals grew to 983 million worldwide in 2011, an increase of 4.6% from 2010, and total international tourist numbers are expected to reach one billion for the first time ever in 2012 (UNWTO, 2012).

Several contemporary trends have been identified that have influenced recent patterns of tourism and recreation:

- The average level of formal education attainment has been rising globally and higher education levels are strongly correlated with demand for outdoor recreation activities. This has also led to an increase towards appreciative and learning travel as more educated travellers are seeking life-enriching travel experiences (Boissevain, 1996; Eagles, 2004; Eagles *et al.*, 2002).
- 2. Emerging economies in South and East Asia are creating a fast growing market for tourism through the increasing provision of paid holidays and growing incomes that enable greater freedom to travel. As a result, these countries provide an emerging large market of new and potential international and domestic tourists (Eagles *et al.*, 2002; Sharma & Bhattarai, 2011).
- New technologies, such as the internet, increasingly enable potential visitors to learn of and research new destinations of interest to them that otherwise may not have been considered as a travel destination (Eagles *et al.*, 2002; Luo *et al.*, 2004; Pan *et al.*, 2007).
- 4. International acknowledgment and concern over social and environmental problems is increasing and there is generally growing support for conservation and community development initiatives. This has led to many tourists becoming more discriminating in their destination choices: tourists are increasingly "voting with their feet" (Eagles *et al.*, 2002, p. 20).

5. The significant increase in the proportion of people over the age of 60 over the last century is expected to increase even more dramatically over the next century (UN, 2009). Given that older travellers tend to be interested in nature activities and in the kinds of experiences offered by natural areas and PAs (Eagles *et al.*, 2002), visitation to these areas is expected to increase as well.

Of particular importance is the expansion of the scope of international travel to increasingly encompass the developing world (Honey & Gilpin, 2009).

2.2. Tourism in the Developing World

International tourism is increasingly contributing to the economies of developing countries and international tourist arrivals in emerging economies are expected to increase twice as fast (4.4% per year) as those in advanced economies (2.2% per year) between 2010 and 2030. The market share of emerging economies increased from 30% in 1980 to 47% in 2011 and it is expected to reach 57% by 2030 (UNWTO, 2012).

Tourism is often perceived to be one of the few feasible tools for development in less-developed countries; however, governments in these countries frequently fall prey to *ad hoc*, haphazard development with resulting negative impacts on the economic and sociocultural well-being of the communities or residents involved (Briedenhann & Wickens, 2004; Tosun, 2000). The rapid development in these countries often results in large amounts of pollution and congestion in urban areas, making nature-based and peripheral tourism a popular and attractive option.

Given their geographic location, climates, history and often rich culture, many developing countries have a rich resource base with pristine natural treasures, offering competitive tourist attractions. Gunn (1972, 1979) describes natural attractions as being magnetic and suggests that natural features have an intrinsic power of attraction. As natural attractions become tourist icons, however, they experience higher levels of tourism which may negatively impact the area by threatening the quality of the very attraction. This has led to many of these areas being designated as "protected" in an effort to conserve their natural and cultural attributes.

2.3. Protected Areas

For over a century, land has been set aside in countries around the world for special protection based on their natural beauty and attractions, and generally high levels of biological diversity. During

this time, more than 100,000 sites worldwide have been classified as "protected", covering nearly 12% of the planet's land surface (Dudley *et al.*, 2005)

2.3.1. Origins

The United States is generally credited with pioneering the modern concept of PAs with the establishment of Yellowstone National Park in 1872. It is speculated that the rise of the national parks movement that followed in the Western world in the latter part of the 19th century occurred in response to industrialization that was rapidly altering natural landscapes (Davenport & Rao, 2002). The twentieth century saw this trend spread throughout the world, generating a family of "Yellowstone's children" (Everhart, 1972, p. 200) and US national parks became the principal model used for these PAs worldwide (Eagles *et al.*, 2002).

As national parks were increasingly established worldwide, the need for an international framework to guide the establishment and management of these areas was becoming apparent. The International Union for the Protection of Nature (established in 1948 and now the International Union for the Conservation of Nature (IUCN)), was the first truly global organization for nature protection. It defined a national park as "a relatively large area where one or several ecosystems are not materially altered by human exploitation and occupation" and its primary objective was to enable a global network of experts and organizations to strengthen nature preservation worldwide (IUCN, 2010).

2.3.2. Traditional Management Approaches

The classic model of the US park system entailed the establishment of national parks to preserve land and habitat for the benefit of future generations but to the exclusion of local and indigenous communities. The prevailing notion behind this approach was that land should be set aside, untouched and pristine in its wilderness, to preserve nature, "to fulfill an emotional need for wild places" (Colchester, 2004, p. 146) and to provide "a cultured person's playground" (Blaikie & Jeanrenaud, 1997, p. 63). The underlying assumption that nature and humans were, and had to be, separate entities and that human impact had to be minimized, if not restricted, for preservation dominated this protectionist approach, which has since been referred to as the protectionist paradigm (Oates, 1999).

Characterized by a top-down, centralized approach, the protectionism concept became central to national park conservation policy worldwide, including developing countries. Expropriation of land to the state with the forced eviction or relocation of local people from their land, without any form of

compensation, was common practice, often resulting in the widespread resistance of local people and park-people conflicts (Colchester, 2004; Phillips, 2003).

The protectionist approach to national parks dominated thinking up to around the mid-1960s, during which time the social revolution of the West was gaining ground worldwide. Various international human rights programs and the 1948 Universal Declaration of Human Rights brought the ideal of social justice to the world stage (Brechin *et al.*, 2002). With increasing recognition of human rights and democratization worldwide, it was becoming evident that classic protectionism model did not suit the new social conscience. It was also becoming increasingly evident that the protectionism model, developed in the context of Western countries with a great deal of wealth and space in generally sparsely populated areas (Blaikie & Jeanrenaud, 1997), was failing in developing countries faced with entirely different population, social, and geographic circumstances. Post-war population growth rates of as much as three to four percent annually in the developing world increased the incidence of park-people conflicts and created even greater challenges for the establishment and enforcement of national parks in these countries. It was during this time that the protectionist approach in the context of the developing world came under fire (Oates, 1999).

2.3.3. Advent of Sustainability and Sustainable Development

At the same time that the suitability of the protectionist approach for PAs in developing countries was being widely questioned, ecological scarcities in terms of natural resource supply and the absorptive capacity of earth's natural sinks were also becoming increasingly apparent (Mebratu, 1998). The 1970s marked a turning point in that the concept of sustainability was introduced as a guide for development (Pezzoli, 1997).

The concept of sustainability is known to have roots in economics where Thomas Malthus foresaw the limits to growth due to resource scarcity in *An Essay on the Principle of Population* (Brander, 2007; Rees, 2002). It is also known to have roots in forestry where it is a central principle, the principle of sustainable yield, entailing not harvesting more than is yielded (Wiersum, 1995). However, it was not until the publication of *The Limits to Growth* in 1972 (Meadows *et al.*, 1972) by the Club of Rome – a group of eminent scientists, researchers and concerned citizens – that the concept of sustainability was introduced into the global policy arena as a guiding principle to address the contemporary challenges facing mankind and the natural environment. The concept was further developed in the 1987 publication by the World Commission on Environment and Development (WCED) entitled *Our Common Future* (WCED, 1987), also known as the Brundtland Report. Here the concept of sustainability was

applied to development as "sustainable development" (Mebratu, 1998) and was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 43). The sustainable development (SD) concept was founded upon two principal influences: increasing evidence of ecological degradation and the persistence and worsening of poverty in a period of large increases in material wealth (Kemp *et al.*, 2005).

2.3.4. Contemporary Management Approaches

By the mid-1980s, with an increasingly global social conscience and the popularization of the SD concept, it was becoming widely acknowledged that the success of national parks and their conservation efforts in developing countries was dependent on their ability to address human concerns (Naughton-Treves *et al.,* 2005). The term "protected area" was adopted at the Third World Parks Congress, held in Bali in 1982, as a more inclusive alternative to "national park" and it was recommended that all nations should strive to place 10% of their land under PA status (IUCN, 2010). The SD concept was further popularized at the Rio Earth Summit in 1992, where an international set of action points for SD, collectively referred to as Agenda 21, was agreed upon. A transition from the protectionism paradigm to a more people-centered one that incorporated SD principles was initiated in response to the failures of the classic model and approach in the developing world (Bell & Morse, 2008).

By the mid-1990s, the scope of conservation policies was broadened by new policies that stressed the importance of sustainable socioeconomic development as a guiding principle of conservation. The emphasis on conservation shifted from protection and exclusion to the prevention of degradation and depletion through sustainable use and local participation (van Schaik & Rijksen, 2002). In 1994, the IUCN system for categorizing PAs was amended to include new categories (V and VI) encompassing culturally modified landscapes and managed resource areas that enabled resource extraction (Table 1).

The people-centered paradigm that has emerged is markedly different from its predecessor and it has been characterized as a "revolution in our approach to protected areas" (Phillips, 2003, p. 20). Hulme and Murphree (1999) identify three major shifts in thinking that accompanied this transition: a shift from centralized control to community-based empowerment and management; a reconceptualization of conservation measures based on principles of sustainable development and ecological dynamics; and the incorporation of market forces to make conservation pay for itself. The notion that PAs need not be owned and managed by a branch of government became increasingly

accepted (Borrini-Feyerabend *et al.,* 2004) and wheels of decentralization were set into motion. The rights of traditional societies were increasingly acknowledged, affirmed, and incorporated into park planning and management during this paradigm transition (Colchester, 2004).

Category	Description	Management Focus	Management Objectives
la	Strict Nature Reserve	Primarily for science	Scientific research; preservation of species and genetic diversity
lb	Wilderness Area	Primarily for wilderness protection	Wilderness protection; maintenance of environmental services
II	National Park	Primarily for ecosystem protection and recreation	Maintenance of environmental services; preservation of species and genetic diversity; tourism and recreation
111	Natural Monument	Primarily for conservation of specific natural features	Preservation of species and genetic diversity; protection of specific natural/cultural features; tourism and recreation
IV	Habitat/Species Management Area	Primarily for conservation through management intervention	Maintenance of environmental services; preservation of species and genetic diversity
V	Protected Landscape/Seascape	Primarily for landscape/seascape conservation and recreation	Protection of specific natural/cultural features; tourism and recreation; maintenance of cultural/traditional attributes
VI	Managed Resource Protected Area	Primarily for the sustainable use of natural ecosystems	Preservation of species and genetic diversity; maintenance of environmental services; sustainable use of natural resources from natural ecosystems

Table 1. Protected area categories established by the IUCN (Eagles et al., 2002).

The result of this paradigm transition has been legislation that is more people-focussed and the devolution of power from a centralized system to a more locally- and regionally-inclusive one (Phillips, 2003). Bottom-up PA management approaches have emerged that aim to balance socioeconomic

development and conservation through the development of resource-sharing and institutional agreements between all parties affected, with an emphasis on participation (Borrini-Feyerabend *et al.,* 2004). These contemporary approaches include Integrated Conservation and Development Programs (ICDPs).

2.3.4.1. ICDPs in Developing Countries

The emergence of the people-centered paradigm was partially fuelled by the growing recognition that externally-imposed conservation goals may lead to resentment and negative attitudes towards park staff and the overall conservation agenda, especially without consent and cooperation from residents (Nepal & Weber, 1995; Wells & McShane, 2004). This was especially evident in PAs in developing nations where high population densities, rapidly expanding populations, rampant poverty, and political instability generally clash with high levels of biodiversity. A link between poverty and declines in biodiversity and forest cover in these countries was identified and became the rationale behind the development of ICDPs. These programs were developed with the intention of enabling constructive participation and preventing the resentment of residents, which may lead to conflict, increased resource exploitation or other actions that compromise the conservation objectives (Robinson & Redford, 2004).

The ICDP approach was popularized in the late 1980s and 1990s. A focus of these programs is on the generation of incentives through social and economic development to garner community support for conservation (Spiteri & Nepal, 2008; Wells & McShane, 2004). The original aim of these programs was to combine conservation and development goals within a SD framework (McShane & Wells, 2004). Over time, there has been a growing desire to link socioeconomic development and conservation with the expectation that PAs and their ICDPs should directly contribute to the alleviation of poverty in developing countries (Naughton-Treves *et al.*, 2005). Although the link between conservation and poverty alleviation has been deemed highly speculative by some (Adams *et al.*, 2004; Roe, 2008) and ICDPs have had a poor track record of successfully achieving their objectives (McShane & Wells, 2004), ICDPs continue to be a popular conservation tool used throughout PAs in the developing world.

2.3.5. Tourism in Protected Areas

Protected areas generally offer diverse and unique natural attractions, often with various outdoor activity options. These attractions draw in tourists from all over the world and there has been a steady increase in the visitation to natural and protected areas (Buckley, 2000; Hummel, 1994; Marion &

Reid, 2007; Moore & Carter, 1993). It is expected that this trend will continue, particularly in developing countries (Nepal, 1997).

International tourism is often promoted in developing countries in efforts to bring income and employment to the local communities. It has also emerged as a major means of self-financing PAs (Boo, 1992; Dharmaratne *et al.*, 2000; Goodwin, 1996) and the implementation and usage of visitor fees has become an important strategy of tourism revenue generation for these areas and contributes to the financial sustainability of PAs (Baral *et al.*, 2008), especially those in developing countries where extreme funding deficits are suffered by thousands of PAs (McNeely, 1989; James *et al.*, 2001; Wilkie *et al.*, 2001). Thus, in addition to biodiversity conservation, the PA concept has become closely linked with tourism (Vaughan, 2000).

2.3.5.1. Planning and Management

Given that PAs garner a large of proportion tourism – both domestic and international – it is a critical component in the management of these areas. Every PA requires a management plan that addresses how tourism and associated development will be managed, specifies goals and objectives, and outlines relevant tourism policies (Foxlee, 2007). Although approaches to managing tourism in PAs are likely to vary between countries and sites, the ultimate aim of all PA managers is to maximize the benefits of tourism while minimizing the costs. This requires effective planning, policy implementation and proactive management, and policies and plans should be integrated with those at different levels to ensure effective coordination (Figure 1). Progress must also be monitored to determine if management actions are sufficient for achieving the objectives set out by the plan (Eagles *et al.*, 2002) and managers should be flexible, adapting the plan to changing conditions when necessary (Foxlee, 2007).

McCool *et al.* (2007) have identified some of the fundamental lessons that have been learned through contemporary experiences of managing tourism in PAs. Perhaps one of the most important is that the market for nature-based and PA-based tourism is growing and is expected to continue to do so. If proactively planned and managed, PAs can take advantage of this trend to further economic advancement, improve living conditions of residents, and protect the natural and cultural attributes of these areas. Residents and those affected by tourism in these areas, however, must be included in decision making and development. Tourism development must also proceed in a manner that recognizes and addresses the potential social and biophysical consequences. Additionally, the use of more sophisticated environmental and cultural education and information-sharing strategies is urgently needed to convey the value of these areas and to raise awareness and support for their conservation.



Figure 1. Protected area planning and management system (Eagles et al., 2002).

2.3.5.2. Community Involvement

It is often assumed that tourism in PAs will stimulate local economic activities from which the local communities will be able to derive benefits; however, this has rarely been found to be the case (Nepal, 1997). Many have argued that community participation in the tourism development process, or community-based tourism, can lead to better planning and management as well as a greater ability for these communities to derive real benefits from tourism (Murphy, 1985; Gunn, 1988; Simmons, 1994). This argument is founded on the notion that local communities have the greatest understanding of how the region they live in adapts to change, they are the ones most affected by tourism, and they are often an integral component of the tourism product (Scheyvens, 1999; Simmons, 1994).

Although there are many examples of successful community-based tourism projects worldwide (see Timothy, 1999; Foucat, 2002; Briedenhann & Wickens, 2004; Gurung, 2008), important potential limitations to this approach have been identified. Host communities in developing countries may not have the knowledge, the investment capital, or the infrastructure necessary for tourism development (Campbell, 1999; Tosun, 2000). There may also be cultural limitations to the involvement of host communities in tourism planning and management (Tosun, 2000). Host communities in countries with heavily centralized political structures may also feel that taking initiative would not be appropriate and that it is the government's responsibility to plan development opportunities (Timothy, 1999). Thus when community-based or participatory management approaches are utilized in PAs, these potential limitations must be considered and addressed throughout the tourism development process to better ensure their success.

2.4. Mountain Protected Areas

Mountain areas are likely to be protected due to their fragile nature and the pressures of tourism. Approximately 32% of all terrestrial PAs are located in the mountain biome with 9,345 PAs covering 1.7 million mountainous square kilometres (Körner *et al.*, 2005); 16% of the mountain biome is listed as "protected" (Chape *et al.*, 2003). The majority of these mountain PAs are located in the developing world. In fact, about 90% of the 1.2 billion people living in mountain environments globally are in developing countries and countries in transition (Körner *et al.*, 2005)

Mountain areas in developing countries are generally characterized by marginal development, inaccessibility, high levels of poverty, high pressure on natural resources, high population growth rates, and a highly unequal distribution of wealth and property. Most of the communities living in mountain regions are rural, most live in poverty, and they are generally dependent upon trade and agriculture (Charters & Saxon, 2007). At the same time, these areas are also characterized by high biological and cultural diversity (Nepal, 2002a) and almost half of the world's biodiversity hotspots are concentrated in mountain areas (Körner *et al.*, 2005).

2.4.1. Mountain Environments

Mountain environments and their immediate surrounding areas account for nearly a quarter of Earth's terrestrial surface and about half of the world's population depend on mountain resources in one way or another (Körner *et al.*, 2005), but especially for the provision of clean water. Mountain areas contribute three important ecosystem services (Körner *et al.*, 2005):

- 1. *Provisioning services:* they provide extractive resources, such as water and timber, that are used by lowland populations;
- Regulating and supporting services: these include biodiversity, climate modulation, watershed hazard prevention, key role in the water cycle, soil storage of water and carbon, and soil fertility; and,

3. *Cultural services:* these areas also have a spiritual role, recreational roles, and they serve as areas of cultural and ethnological diversity.

Mountain environments offer an experience of unspoilt nature through expansive and diverse landscapes, fresh air, remoteness, and generally rich biodiversity and unique culture. Mountain communities are comprised of several thousand different ethnic groups, and the diversity and uniqueness of these groups is often an important attraction for tourists (Charters & Saxon, 2007).

2.4.2. Tourism in Mountain Areas

Mountains are the second most popular tourist destinations after coastal and island regions (Walder, 2000). Mountain tourism accounts for over 20% of total global tourism, or \$70-90 billion annually, and travel to mountain areas is increasing at a rapid rate (Charters & Saxon, 2007).

Tourism is often seen as perhaps the most promising strategy for diversifying local livelihood options and sometimes the only option for development in remote or inaccessible mountain areas (Kruk, 2011). Mountain tourism in developing countries, however, is generally characterized by a lack of environmental standards and monitoring, haphazard planning and development, competition leading to price cutting and low returns, seasonality, and the dominance of tourism in the overall economy (Nepal, 2002; Thapa, 2004). These factors are often further compounded by an unstable policy environment (Kruk, 2011). This is often largely due to unmanaged or poorly managed tourism, which may result in negative impacts that threaten the very attributes that attract tourists to these areas to begin with.

2.4.3. Impacts of Tourism in Mountain Areas

Tourism can have a range of impacts on mountain regions, their communities and the local economies. These impacts are dependent on multiple factors: the carrying capacity, or the capacity of the area to absorb and recover from the impacts (Brown & Turner, 1997); the type and number of tourists visiting the area (Nyaupane & Thapa, 2004); and the level of involvement and participation of the host community in planning and management (Murphy, 1985; Gunn, 1988; Simmons, 1994; Tosun, 2000). Given the socially and environmentally fragile nature of these areas, however, these impacts are often negative if tourism is poorly managed or unmanaged.

2.4.3.1. Environmental Impacts

Mountain regions are particularly susceptible to environmental change and degradation due to the fragility imposed by high altitude, sloping terrain, and relatively thin soils that render the recovery of

these systems from disturbances slow or impossible (Charters & Saxon, 2007; Körner *et al.*, 2005). The short growing and reproductive seasons of the flora and fauna also make these ecosystems especially sensitive to human disturbance. Tourism activities are also often concentrated in small areas and these activities often require the development and use of tracks, paths, and roads used by vehicles, non-motorized transport, and pedestrians (Charters & Saxon, 2007)

Tourism has the potential to contribute to environmental conservation and protection and to raise awareness on local environmental issues if it is accompanied with suitable management and the effective sharing of environmental knowledge (Kruk & Banskota, 2007). Well-managed tourism may garner support for conservation among residents through education (Baral *et al.* 2007). It may also enable the protection of ecological processes and watersheds (Bajracharya *et al.*, 2005) and increase support for research and development of effective environmental practices and management systems (Eagles *et al.*, 2002; Charters & Saxon, 2007). On the other hand, poorly managed tourism activities may lead to: the clearing of vegetation; soil erosion; the altering or destruction of critical or scarce habitats and watersheds; water and air pollution; the over-extraction of valuable natural resources; wildlife relocation or behavioural changes (Eagles *et al.*, 2002; Charters & Saxon, 2007). Charters & Saxon, 2007); and increased solid and liquid waste that may harm the ecosystem (Mbaiwa, 2003).

2.4.3.2. Sociocultural Impacts

The diversity and uniqueness of ethnic groups in mountain communities is often an important attraction for tourists (Charters & Saxon, 2007). Well-managed tourism may facilitate the empowerment of women (Nyaupane *et al.*, 2006) and enable greater educational opportunities (Kruk & Banskota, 2007). It may also facilitate the preservation of culture and built heritage and improve the living condition of these communities (Eagles *et al.*, 2002; Nyaupane *et al.*, 2006). Furthermore, the maintenance of cultural authenticity may contribute to a region's competitiveness in the tourism market by distinguishing it from other destination or regions (Charters & Saxon, 2007). On the other hand, poorly-managed tourism may result in a reduced availability of already scarce resources shared with tourists (Charters & Saxon, 2007; Eagles *et al.*, *2002*). Community disturbances from noise and traffic in concentrated tourist areas may also arise. There is also greater potential for cultural assimilation, leading to a loss of cultural integrity and identity. King and Stewart (1996) argue that tourism eventually destroys the local culture by transforming these cultures into commodities and transforming traditional lifestyles into extractive and consumptive lifestyle. Kruk and Banskota (2007) argue that although in some cases this may be true, efforts towards reviving the cultural characteristics that draw in tourists to

begin with are often made once mountain communities begin profiting from tourism to prevent the destruction of culture.

2.4.3.3. Economic Impacts

Most of the communities living in mountain regions are rural, most live in poverty, and they are generally dependent upon trade and agriculture (Charters & Saxon, 2007). Well-managed tourism has the potential to provide much needed employment and enable economic diversification in communities traditionally reliant on subsistence farming. It may also attract revenue to assist with poverty alleviation and improve infrastructure and important community services, such as medical care. Perhaps most importantly, it may improve the overall sustainability of these communities (Charters & Saxon, 2007; Eagles *et al.*, 2002). Poorly-managed tourism, on the other hand, may have only short-term benefits and lead to unequal distribution of tourism benefits, creating or furthering the gap between those directly benefiting from tourism and those who are not (Charters & Saxon, 2007; Eagles *et al.*, 2002). Nepal, 2000). It may also facilitate poor working conditions and enable or further economic leakages from the local economy to outside players (Kruk & Banskota, 2007).

2.5. Sustainable Tourism

The concept of ST has emerged as an alternative to mass tourism that aims to minimize the negative impacts of tourism using practices that are more environmentally sensitive and socially aware. Sustainable tourism is perhaps the most relevant in the context of PAs given the dual challenges of enabling but limiting growth in tourism to protect the natural resource base while also satisfying the needs of various user groups or stakeholders (Nepal, 1997). The concept is especially relevant to mountain PAs given the fragile nature of these systems generally faced with increasing levels of tourism.

2.5.1. Origins and Definitions

The concept and principles of ST evolved from the original concept of SD. Contemporary growth of the tourism industry has also been accompanied by a growing acknowledgement of the challenges of the industry, including its resource-intensive nature which may lead to environmental degradation (Bell & Moarse, 2008) and its contribution to economic disparity and haphazard development in developing countries (Brohman, 1996). These challenges, combined with increasing levels of tourism to fragile environments that are often highly sensitive to change (Twining-Ward, 1999), and the historically unsustainable nature of tourism (McKercher, 2003), led to the widespread application of the SD concept

to tourism; ST arose out of the notion that SD is inherently good and appropriate for tourism (Butler, 1999).

Since its inception, ST has been conceptualized differently by researchers and organizations (see Garrod & Fyall, 1998). The World Tourism Organization (WTO) originally defined ST as: "Tourism which meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future" (WTO, 1993, p.7). Just as early definitions of SD were criticized for their ambiguity, early definitions of ST were criticized for being vague with no specification as to what exactly should be sustained (McCool, 1999) and for emphasis on business viability to the detriment of ecological and cultural factors (Hunter, 1997). In response to these criticisms, the definitions of both SD and ST have been expanded by many to address specific dimensions of sustainability that are important when operationalizing the concepts. A recent definition of ST by the WTO is (UNWTO, 2012):

Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

The economic, environmental, and social dimensions of sustainability in particular have been incorporated into recent conceptualizations of SD and ST and have been referred to as the pillars of sustainability (McKercher, 2003), although some have gone even further to include political, local, cultural, managerial, and technological dimensions as well (Bramwell *et al.*, 1996; Mowforth & Munt, 1998; Pawlowski, 2008).

The economic dimension of sustainability is often referred to in terms of the economics of the tourism industry in general but a number of other important elements must be considered from an economic perspective. These include: the equitable distribution of tourism benefits among local communities; the minimization of economic leakages from the local economy; the minimization of unfair competition among tourism businesses; the provision of employment opportunities; and the diversification of the local economy (Kruk *et al.*, 2007; McKercher, 2003).

The environmental dimension of sustainability is associated with the protection of the natural and physical environment, including wildlife and natural resources. Environmental sustainability entails: the conservation and management of natural resources; the minimization of pollution and waste; the conservation of biodiversity; the preservation of ecological integrity; and the maintenance of ecosystem services (Kruk *et al.*, 2007; McKercher, 2003; Swarbrooke, 1999).

The social dimension of sustainability has generally been afforded less attention relative to the economic and environmental dimensions in the ST debate until more recently. Social sustainability

entails: equal opportunities for all members of society; the alleviation of poverty; improved understanding between tourists and locals; tourist satisfaction; stakeholder participation in decision making; cultural preservation; and improved standard of living (Kruk *et al.*, 2007; McKercher, 2003; Swarbrooke, 1999).

These three pillars or dimensions of sustainability are interconnected or interdependent and may be mutually reinforcing or in competition with each other. The challenge of SD and ST is striking a suitable balance between these dimensions and recognizing the importance of each of these dimensions to overall sustainability (Reid, 1995).

2.5.2. Interpretations of the Concept

The ST concept has been subject to multiple definitions and diverse interpretations. Butler (1993) argues that ST may be thought of as "tourism which is in a form which can maintain its viability in an area for an indefinite period of time" (p. 29). Contemporary conceptualizations of ST, however, perceive the concept as being firmly grounded in the principles of its parental paradigm, SD (Butler, 1999; Sharpley, 2000). This had led to many distinguishing the ST concept from one of SD in the context of tourism, or sustainable tourism development (Butler, 1993; Mowforth & Munt, 1998; Tosun, 2001). Regardless of this distinction, ST has become a form of shorthand for tourism that adheres to principles of SD (Wight, 2002) and remains the most common term used by researchers and practitioners alike.

Butler (1998) suggests that in order for the concept of ST to abide by the principles of SD, a holistic and integrated approach is needed which addresses the three dimensions or pillars of sustainability and their interrelationships. A focus on the sustainability of the tourism industry in isolation from these additional dimensions of sustainability is contradictory to the SD concept (Butler, 1998) and unlikely to lead to or enable ST (McKercher, 2003). Although it is generally accepted that all dimensions should be considered, whether each is given equal consideration has been debated.

Many interpretations of the concept generally explain ST in terms of finding a balance between environmental protection, tourism-related economic development, and satisfying the needs of both tourists and local residents (Farrell, 1992; Getz & Timur, 2004; Muller, 1994). This interpretation suggests that a ST situation occurs when no single element (environmental/social/economic) predominates, or as Muller (1994) suggests, the target situation is balanced tourism development. In contrast, others have argued that the concept of balancing all goals is unrealistic and necessary tradeoffs are required (Hunter, 1997; Hediger, 1999; Turner *et al.*, 1994; Wall, 1997).

Turner *et al.* (1994) and Hunter (1997) suggest that a spectrum of four sustainable tourism approaches exists where trade-offs between elements are necessary: very weak, weak, strong and very strong sustainability. The weakest sustainability position is characterized by a focus on continued economic growth in the tourism industry (Figure 2). The weak sustainability position is similar to the weakest position but it allows for the consideration of resource conservation, the management and modification of growth, and the distribution of development costs and benefits. The strong sustainability position is characterized by an ecosystems perspective, zero economic and human population growth, resource preservation, and "recognizes the primary value of maintaining the functional integrity of ecosystems over and above the secondary value through human resource utilization" (Hunter, 1997, p. 853). Last, the strongest sustainability position is characterized by an eco-centric perspective where use of natural resources is minimized, economic growth is not permitted and the human population is reduced (Figure 2). The major difference between the weakest and strongest positions of sustainability is that society is viewed as dependent on the economy for its well-being in the weakest position but the opposite is true in the strongest position: the economy is dependent on society, which cannot exist without a stable and vital environment.



Figure 2. Interpretations of the ST concept (PCE, 2002).

Others suggest that polarized paradigms have emerged due to differences in philosophical and ethical interpretations of the concept. Hediger (1999) argues that trade-offs across different objectives are unavoidable but this has been largely neglected in the literature. He suggests that this has led to mutually exclusive concepts of weak and strong sustainability rooted in an ethical premise of keeping the economy constant, or maintaining essential environmental functions and resources. Similarly, McKercher (1993) suggests that differing interpretations of the ST concept by industry and conservationists have polarized the issue into ecology and development factions. He describes two broad approaches to the concept: a development-oriented approach and an ecological perspective approach (Figure 3; McKercher, 1993). The tourism industry has tended to advocate a development approach to sustainability where the natural resource base can be consumed providing it produces wealth. The conservation movement, on the other hand, has tended to advocate an ecological approach whereby the natural resource base should not be permitted to decline over time. He argues that this polarization threatens the implementation and success of ST and suggests that the needs of all user groups must be integrated to address this threat.



Ecological Perspective

Figure 3. Development and ecological perspectives of the ST concept.

What has become evident from the various interpretations of the ST concept is that it must be regarded as an adaptive paradigm that is capable of articulating different goals and addressing widely different situations (Berno & Bricker, 2001; Hunter, 1997; Sharpley, 2000).

2.5.3. Stakeholder Involvement

It has largely been agreed upon that stakeholder involvement and agreement is necessary for the achievement of ST (Hardy & Beeton, 2001; Hardy et al., 2002; Marien & Pizam, 1997; McKercher, 1993; Twinning-Ward & Butler, 2002; Yuksel et al., 1999). A stakeholder has generally been defined as "any group or individual who can affect or is affected by the achievement of an organization's objectives" (Freeman, 1984, p. 46). More recently, it has been argued that stakeholder status should not be limited to humans and the natural environment merits stakeholder status given its linkage with the business environment (Starik, 1995).

In the context of tourism, Cater (1995) has identified four loosely grouped stakeholder categories that have mutually-reinforcing aims in ensuring ST development: the host population, tourist guests, tourism organizations and the natural environment. Hardy & Beeton (2001) have suggested that the third category, tourism organizations, should probably be further divided into tourism operators and regulators given that these stakeholders plays an equally important role in developing and managing the tourism product, particularly the natural environment. In the context of PA-based tourism in particular, there are many stakeholders, each with their own objectives and values, placing constant demands on park management. According to Eagles *et al.* (2002), there are four groups in particular that are important in PA-based tourism management: park managers, tourism operators, visitors and users, and society in general, including local communities. Relevant stakeholders should all be clear about the objectives of the tourism management plan, and their meaning, and they should understand their role in achieving the objectives (Eagles *et al.*, 2002).

2.6. Tourism in Nepal

Nepal is one of the poorest countries in the world. The United Nations has categorized it as a Least Developed Country given the country's high levels of poverty and economic vulnerability and low level of socioeconomic development relative to others (UN, 2008). The country is geographically positioned among eight of the world's 14 highest mountains in the central Himalayas and it shares the world's highest summit, Mt. Everest, with Tibet to the north. Of Nepal's total landmass, 83% consists of mountain landscapes (Kruk & Banskota, 2007).

Since Nepal opened its borders to outside tourism in 1951, there has been tremendous growth in the number of international tourists visiting the country, particularly mountaineering and trekking tourists (Nepal, 2000). International arrivals increased from 6000 tourists in 1962 to almost 260,000 by 1988 (Wells, 1993) and arrivals for 2011 were reported to be almost 525,000 (Ministry of Culture,Tourism & Civil Aviation, 2011). Tourism is now the country's largest source of foreign exchange earnings, and tourism accounts for about 4% of the country's GDP while creating over 250,000 direct and indirect jobs for local people (Nyaupane & Budruk, 2009).

The image of tourism in Nepal has been built around the image of Shangri-La (Bhattarai *et al.* 2005) largely because the country was virtually cut off from the outside world until the doors were opened to tourism in the 1950s. The rapid development that has followed, however, has resulted in large amounts of pollution and congestion in urban areas. Nepal's capital, Kathmandu, has alarming air pollution levels. Given the high levels of pollution and congestion in Kathmandu, visitors are generally

attracted to areas outside of the city, the many protected and mountain areas in particular (Nepal, 1997).

2.6.1. Protected Area-Based Tourism in Nepal

A significant portion of Nepal's landscape (19%) is housed within a PA network composed of nine national parks, three conservation areas, three wildlife reserves, one hunting reserve, and nine buffer zones (CBD, 2012). Initial legislation for the protection of areas was provided for by the 1973 National Parks and Wildlife Conservation Act. Initially, this act was restrictive and dominated by a centralized approach that usurped any local control by communities in PAs. Various amendments were made to the Act over the next few decades. The most important of these was the Third Amendment in 1992. This enabled the designation of Conservation Areas and allowed for greater human use and the improvement of the social welfare of local communities as a management goal (Heinen & Shrestha, 2006).

Nepal's tourism industry has been largely driven by the country's extensive PA network, in addition to its unique geological formations and rich cultural heritage, and almost all trekking is based in PAs (Nepal, 2000). The number of international tourists visiting Nepal's PAs has been increasing annually since 1990 (except during the Maoist insurgency period of 2001-2006). In 1993, 20% of international tourists entering the country visited at least one PA (Wells, 1993). In 2011, almost 50% of international tourists entering the country visited at least one PA and of these, 33% visited the ACA (Ministry of Culture, Tourism & Civil Aviation, 2011).

2.7. The Study Area: The Annapurna Conservation Area

The ACA is a well-known and popular mountain PA in Nepal. It is Nepal's largest PA, covering an area of 7,629 km² in the northern-central part of the country (Figure 4). In 1992 it was declared an IUCN category VI PA, meaning it is primarily managed for the sustainable use of natural resources. It has been recognized as one of the most culturally and geographically diverse areas in the world (Nepal, 2000). It is nestled among the central Himalayan landscape and contains the world's tenth highest peak, Annapurna I (8091 m), as well as the world's deepest river valley, the Kali Gandaki (Gurung & De Coursey, 1994).

The physical geography of the ACA is greatly varied with altitude ranging from 800m to over 8000m above sea level within 120km (Nyaupane & Thapa, 2004) and the area boasts 300km of trail networks through mountain ranges, gorges, and high plateaus. The area also harbours great biological diversity containing: 22 different forest types, including the world's largest rhododendron forest; over

1200 plant species; 488 bird species; 102 mammal species; 40 reptile species; 23 amphibian species; and 20 fish species (ACAP, 2009). The cultural diversity is equally great and the area is home to a population of approximately 120,000 people belonging to 10 distinct ethnic groups, each with their own local dialect, unique culture and traditions (ACAP, 2009). The residents are mainly subsistence farmers, labourers, traders, or herders and are very reliant on the area's natural resources (Nepal, 2007a).



Figure 4. Location of the ACA in Nepal.

The ACA is currently undergoing rapid changes, largely due to recent road developments in the region. The National Planning Commission of Nepal has a mandate to connect all district headquarters in the country by road, including those within the ACA. Road construction from Beni to Jomsom and Muktinath was completed in 2008 (Figure 5); Muktinath is one of the most popular pilgrimage destinations for Hindus and Buddhists, particularly those from Nepal and India. The road has already been constructed from Besishahar to Chame, completed in 2012, with an expectation for it to be continued up to Manang. The road has been constructed on the existing Annapurna Circuit (AC), one of the most popular treks in the ACA, previously considered one of the top 10 treks in the world (Nepal Tourism Board, 2003).

2.7.1. Tourism in the ACA

The combination of geographical, biological, and cultural diversity, in addition to the ease of access and the well-developed infrastructure for tourism, has made the ACA the most popular trekking destination in Nepal. It receives over twice as many visitors as Sagarmatha National Park, which

encompasses Everest base camp, and it is visited by over 60% of total trekking tourists entering Nepal (ACAP, 2009). Visitation is concentrated during two main trekking seasons in spring (March-May) and fall (September-November).

Local tourism business owners maintain a significant degree of ownership and control in the ACA compared to mountain tourism destination in other countries, which are often dominated by national tourism companies and migrant tourism vendors (Nyaupane *et al.*, 2006). There are over 1000 locally owned tourist lodges/hotels and teashops located throughout the ACA that provide local people with employment (Nyaupane *et al.*, 2006); in 1969, there was only a single lodge in the region (Nepal, 2007b). Local people are often employed as guides, porters, and cooks (Nyaupane *et al.*, 2006) and Nepal (2002b) estimates that 65,000 trekkers provide seasonal jobs to more than 50,000 people during peak tourist season in the ACA.



Figure 5. Road development in the ACA. The blue dashed line indicates the AC trail and the red dashed line indicates completed road.
Although international tourist numbers dropped significantly between 2001 and 2006 due to political conflict associated with the Maoist insurgency, they have since rebounded to levels even greater than those prior to the conflict (Figure 6). International tourists numbers for 2011 were just shy of 100,000, the highest number experienced to date (ACAP, 2012, personal communication).



Figure 6. International tourist arrivals in the ACA from 1996 to 2011 (Source: ACAP, 2012, personal communication).

2.7.2. The Annapurna Conservation Area Project

The ACA has a history of rapid tourism development that lead to an innovative approach to managing the impacts of international tourism. The Annapurna Conservation Area Project (ACAP) was established to facilitate this innovative management approach.

2.7.2.1. Origins

The proliferation of tourism in the Annapurna region from 1965 to 1985, and the associated negative environmental impacts, led to its designation as a Conservation Area in 1986 (Nepal, 1997). Upon designation, ACAP was created and managed by the King Mahendra Trust for Nature Conservation (KMNTNC), now the National Trust for Nature Conservation (NTNC), an autonomous non-governmental organization established in 1984 by His Majesty's Government of Nepal (HMG) in response to the impacts of and problems associated with rapidly increasing tourism in Nepal's rural and mountain regions (Nepal 2007).

The ACA was initially slated to become a national park in an effort to preserve the region's unique biological diversity, but a few studies and a social impact assessment conducted by the KMTNC on behalf of HMG led to the designation as a Conservation Area. It was felt that this would be more appropriate for the region given the size and history of the resident population (Hough & Sherpa, 1989). In addition to the region's designation as a PA, a unique management approach was utilized by ACAP that considers and empowers local people to be custodians of their natural and cultural heritage.

ACAP began as a pilot project in Ghandruk, located on the southern slopes of the Annapurna range (Figure 7), with the aim of facilitating a participatory management approach (Nyaupane *et al.*, 2006). The expansion of ACAP's activities from the initial project area of 200 km² in 1986 to 1,200 km² in 1989 reflects the success of this participatory approach (Nepal, 2000). Following the final expansion, the ACA was divided into seven regional units by ACAP, each with a Unit Conservation Office (UCO), for administrative and development purposes (Figure 7). These UCOs serve as field offices and five of these serve as regional headquarters: Ghandruk, Sikles, Bhujung, Manang, and Jomsom. The ACAP headquarters are located in Pokhara, approximately 30km outside of the ACA.



Figure 7. ACAP expansion phases within the seven regional units of the ACA: Pilot Phase in 1986; Phase I expansion in 1990; Phase II expansion in 1993 (ACAP, 2009).

2.7.2.2. Management Approach and Objectives

ACAP's approach entails the adaptation of traditional communal management systems (Thakali, 1997, cited in Nepal, 2007b) through an ICDP management framework. This approach is based on the primary objective of community-based participatory conservation. In order to realize its objective, ACAP was authorized by HMG with special legislation to both charge and retain visitor entry fees to finance its operation and activities. Donor funds from international organization supported ACAP operations and its initiatives at the outset but core management operations are now supported solely through the entry fees collected, although some development projects are still partially funded by donor contribution (Gurung, 2003).

ACAP implements programs that aim to balance nature conservation and socioeconomic improvement through the development of ST. These programs are categorized according to 11 thematic areas (Table 2). Of these programs, those that function to reduce the environmental impacts associated with tourism, encourage participation in natural resource conservation, and increase the local economic benefits of tourism have been given highest priority since the launching of ACAP (Nepal, 2000). Accordingly, the Sustainable Tourism Management program has been given high priority, especially in the regions subject to the highest levels of tourism.

ACAP Program Thematic Areas							
Sustainable Tourism Management							
Natural Resource Conservation							
Community Infrastructure Development							
Alternative Energy Promotion							
Gender Development							
Agriculture and Livestock Development							
Conservation and Education Extension Program							
Capacity Development							
Research, Survey, and Documentation							
Cultural Heritage Conservation							
Health Support Services							

Table 2. Thematic areas of ACAP programs (ACAP, 2009).

Community-based ST is promoted in all major trekking areas in the ACA and it is a key tourism modality used by ACAP (Bajracharya, 2011). This approach aims to ensure a positive experience for local people, tourism businesses, and tourists (Bajracharya, 2011) and it is based on two concepts:

community-based management and alternative livelihoods (Wong, 2001). The community-based management concept places the management of natural resources in the hands of the local communities. The alternative livelihood concept is based on the premise that providing sustainable alternative income through tourism can minimize the use of destructive methods of income generation that may result in overharvesting of natural resources (Wong, 2001). ACAP aims to facilitate community-based ST through various programs aimed at: the empowerment and strengthening of local communities; the enhancement of the tourist experience; local skill development to increase economic benefits; and the maintenance and improvement to the natural and socio-cultural environments (Lama, 2011).

Chandra Gurung (1995), the founder and initial director of ACAP, identified three basic principles that guide the project: sustainability; participation of local people; and ACAP acting as a catalyst in the identification of problems and the development of solutions by local people. In order to facilitate this, knowledge of conservation, sustainable land use practices, and tourism has been provided to local communities through various channels: formal education, through the conservation curriculum introduced into Classes six, seven and eight; informal education, through adult literacy classes; and through extension activities, including mobile awareness and tourism camps, clean-up campaigns, training sessions, and presentations (Parker, 2003). The participation of the local people has been enabled through community consultation and consent for all activities (Bajracharya, 2011), as well as the establishment of various local-level institutions. Management tasks are distributed between ACAP and these local-level institutions and ACAP has provided training focussed on the capacity-building of these institutions (Baral *et al.*, 2010).

2.7.2.3. Institutional Arrangements

The local-level institutions established by ACAP facilitate the management of natural resources by local communities and create the foundation for a grassroots system characterized by a bottom-up approach. These local institutions include Village Development Committees (VDCs), Conservation Area Management Committees (CAMCs), and various management sub-committees and groups. Table 3 lists the primary institutions operating in the ACA that are most important to tourism management in the ACA.

	2009	2012
Local-level Institutions	Totals	Totals
Village Development Committees	57	57
Conservation Area Management Committees	57	57
Tourism Management Sub-Committees	30	47
Women's Group	247	304

Table 3. Number of primary local-level institutions operating in the ACA (ACAP, 2009; Khadka *et al.,* 2012).

ACAP assumes a lead role with higher level actors, including the Government of Nepal and national and international donors and organizations. They are responsible for collecting tourist entry fees, preparing management plans, the allocation of resources to the CAMCs, providing technical assistance, and complying with national legislation (Baral *et al.*, 2010). They also delegate authority to the CAMCs, which can then further devolve authority to the sub-committees and groups (Figure 8; Baral *et al.*, 2010). The VDCs are primarily concerned with administrative and political affairs and work collaboratively with the Government of Nepal (Nepal, 2007c). The CAMCs, on the other hand, are the primary institutional units formed within each VDC that work collaboratively with ACAP in managing the ACA. A horizontal linkage between CAMCs and VDCs is established through the appointment of a VDC chair as a CAMC member to ensure efficient communication (Baral *et al.*, 2010).

Each CAMC is typically composed of fifteen members elected from each village ward. A chairman, vice-chairman, secretary and treasurer are selected and women and socially disadvantaged groups are represented by one member on the committee (Nepal, 2007c). The primary concern of CAMCs is the protection and management of natural resources, although they are also important to tourism management given their overall management capacity. Natural resource management is facilitated through the collection of revenue from harvest permits, the mobilization of local community groups, the implementation of conservation and development programs, and the monitoring of all activities within the ACA (Baral *et al.*, 2010). According to ACAP (2009), the CAMCs "make or break the success of the integrated conservation and development programs" (p. 23).



Figure 8. The interplay of organizations and actors involved in governance in the ACA.

The participation of locals at the management level is also facilitated through the Tourism Management Sub-Committees (TMsCs), which are comprised of residents directly involved with tourism, including lodge operators and local tourism entrepreneurs (Bajracharya, 2011). Although all tourism business owners are required to be general members of this committee, an executive committee of seven to ten members is elected with a chairman, vice-chairman and secretary for a fixed three year term (Nepal, 2007c). The primary aim of TMsCs is ST management through community participation and empowerment and they are responsible for managing tourism-related activities in the ACA (Bajracharya, 2011). Their responsibilities include the development of policies related to tourism, the standardization of rates, supporting local cultural programs, monitoring and improving service quality, and handling tourist complaints (Nepal, 2007c).

Women's Groups were established to facilitate the involvement of women in planning and decision making. Generally all women in a community are members and an executive committee of eleven to fifteen members are elected, including a chairperson, vice-chairperson, secretary and treasurer for a fixed 3 year term (Nepal, 2007c). These groups are largely engaged in community activities, including community, cultural and family development, as well as various tourism-related

activities, including trail clean-up and repair campaigns and the organization of cultural events for tourists.

The official management agreement between the NTNC and ACAP, facilitated by HMG, was created with the intention of eventually handing over management responsibility to the CAMCs once a sufficient level of education, training, institutional development and capacity building was provided by ACAP. The management agreement was reviewed and extended for another 10 year period in 2002 based on the recommendations of the NTNC and CAMC representatives that there was more work needed in the area of institutional capacity building (Baral & Stern, 2009). The management term of ACAP was up for review in mid-2012 and it was decided that ACAP's management role would be extended one last time for a period of six months, upon which time management responsibility will be handed over to the CAMCs.

2.7.2.4. Successes

ACAP has received worldwide recognition for its novel participatory approach to linking tourism development with natural resource conservation (Nepal, 1997). Since its establishment, ACAP has been successful at garnering the support and participation of the local communities in conservation efforts and the management of natural resources, resulting in significant improvements in environmental conditions (Bajracharya *et al.*, 2006; Nepal, 2000). Wild animal populations have also increased within the ACA with the establishment of wildlife management and conservation practices (Bajracharya *et al.*, 2005). Fuelwood use per trekker has significantly decreased through the promotion of energy efficient hearths and water heating systems and alternatives to fuelwood, including solar and micro-hydro energy (Jain, 1998). The overall quality of life has been increased for many local communities in the ACA (Bajracharya *et al.*, 2000) and tourism has increased local employment opportunities and brought considerable economic benefits to some local communities (Sacareau, 2009).

ACAP has developed a tourism management plan that has been relatively successful in preserving the local culture and environment and in the involvement of local communities in tourism and resource management. Bajracharya *et al.* (2005) suggest that the region's traditional strong communities and their way of life, the high level of biodiversity and spectacular scenery, and the ability of ACAP to retain entrance fees for operations are distinct unique features of the ACAP model that have contributed to its success.

2.7.2.5. Challenges

In spite of the successes of ACAP, tourism-related environmental challenges persist due to increasing tourist numbers in the region. The congestion of teashops and lodges in some villages has created localized environmental and health problems; trail degradation is evident in some areas that experience high tourist traffic (Nepal, 2000); and garbage and waste created by the increasing number of tourists (Gurung & DeCoursey, 1994) have created a waste management problem that is difficult to address (ACAP, 2012, personal communication; Magditsch & Moore, 2012). Although the higher income provided by tourism in the ACA, combined with the technical assistance of ACAP, has made it possible for many residents to afford new energy-efficient technologies, the use of fuelwood as a main energy source is still prevalent among the majority of the lodges in the region (Nepal, 2007a).

The overall quality of life has increased for many local communities; however, this has not been realized by all the communities in the region, especially those not located along any of the major trekking routes. The unequal distribution of tourism benefits and wealth among communities and residents in the ACA continues to be a major issue with a large and growing disparity in income between those who reside on trekking routes and those who do not. The income disparity between those directly involved with tourism and those who are not is also evident and continues to increase with tourism income primarily collected by a few "elite" ethnic groups and tourism business owners while the subsistence farmers and other non-tourism related residents receive very little benefits in comparison (Nepal, 2000).

Tourism has also flourished at the expense of other traditional practices, such as agriculture and livestock herding. Many farmers have left their land or converted it to pursue tourism opportunities (Nepal, 2007a). Kruk and Banskota (2007) suggest that an over-dependency of the local markets on tourism weakens the stability of the local economy and makes these communities vulnerable to a rather volatile industry. Furthermore, the high degree of seasonality in the ACA creates economic and social insecurity for local people dependent on the tourism industry (Kruk & Banskota, 2007).

The economic leakage from tourism is also a prevalent problem in the region. Banskota and Sharma (1997) found that only 55% of tourism-related income in Ghandruk was retained locally while a significant portion of the rural population did not have access to incentives or opportunities to realize tourism benefits. Even when tourism expenditures are high, it is generally highly inequitable in terms of beneficiaries. Nepal (2000) found that only 6% of tourist expenditure in the entire ACA remains in the local rural economy. Most tourism earnings flow out of the region to urban-based tour and travel agents (Sharma, 1998, cited in Kruk & Banksota, 2007). This is largely due to the lack of linkage between

tourism and the local resource base and a dependency on outside imports (Banskota & Sharma, 1997, cited in Kruk & Banskota, 2007).

Many attempts have been made to resolve the tourism-induced problems. These include: the reinstatement of traditional management systems; the promotion of alternative energy sources; the launching of community development and clean-up projects; the mobilization of local manpower and resources; and the forging of partnerships among ACAP, local-level institutions, government authorities, and various donor agencies (Nepal, 2000). With increasing tourist numbers and the area experiencing the highest tourist numbers to date, however, these challenges are becoming increasingly difficult to manage and resolve (ACAP, 2012, personal communication).

2.8. Research Motivation and Justification

With the high level of international recognition ACAP has received for its novel approach to PA management, there has been a great deal of research conducted in the ACA. Three broad themes run through the existing literature about the ACA:

- Tourism development and impacts (Brown & Turner, 1997; Kruk & Banskota, 2007; Luger *et al.,* 1998; Nepal, 1997, 2002a,b, 2007a, 2008) – including perceptual studies (Holden, 2003, 2010; Holden & Sparrowhawk, 2002; Nepal, 2007b);
- Successes and challenges of community-based conservation (Bajracharya *et al.*, 2005, 2006; Baral & Stern, 2011a; Khadka & Nepal, 2010; Mehta & Heinen, 2001; Nepal, 2000; Nyaupane *et al.*, 2006; Spiteri & Nepal, 2008); and,
- Local empowerment and governance (Baral & Stern, 2009, 2011b; Baral *et al.*, 2010; Nepal, 2007c).

Holden (2010) recently examined the perceptions of tourism stakeholders about current sustainable tourism development, impacts and challenges in the ACA. The aim of his research was "to give insight into [stakeholders'] attitudes, values, and practices of sustainable tourism and to highlight variations between them" (p. 342). What is missing from this study, the literature, and the knowledge base is whether key tourism stakeholders in the ACA have a shared understanding of the primary concept associated with main tourism objective of the management plan: sustainable tourism.

McCool *et al.* (2001) suggest that definitions of sustainability must be shared among land management agencies, the tourism industry, and local residents in order for it to be achievable and "future research should more explicitly examine the extent to which meanings are shared or different" (p. 130). There have been numerous attempts to define ST but there is little information about

stakeholder understanding or perceptions of ST. The few existing studies have tended to focus on only one stakeholder group and there is a general lack of research comparing the perceptions of different groups (Hardy & Beeton, 2001). According to Butler (1999), "the key problem...is the current inability to define to the satisfaction of all, or even most, of the stakeholders in tourism, exactly what is meant by sustainable tourism" (p. 19).

Hardy and Beeton (2001) argue that the nexus between maintainable tourism and ST is an understanding of what stakeholders perceive ST to be. Maintainable tourism involves management based on assumptions rather than understandings. Without this full understanding, it is unlikely that ST will occur. Additionally, an understanding of stakeholder perceptions can facilitate a better understanding of whether tourism is sustainable or maintainable on a regional scale (Hardy & Beeton, 2001). Perceptual understanding is also relevant at the policy, planning and management level. Given that ST assumes the meeting of subjective needs as an underlying principle (Hardy & Beeton, 2001), knowledge of stakeholder perceptions can aid in the formulation of a holistic goal or plan that is relevant to the largest number of stakeholders (Ap, 1992). Furthermore, "an understanding of stakeholder perceptions allows current management strategies to be assessed for their effectiveness and relevance to the stakeholders in the region" (Hardy & Beeton, 2001, p. 169).

Given the fact that ACAP has adopted a community-based, ST management approach, combined with the fact that management responsibility will eventually be entirely transferred to the CAMCs, this research is motivated by the need to better understand what tourism stakeholders in the ACA perceive ST to be. A starting point in assessing the extent to which a ST management plan has adopted a suitable approach is to find out just what stakeholders understand the objectives and related concepts to be.

3. RESEARCH DESIGN AND METHODS

This chapter begins with an outline of the research questions of the thesis. The conceptual framework of the thesis is then presented followed by the methods of data collection. The chapter ends with a description of the data analysis approach that was used.

3.1. Research Questions

This research aims to gain insight into whether key tourism stakeholders in the ACA are familiar with the ST concept and if key stakeholder groups have a shared understanding of what it means and what it is that needs to be sustained. The main research questions guiding this thesis are as follows:

- 1. Do key tourism stakeholders have knowledge about the ST concept?
- 2. How do key tourism stakeholders interpret the ST concept?
- 3. How do interpretations of the concept differ among stakeholders and stakeholder groups?
- 4. What are the most important channels and sources of ST knowledge and information for stakeholders?

It is hypothesized that there are differences in the knowledge and interpretation of ST among and within stakeholder groups. It is also hypothesized that differences in interpretation of ST among key tourism stakeholders are influenced by the different channels and sources of ST information available to them. It is argued that unless key tourism stakeholders in the ACA have a shared understanding of the ST concept with access to ST information to facilitate this, it is unlikely that they will be successful in achieving or moving towards and managing ST.

3.2. Conceptual Framework

The conceptual framework for this thesis is one that utilizes a naturalistic approach and qualitative inquiry to gain insight into how the concept of ST is understood and interpreted by different tourism stakeholders in the ACA.

3.2.1. Naturalistic Approach

A naturalistic approach is characterized by qualitative inquiry, research in natural settings, purposive sampling, inductive analysis, a case study reporting method, and the tentative application of findings (Lincoln & Guba, 1985). The researcher studies the natural unfolding of real-world situations rather than manipulating research outcomes conceived beforehand and recognizes the existence of multiple constructed realities (Bowen, 2008). This study used a naturalistic approach with the research conducted in a natural setting, the use of a purposive or purposeful sampling method, and the qualitative analysis of data.

3.2.2. Qualitative Inquiry

It has been suggested that a great deal of the seminal work in tourism studies was initiated through qualitative research methods (Cohen, 1988). However, most of the research published in *tourism* journals has been characterized by quantitative methods. Although quantification is still dominant in the tourism literature (Riley & Love, 2000), tourism researchers have been increasingly questioning quantitative research due to its inability to address questions of understanding and meaning (Henderson & Bedini, 1995; Hollinshead, 1996; Riley, 1996; Walle, 1997). In recent years, qualitative research has been increasingly acknowledged for its ability to provide a perspective that helps researchers understand phenomena in a different way from a quantitative approach alone (Denzin & Lincoln, 1994).

Qualitative research is defined as (Denzin & Lincoln, 1994):

multi-method in focus, involving an interpretive, naturalistic approach to its subject matter...[that] involves the studied use and collection of a variety of empirical materials - case study, personal experience, introspective, life history, interview, observational, historical, interactional, and visual texts - that describe routine and problematic moments (p.2).

All qualitative research is primarily inductive and comparative (Merriam, 2009) and places emphasis on generating or exploring new theory rather than on testing existing theory (Connell & Lowe, 1997). This type of research typically employs data collection methods that generate in-depth insights from small samples.

Given the nature of this study, a qualitative approach was utilized. This approach was thought more likely to provide insight into understandings, processes, and linkages that offer opportunities for change when compared to surveys. A mixed-methods approach using both qualitative and quantitative methods was considered, through the additional use of a survey instrument. However, qualitative inquiry was deemed best suited for gaining an in-depth understanding of participants' interpretations of a relatively complex concept, ST, given the time and logistical constraints.

3.2.3. Data Saturation

The concept of data saturation is integral to naturalistic and qualitative inquiry; however, there are various ways of interpreting what constitutes data saturation. According to Bowen (2008), saturation "entails bringing new participants continually into the study until the data set is complete, as indicated by data replication or redundancy" (p. 140). Others have argued that data saturation is a matter of degree and researchers should be most concerned with the point of counter-productivity due to more data than necessary and when new data does not necessarily add anything to the overall narrative, theory, or framework (Strauss & Corbin, 1998). Charmaz (2006) suggests that saturation may be reached more quickly in smaller studies with limited scope relative to larger studies spanning multiple disciplines.

The nebulous nature of the data saturation concept provides little guidance for sample size selection in qualitative studies, leading some to suggest guidelines for qualitative sample sizes. McCracken (1988) argues that depending on the topic focus, most studies achieve saturation between eight and 24 interviews whereas Bertaux (1981) argues that 15 is the smallest acceptable sample size. When looking at past qualitative studies, data saturation was stated to be achieved after anywhere from 17 to 63 interviews (Bernard, 2000; Bowen, 2008; Bruyere *et al.*, 2009; Gossling, 2002; Hardy & Beeton, 2001; Hockert, 2009; Mitchell & Eagles, 2001; Ross & Wall, 1999).

Given the realistic time and logistic constraints, the concept of data saturation was not the sole guiding principle of sample size. Strauss and Corbin (1998) suggest that the longer the researcher has to collect, examine, and analyze data, there will always be the potential for new data to emerge; the researcher must critically decide when enough data have been collected to support key ideas or theories while considering realistic constraints. Although the data saturation concept was considered by the researcher throughout the collection and analysis processes, it was not rigidly applied and data collection continued until a sufficient amount of information was collected to address the research questions given the time and logistic constraints imposed on the researcher.

3.3. Data Collection

Since the hallmark of naturalistic inquiry is the interpretation of data collected *in situ* (Belk *et al.,* 1988), preliminary data collection was conducted in the ACA for a period of three weeks in May-June of 2011 and primary data collection occurred over period of four weeks in March, 2012.

The first visit involved data collection for another study whereby a survey instrument and the contingent valuation method were used to explore international tourists' willingness to pay for the entry

fee to the ACA (Wrobel & Kozlowski, 2012). In addition to general demographic questions, the survey instrument consisted of questions aimed at eliciting tourists' perceptions of the ACA, the quality of their experience, and the quality of available tourist information sources. A modified New Environmental Paradigm scale was also utilized to gauge overall environmental commitment of the 101 tourists surveyed.

Preliminary data collection began for the current study during the initial visit in 2011. The aim was to gain insights into local issues and to begin to understand the issues surrounding ST in the ACA. Seven preliminary interviews were conducted with various staff of ACAP, the NTNC, and the International Centre for Integrated Mountain Development (ICIMOD), a regional intergovernmental organization working within the eight countries of the Hindu Kush Himalayas whose primary aim is knowledge sharing. The researcher also engaged in informal conversations with guides, lodge owners, and tourists, which were noted in a research journal immediately following the encounters. Information collected during this first visit set the stage for the research objectives of the current study. Key stakeholder groups were also identified during the initial visit and networks were established to facilitate formal and informal interviews with key stakeholders during the second visit when primary data collected during the second visit where applicable.

3.3.1. Stakeholder Groups

Eagles *et al.* (2002) suggest that key stakeholders include park managers, local communities, tourism operators, and visitors. For the purpose of this study, key tourism stakeholders are defined as those whose support and compliance is necessary to achieve the ST objectives of the ACAP management plan.

ACAP has the primary role of park manager and it has played an instrumental role in the development of the management plan for the ACA, including the development of tourism objectives. It also possesses technical knowledge that is integral to achieving the tourism objectives. Accordingly, ACAP was selected as a key stakeholder group.

Tourism business owners (TBOs) live at the destination level and are part of the local community. They are also directly involved with tourism management in the ACA given the participatory approach of ACAP and the composition of important local-level institutions. Thakali (1997, cited in Nepal, 2007b) suggests that CAMCs are mainly composed of lodge owners, sawmill operators, and timber concessionaries. Given that TBOs are an important part of the local communities and the

eventual handover of management to CAMCs, largely composed of lodge owners, TBOs were selected as a key stakeholder group.

Guides were selected as a key stakeholder group as they have a stake in a sustainable tourism industry and rely on the tourism industry as a livelihood and income source. They also have the ability to influence the environmental and sociocultural attributes of the region through their attitudes and behaviours, which in turn can influence the attitudes and behaviours of their tourists. Guides were selected as representative of the tourism operators stakeholder group, rather than trekking agencies themselves, since they are generally on the frontlines of communication with TBOs and international tourists in the ACA.

International tourists were selected as a key stakeholder group given that they drive the demand for tourism and tourism products in the ACA and they make up the largest proportion of visitors. They are heavy users of resources in the ACA, and their behaviours and actions directly impact the environmental and sociocultural attributes of the region.

3.3.2. Sample Sites

Data were collected from all four stakeholder groups at three sites, all located on the AC with economies heavily reliant on tourism: Ghandruk, Jomsom, and Manang. Each is an established tourist area with more than two decades of tourism history and each has reached the status of a tourist hub in the ACA (Nepal, 2007a). Each site is also contains ACAP field offices that serve as UCO regional headquarters. ACAP's primary focus in each of these areas is on integrated tourism management (ACAP, 2012, personal communication). A fourth sample site was the ACAP headquarters in Pokhara located 30km outside of the ACA (Figure 5) where ACAP management staff were also interviewed – no other stakeholder group was interviewed in Pokhara.

Although the three sites in the ACA share the characteristic of being tourist hubs, they have different histories and are faced with different issues and challenges.

Ghandruk is located at 2000m above sea level (ASL) in the Kaski district on the lush southern belt of the ACA (Figure 5). There are about 1,142 households and approximately 5,138 people within the Ghandruk CAMC (ACAP, 2009). The community is primarily composed of Gurung people with a rich cultural history that is still very visible in the village, reflected in the distinct architecture and dress. Evidence of modern influences, however, is certainly visible and new "modern" hotels have been built that have abandoned the traditional architecture. Being the site of the original ACAP pilot project, residents have had the greatest exposure to the education and training provided by ACAP and their

CAMC is the longest running in the ACA. In 1992, the Ghandruk CAMC won the Paul Getty Wildlife Conservation Award, and in 1994 it won the United Nations Environment Programme's Global 500 Award (Baral *et al.*, 2010). A dirt road, built in 2009, runs close to Ghandruk, making the area more accessible, although there is still a walk of about 45 minutes to get to the village (the walk used to be 5 hours). There is also an alternative trekking route to Annapurna Base Camp (ABC – the most popular destination in the ACA) being developed in the region, which may make villages along the new route competition for tourism in the future. The majority of international tourists visiting Ghandruk are engaged in shorter treks ranging from 2-10 days with Ghandruk being either the sole destination or simply a stop along the way to ABC. The area also receives increasing levels of domestic and South Asian Association for Regional Cooperation (SAARC) tourists¹, primarily from India, given the easier access provided by the road nearby.

Jomsom, located at about 2800m ASL along the banks of the Kali Gandaki River on the northeast side of the Annapurna massif, is the district headquarters of the Mustang region (Figure 5). There are about 450 households and 1,698 people within the Jomsom CAMC (ACAP, 2009). It is a primarily a commercial and administrative center and the community is composed of Thakali people, government officials and merchants (Nepal, 2007a). It is also a hub for pilgrim tourists visiting the Muktinath temple, one of the holiest sites for Hindus and Buddhists, and it receives the greatest number of domestic and SAARC (primarily from India) tourists of all locations in the ACA. The majority of the international tourists visiting Jomsom are trekking the AC, ranging from 12-21 days in duration. The main airport in the ACA is located in Jomsom, experiencing six to 12 flights per day from Pokhara and Kathmandu when the season and weather permits. Jomsom and Muktinath are also connected to Beni by road, constructed in 2008 (Figure 5), making Jomsom a very accessible place in the ACA for a variety of tourist types. Many buses and jeeps run from Beni to Jomsom and Muktinath, and the number is increasing each year. The number of jeeps running from Jomsom to Muktinath alone grew from eight in 2008 to 44 by 2012 (Jomsom Transit Authority, 2012, personal communication). Most international tourists trekking the AC now opt to fly or jeep out of Jomsom rather than continue walking along the dusty road shared with many vehicles; what used to be a 21 day trek prior to the development of the road can now be completed in 12 days if alternative transport is used from Jomsom. Modern influences are perhaps most visible in Jomsom relative to the other sites with a greater number of higher-end and modern lodges

¹ SAARC is an organization of South Asian countries including Afghanistan, Sri Lanka, Pakistan, Maldives, Nepal, Bangladesh, India and Bhutan.

and cultural attributes being far less visible. Lodges and hotels in Jomsom are generally far more expensive than those in the other two sites.

Manang is located at about 3500m ASL in the Manang district along the Marsyangdi River and on the northern side of the Annapurna massif (Figure 5). The CAMC contains about 230 households and 1,299 people, primarily Gurung and Ghale people (ACAP, 2009). It is the main settlement area of the Manang valley and the centre of cultural, political, and administrative activities of the valley. The Manangi have a history as traders and merchants within and outside Nepal owing to the trade privileges they were awarded by the Nepali King in the 18th century, enabling them to sell local goods to other countries in South and Southeast Asia (Aase & Vetaas, 2006). Once the district was opened for tourism in 1977, many of these Manangi traders and businessmen had the capital to open hotels and tourism businesses, including shops and restaurants. Almost all international tourists visiting Manang are trekking the AC. It serves as an acclimatization area and most trekkers spend two to three days in the village prior to embarking on to the pass, Thorung La (5416m ASL). The area receives the least amount of domestic and SAARC tourists out of the three sites, largely due to the lack of road access. This may change in the future, however, as a road has been developed to Chame (Figure 5) and there has been much discussion about developing it further to Manang.

3.3.3. Sampling

Purposeful or non-probability sampling was used rather than random sampling given that the main research objective was to gain an in-depth understanding of a subject within a particular context rather than generalizability. Thus, with purposeful or non-probability methods, sampling need not ensure that all objects have an equal probability of being included in the sample (White & Marsh, 2006). Rather, this type of sampling is based on the assumption that the researcher aims to better understand and gain insight and so must select from a sample from which the most can be learned (Merriam, 2009).

McCracken (1988) proposes three "sampling rules of thumb" when undertaking purposeful sampling: informants should not be acquainted with the research project in order to minimize the effect of mutual understandings; informants predisposed to answer with formally learned knowledge should be avoided; and informants should be deliberately chosen to facilitate contrast and information variety. He suggests that diversity characteristics need to be actively reviewed when sampling to fill known voids in the sample through selection of additional informants or participants.

Key informants from the TBO and ACAP stakeholder groups were interviewed. Key informants are essentially people that know what is going on in their community or area of work and they could

include community leaders, NGO or management organization employees, entrepreneurs, and representatives of major sources of livelihoods within the community that are in some way impacted directly or indirectly by tourism (Simpson, 2007). Key ACAP management staff at the headquarters in Pokhara were identified during the preliminary data collection period in 2011. Upon the second visit in 2012, a list of key informants within the ACA was created with the assistance of the ACAP management staff in Pokhara. Informants were selected based on their experience, insider view, and involvement in tourism management in the ACA.

The list of ACAP field staff included individuals with the greatest amount of experience with ACAP and tourism management. The list of TBOs included individuals who were involved with or had been involved with various management committees, including CAMCs, TMsCs, WGs, and various tourism entrepreneurs associations. There were also instances of snowball sampling in both of these groups with some key informants recommending other participants who were deemed knowledgeable or to have a great deal of experience with tourism or tourism management in the area.

Given the transient nature of guides and tourists in the ACA, the selection of key informants from these groups was not deemed feasible. Instead, participants from these two groups were selected in a way that maximized the breadth of views of people from within a wide range of demographic attributes. This was done to ensure that participants from these two groups were representative of a cross-section of the range of guides and tourists that enter the ACA. The attributes considered when selecting guides included age, gender, length of guiding career or experience, and the type of trekking agency they are employed by. The attributes considered when selecting tourists included age, gender, resident country, duration of trek, areas visited, whether tourists were independent or with a guide, and whether they had visited the ACA before. The attributes of participants in these two groups were actively reviewed throughout the data collection process to fill known voids in the sample given the intent of obtaining a cross-section of the range of guides and tourists entering the ACA. For example, guiding has been an exclusively male profession until more recently (the first ever female guide trekking agency, 3 Sister's Adventure Trekking, was opened in Pokhara in the late 1990s) and the researcher aimed to include female guides in the sample.

3.3.4. Interviews

Since this study is concerned with in-depth investigation and with quality rather than quantity, the objective was to obtain rich information on the topic rather than to maximize numbers. Face-to-face, semi-structured interviews were the main method of data collection to facilitate this. When

conducting research *in situ*, as in this study, the researcher is essentially an outsider with limited knowledge of the community. Semi-structured interviews are thus well-suited for this type of research given they limit the structure imposed by the interviewer, enabling greater opportunity for participants to offer their constructed knowledge and allowing for issues to emerge previously unknown to the researcher (Riley, 1996).

A basic interview guide was developed for each stakeholder group and pre-tested on university students of Nepali origin to gauge if suitable language was used to enable complete understanding by the participants, and if questions were easily understood and logical.

A total of 55 interviews were conducted with stakeholders at the four sample sites. All interviews were conducted by the researcher in either English or Nepali with the assistance of a translator and recorded for later transcription.

Interviews began with general descriptive questions of personal attributes, background, and experiences that informants could easily answer to allow participants to become comfortable with the interviewing process and the recording technology. The main interview questions were open-ended to facilitate the collection of in-depth data. Given the research objectives of the study (refer to Section 3.1), the main questions in the interviews guides were aimed at eliciting: whether participants are familiar with or have any knowledge of the ST concept; what participants understand ST to mean or how they interpret the concept; and how participants had come to know of the concept. Given the aim was to collect rich and informative data pertaining to these research questions, supplementary questions related to the perceptions of tourism in the region were included to provide additional context to the responses of the main questions.

Not all participants were necessarily asked all of the potential questions in the interview guides that were initially created; however, each stakeholder group was asked a set of core questions (Table 4). Given that responses to questions were often either a simple yes or no or minimal in detail, probing questions were utilized to extract further information when necessary.

Stakeholder Group	Interview Questions	Probing Questions
All groups	1. Have you heard of sustainable tourism before?	
	2. What do you understand by the term sustainable tourism?	a. What do you think is most important or necessary for long- lasting tourism in the ACA? (for those whose response was simply long-lasting tourism)
	3. Where did you hear or how did you learn about sustainable tourism?	
	4. Do you think there is enough information available or provided to tourists about: the ACA; ACAP; the people and culture; and the environment?5. How do you think tourism or the tourist experience in the ACA could be improved?	a. What type of information do you think is needed or would you like to see?
ACAP	1. What are some of the biggest challenges for ACAP in terms of the sustainable tourism management program?	
Guides	1. When did you receive your guide training and license?	a. Have you had any additional training or attended any workshops since?
TBOs	1. Do you have any communication about management decisions with ACAP staff or other local institutions or groups in the ACA?	a. Are you happy with the level of communication?
	2. Have you received or attended any tourism training and education provided by ACAP?	a. Are you happy with the training and education that it is available to you?
Tourists	 Are you familiar with ACAP and the role it plays in the ACA? What sources of information about the ACA did you use? 	a. How did you hear about ACAP?
	3. What attracted you to the ACA?4. What do you think are the positive impacts of tourism in the ACA?	
	5. What do you think are the negative impacts of tourism in the ACA?	:
	6. Would you return to the ACA in the future?	a. Why or why not?

Table 4. Core questions and probing questions asked during interviews.

Interviews generally lasted between 30 minutes and two hours. Note that additional questions about tourism and road development in the ACA were asked during these interviews for another study being conducted by the researcher. Interviews took place in the dining rooms of lodges and in restaurants in the ACA with TBOs, guides, and tourists, while interviews conducted with ACAP staff primarily took place in their offices or homes. All participants were provided with a document outlining the purpose and intent of the study, confidentiality, and with a requirement for consent (Appendix A). Every effort was made to transcribe interviews verbatim as soon as possible given that data analysis begins and occurs concurrently with data collection.

3.3.5. Informal Conversations and Interviews

Informal conversations with members of any of the four stakeholder groups (when meetings and conversations were impromptu or formal interviews were not possible or not suitable) were written down in a research journal as soon as possible following the encounter. A total of 22 informal conversations were noted in the research journal and these informal encounters occurred during both visits to the study area. Any conversations had between the research assistant/translator and Nepali people along the way that were pertinent to the study were also written down as soon as possible following conversation. All informal conversations were written as detailed notes in a narrative format in a manner analogous to an interview transcript (Appendix B) and were used to support the interview data.

Several informal conversations were had with additional participants outside of the three study sites in the ACA during the second visit, including owners of trekking agencies in Pokhara with a long history in the region and an NTNC staff member in Kathmandu who works in the capacity of ACAP management. The data from these informal interviews were used to support data obtained from the formal interviews.

3.3.6. Observations

Unstructured observations were recorded as field notes as soon as possible after the observation and used to support the interview data. Unlike structured observation, where a list of predetermined behaviours are checked for, unstructured observation carries no predetermined notion of what might be observed, although the researcher may have some ideas of what to observe (Mulhall, 2003). Observations took place during both visits to the study area. During the first visit, the researcher trekked the AC for three weeks using the route most taken by international tourists. During the second

visit, the researcher used bus, jeep, and horse transportation along the AC, although some trekking was required. Both eyes and ears were used as instruments of observation.

3.3.7. Secondary Data

Secondary data, in the form of the ACAP Management Plan, government reports, statistical documents, and relevant studies, were also utilized in this study to support interview data and gain greater insight into the particular context of the study area and stakeholder groups within it.

3.4. Data Analysis

Data analysis for this thesis consisted of constant comparison and qualitative methods. When using qualitative methods, coding and analysis occur simultaneously. Constant comparison, various levels of coding, queries, memos, and coding matrices were used to uncover underlying themes and patterns in the data pertinent to the research questions or ST management in the ACA.

3.4.1. Constant Comparison Method

The constant comparison (CC) method was employed when collecting data and analyzing the interviews. It involves continually comparing newly collected data with previously collected data throughout the data collection and analysis processes (Bowen, 2008). Although this method of data analysis is a characteristic of a grounded theory approach, it is widely used in a variety of qualitative studies whether or not the researcher is using grounded theory (Merriam, 2009). Leech and Onwuegbuzie (2007) suggest that it may be the most commonly type of analysis used with qualitative data.

Interviews were transcribed as quickly as possible (when possible) in order to constantly compare and enable the data obtained to guide questions asked in future interviews. Existing codes created during coding of the first transcripts were checked for suitability before applying a new code to a segment of text in later transcripts, also facilitating comparison (Leech & Onwuegbuzie, 2007). For example, when analyzing a segment of text in the transcript from the fourth interview, all existing codes devised during the analysis of the previous three interviews were checked to see if either of them would be suitable for the segment of text. If the segment of text contained data that did not fit any of the existing codes, a new code was created. When transcription was not possible, due to the constraints imposed by conducting research at high altitude in Nepal, CC was facilitated by noting the important

responses, taglines and items identified while listening to the interviews and comparing them to those of past interviews to identify patterns and divergences.

3.4.2. Qualitative Analysis

There are many variations on the techniques used to conduct qualitative analysis and the choice of technique is generally dependent on the nature of the data, the objectives of the study, and the experience of the researcher (Denzin & Lincoln, 1994). The task of discovering themes or patterns, however, is at the heart of all qualitative data analysis and these are identified by the researcher before, during and after data collection (Bernard & Ryan, 2009). These are then summarized into coherent categories that bring meaning to the text.

The first step to category construction entails coding of the data; however, unlike quantitative content analysis, this does not involve assigning numerical codes but rather comments, notes or symbols to identify themes and ideas relevant to the research question. The initial form of coding may be referred to as open coding (Merriam, 2009) or broad-brush topic coding (Bazeley, 2007) since the researcher is open to anything possible at this point. Once an entire transcript has been open coded, the comments and notes (codes) are grouped into categories based on similarities. This process is known as analytical coding (Merriam, 2009) or coding in detail (Bazeley, 2007). During this process, subcategories may also be identified, creating a coding hierarchy. This is done until no new categories or subcategories are identified.

The main challenge is to construct categories and subcategories that capture recurring patterns found in the data. These patterns may be found within or between categories. Several criteria should be met when constructing categories and categories should be: responsive to the purpose of the research; exhaustive; mutually exclusive; sensitive to what is in the data; and conceptually congruent. Once category construction is complete, the data from the transcripts are sorted into categorical file folders for further analysis. This is where a computer software program becomes useful in assisting with this sometimes daunting task (Merriam, 2009).

In this study, qualitative analysis began with intensive and repeated reading of the transcripts, or familiarization with the material, to get an idea of the "big picture," followed by computer-assisted coding and analysis using NVivo 9 software (QSR International Pty. Ltd, 2009). During the process of familiarization, the researcher became aware of key and recurrent ideas and responses and made notes of them. These notes were then used to assist with initial coding.

3.4.2.1. Coding

Interview transcripts, informal conversations, and observations were included in the coding and analysis process and this process occurred in three phases. During the initial open coding phase, data were broken down into context, broad themes and topics and nodes were created to house coded data².

Segments of text were coded using a set of *a priori* nodes that were developed based on the questions in the interview guides. Various nodes were also inductively created based on emergent topics and themes identified in the data during the initial coding phase (Table 5). The occurrences of repetitions of items in the text pertinent to the research questions were used as a basis for inductive node creation. As the number of open nodes increased, it became necessary to sort them into node trees and begin coding in detail by asking the questions: Who? What? Where? How? Why?

A Priori Nodes	Inductive Nodes	
Interpretation of ST	Long-lasting tourism	
Lack of knowledge	Increased pollution and garbage	
Economic dimension	Waste management	
Environmental dimension	Need for planning	
Social dimension	Lack of tourism policies	
Tourist information system	Difficulty with organizing training	
Tourist attractions	Inactivity	
Tourism planning & management	Increasing domestic and SAARC tourists	
Training and education	Lack of information	
Sources of information	Incongruence of policies and objectives	
Impacts of tourism		

Table 5. A priori and inductive nodes created during the initial open coding phase of analysis.

During the second phase of coding, or coding in detail, data were sliced into component parts to prevent repetitive or redundant nodes. Multiple codes were used for the same passage of text and each component was coded separately. Coding hierarchies, or node trees (Bazeley, 2007), were created by grouping similar items together and giving them a conceptual label, or category. Nodes were reviewed regularly to ensure consistency of coding and categories and concepts were continually refined based on

² When using computer-assisted qualitative analysis software for coding, codes are stored at a node, which is analogous to a file folder that stores segments of text with the same or related coding. Computer-assisted coding facilitates references to passages of text to be stored at multiple nodes without physically moving the text.

emerging data by comparing new data with the old. Nodes were merged where warranted based on overlapping of coding, identified using the Coding Comparison function in NVivo. Concepts or issues not foreshadowed but that emerged in the data during the second phase of coding and were deemed important to the research questions were inductively coded. Table 6 shows the coding classification system that was developed following the open coding and coding in detail phases. All transcripts were recoded using this system to further ensure consistency in coding.

Parent Nodes	Child Nodes - 1st Tier	Child Nodes - 2nd Tier
Attitudes	Positive Negative Uncertain	
Attractions	Nature Culture Trekking Wildlife	
Experiences	Management Training Education Communication	
Impacts	Increasing # of vehicles Increased demand for resources Increased pollution and garbage Injection of money Loss of culture	
Issues	Inactivity Lack of environmental awareness	
	Lack of information	About the ACA (e.g. trail info) About ACAP About the entry permit Difficulty with access Society and culture Environment
	Tourism	Road development Increasing domestic and SAARC tourism Need for more tourists Need for more attractions

Table 6. Final coding classification system used to code interview transcripts.

Parent Nodes	Child Nodes - 1st Tier	Child Nodes - 2nd Tier
Issues	Training and education	Need for more Need for refresher Need for updating Difficulty with organization
	Waste management	
People referred to	ACAP Domestic tourists Government Guides Local community Local-level institutions TBOs International tourists SAARC tourists Trekking agencies	
Sources of information	ACAP brochures ACAP office ACAP checkposts ACAP training Formal education Guidebook Guides Guide training Internet News media Signs Trekking agencies	
Sustainable tourism	Interpretation	Economic Environmental Social Lack of knowledge Longevity of the industry

Table 6 (Cont'd). Node trees created during the second phase of coding.

When coding responses to questions pertaining to knowledge and understanding of the ST concept, the node *lack of knowledge* was used when a participant was not familiar with or had no knowledge of ST. Those familiar with the ST concept were asked to explain what they understand it to mean. The responses were coded according to the aspects of dimensions of sustainability that were mentioned by participants, including the *economic, environmental,* and *social dimensions* of sustainability (Table 7).

Dimensions Coded for	Aspects mentioned	Examples of responses
Economic	Equitable distribution of tourism benefits	"[Tourism] should be not only for a few persons and not for a few villages but call can get opportunity and whole Nepal should get the benefit and whole Nepalis and every part of the area." [Guide 8]
	Increased employment opportunities	"If I have no difficulty finding the jobs in the future, that's what I view about sustainable tourism." [Guide 6] "Also it will generate employment." [ACAP 3]
	Support for the local economy	"Not only [good for] tourism but also agriculture because here we grow very good vegetables and then we can sell more." [TBO 13] "Sustainable tourism is that type of tourism which supports the local economy." [ACAP 9]
Environmental	Preservation or conservation of nature	"We will conserve the nature, wildlife and mountains." [ACAP 2] "Environmental conservation is important." [TBO 16]
	Minimization of waste and pollution	"Sustainable tourism, to me, is that every tourist that comes in here is responsible for their own rubbish. If you take it in you gotta take it out." [Tourist 8]
	Minimization of resource usage	"Stay in hotels that don't use wood from the area." [Tourist 13] "And consume little, limit fuels. Like if you order food, order once, yeah? Not many times." [Guide 2]
Social	Preservation of culture	"The preservation of culture and traditions is very important." [TBO 5] "The customs shouldn't be tainted if sustainable tourism is in action." [Tourist 4]
	Increased cultural understanding	"Perhaps you get a better understanding for the people living here." [Tourist 2]
	Respecting the local communities	"Also to behave with other well with other people, the local people." [Tourist 2] "Respecting the people and how they are." [Tourist 5]
	Tourist satisfaction	"We have to respect our clients and then we must be very friendly and flexible for the tourist." [Guide 10] "Also people need to give good service, every hotel, and good food." [TBO 12]
	Cooperation among local residents	"The relation between the hotel owners, along all of the area, all of Ghandruk, it should be good. So that we can cooperate in every work." [TBO 2]
Longevity of the Industry	Long-lasting tourism	"Digo means forever. Forever tourism. Long lasting." [TBO 3] "I think that we need more attractions to bring tourists so that they come for ever and ever." [TBO 6]
	Need for increasing numbers of tourists	"We should focus on the attraction of tourists so more and more tourists." [TBO 4] "It is sustainable tourism to increase the number of tourists, to keep tourism going." [Guide 1] "We have to make it so that people come more and more here. That is sustainable tourism." [TBO 1]

Table 7. Aspects of the dimensions of sustainability mentioned by stakeholders interviewed.

The node *longevity of the industry* was added early as it became apparent that this was a widely held understanding of the concept among TBOs and guides. This was coded for when participants understood ST to mean "long-lasting tourism." The prevalence of this response is not surprising given that the translation of ST into Nepali is "long-lasting tourism" or "forever tourism." When this response was given, the participant was probed further about what they thought was most important to ensure long-lasting tourism in the region. These responses could generally then be coded according to any aspects of the economic, environmental, or social dimensions of sustainability mentioned by the participant; however, in some cases participants did not mention any aspects of these three dimensions of sustainability. This is discussed below.

The nodes *economic dimension* and *longevity of the industry* were coded for separately during the analysis. For example, the response "I understand it to mean long lasting tourism" was coded for longevity of the industry while the response "It will generate employment and the people of that area will be economically benefitted" was coded for economic dimension. As transcripts were coded in more detail, the node longevity of the industry was used if long-lasting tourism and the need for a greater number of tourists were the sole understanding of ST by the participant (Table 7). If the participant mentioned any other aspect of the economic dimension or any aspects of the social or environmental dimensions, the segment of text originally coded for *longevity of the industry* was recoded for *economic* dimension. Although it can be argued that longevity of the tourism industry is valid a component of the economic dimension, the understanding of the ST concept solely as the sustainability of the tourism industry itself has been referred to as the weakest interpretation of the concept (Butler, 1999; Hunter, 1997). Accordingly, this approach to coding was taken to isolate participants with the weakest interpretation of the ST concept (defined as those who perceive that it is solely the tourism industry that needs to be sustained) from those with a stronger interpretation of the concept (defined as those who perceive there to be other important aspects and dimensions of sustainability other than simply the longevity of the tourism industry). When probed about what they thought was most important for longlasting tourism, common responses from participants with the weakest interpretation of the concept included a greater number of tourists and the need for more attractions to bring more tourists (Table 7), which is a tourism sector-only or tourism-centric perspective and thus was still considered the weakest interpretation in this study.

The responses to the question about how participants came to know of the ST concept were coded for using the *source of information* node tree (Table 6). Any additional information regarding participants' perceptions about these channels and sources were noted in memos linked to the

documents. Constant comparison and detailed coding of these memos led to the creation of the child nodes in the *training and education* node in the *issues* node tree (Table 6) and responses to these questions were then coded using this node tree.

Participants were also asked whether they thought current sources of tourist information are sufficient and what other types of information they would like to see available. These responses were initially coded using child nodes in the *attitudes* and *source of information* node trees (Table 6) and details regarding participants' perceptions and suggestions about what type of information they desire or would like to see were noted in memos linked to the transcript. Constant comparison and detailed coding of these memos led to the creation of the *lack of information* node and its child nodes in the *issues* node tree (Table 6) and responses to these questions were then coded using this node tree.

Further comparison and analysis of categories and concepts identified led to the emergence of patterns and themes in the data.

3.4.2.2. Analysis

Although analysis was largely integrated into coding, deeper analysis began once an initial coding classification system was established. At this point attention was turned to identifying connections and relationships between nodes, also known as "pattern coding" (Miles & Huberman, 1994). The use of coding queries, CC of information contained in memos among stakeholders, and coding matrices eventually led to the emergence of themes and patterns in the data.

Coding queries were used early in the analysis to identify intersections of coding, which led to inductive development of new nodes. As mentioned above, the intersections between the *negative* attitude node and *source of information* child nodes were queried to identify which participants had negative attitudes towards specific sources of information and why. This led to development of the *lack of information* node and its child nodes in the *issues* tree. The intersections between the *attitudes* child nodes and *people referred to* child nodes were queried to identify which participants had particular attitudes towards others. The reasons for particular attitudes stated by participants were noted in memos linked to the transcripts. These intersections and associated memos were particularly important in this study as CC of information contained in the memos led to the inductive development of additional important nodes, including many of the child nodes related to training and education and lack of information in the *issues* node tree (Table 6).

Constant comparison of the information contained in nodes and memos among stakeholders then facilitated the identification of emerging themes in the data. Important themes pertinent to ST management in the ACA emerged in the data and are presented and discussed in the following chapter.

Coding matrices were also used to assist with the identification of patterns and relationships in the data and to compare data among stakeholder groups and sites by facilitating content analysis. Qualitative content analysis (QCA) is similar to the CC method. The main difference is that frequency of nodes coded for is counted in QCA whereas in CC, themes are created. QCA is useful when the researcher wants a sense of how often important or specific codes have been used in the analysis or is interested in the frequency of themes (Leech & Onwuegbuzie, 2007). According to Bazeley (2009), QCA using coding matrices is a very useful way of detecting and displaying patterns in the data. Coding matrices were created using the data collected about knowledge and interpretations of the ST concept, channels and sources of ST knowledge, and perceptions of current tourist information sources.

Concepts, connections, and relationships that emerged in each individual interview were compared with various attributes of the participants to identify common or divergent understandings, beliefs, perceptions, and relationships. These were also compared across sources of data (interviews, informal conversations, observations).

The coding and deeper analysis processes with associated emergent ideas, issues, or relationships were all documented in a research journal as well as important pattern and relationship memos. This assisted with the formulation and application of the findings to the research questions.

3.5. Validity and Reliability

Qualitative approaches are criticized because of their lack of rigour and the challenges of trustworthiness stemming from a lack of methodological justification and explanation (Decrop, 1999). Trustworthiness of quantitative approaches is enabled through the provision of internal and external validity, reliability, and objectivity. Given the nature of qualitative research, however, Lincoln and Guba (1985) suggest these criteria be substituted by credibility, transferability, and dependability and confirmability in qualitative studies.

3.5.1. Credibility

Decrop (1999) proposes the use of data triangulation – looking at the same research question through multiple sources of data – to establish the credibility of qualitative findings. The concept of triangulation, derived from topography and initially used in military science, has been adapted to social

science inquiry to strengthen qualitative findings by limiting personal and methodological biases and enhancing generalizability (Decrop, 1999).

Data triangulation was achieved in this study using coding matrices and QCA to check for frequency and salience of themes and patterns identified, and through the use of multiple sources of data: interviews, informal conversations, observations, and secondary data. Writing field notes during and immediately after each interview also contributed to the triangulation of the data by enabling the researcher to compare observations and inferences about the interview with the data obtained during the interview.

3.5.2. Transferability

Since generalizability cannot occur in qualitative research in a statistical sense given the relatively smaller sample sizes and that the aim of qualitative research is to understand a particular phenomenon in depth and not to discover what is generally true of many (Merriam, 2009), the notion of transferability is applied instead. Lincoln and Guba (1985) argue that although researchers cannot know the sites to which transferability of the findings might be sought, appliers of the findings can if sufficient descriptive and contextual data is provided through rich, thick description. Maximum variation in the sample through sites or participants selected is another strategy that allows for the possibility of a greater range of application of the findings (Merriam, 2009).

In the current study, transferability has been enabled through efforts to provide rich, thick description of the setting and particular context of the study setting, as well as a detailed description of the findings with supporting evidence in the form of quotes from data collected. Maximum variation was also facilitated through the use of three sample sites with varying histories and circumstances, and through the selection of participants with varying demographic attributes and experiences.

3.5.3. Dependability and Confirmability

Dependability and confirmability refer to the extent to which the findings of a study are consistent with the data collected and presented. It is used in place of reliability in qualitative research since replication of a qualitative study will not necessarily yield the same results given the possibility of various interpretations of what is happening and that what is studied in the social world is assumed to be in flux (Merriam, 2009).

Lincoln and Guba (1985) suggest the use of an audit trail to ensure dependability and confirmability. An audit trail enables researchers to authenticate their findings of study by providing

independent readers with their research trail. As Richards (2005) points out, "good qualitative research gets much of its claim to validity from the researcher's ability to show convincingly how they got there" (p. 143).

The dependability and confirmability of the findings of this research is provided through the detailed description of how the data were collected, the use of visual representations of the data analyzed, and the maintenance of a detailed research journal throughout the research process.

4. RESULTS AND DISCUSSION

This chapter presents and discusses the research findings in the context of the research questions set out in Section 3.1. The chapter begins with a profile of the participants interviewed in the study. This is followed by findings related to the possession of ST knowledge among stakeholders. The third section presents and discusses the interpretations of the ST concept among stakeholders with ST knowledge. In the final section, important channels and sources of ST knowledge are presented and discussed in relation to knowledge and interpretations of ST among stakeholders.

4.1. Participant Profile

The following three sections present a profile of the participants.

4.1.1. Stakeholders Interviewed

Fifty-five stakeholders were formally interviewed at the four sample sites. Of these stakeholders interviewed, 10 (18.2%) were ACAP employees, 16 (29.1%) were TBOs, 12 (21.8%) were guides and 17 (30.9%) were international tourists (Table 8).

	Sample Site					
Stakeholder Group Ghandruk Jomsom Manang Pokhara						
ACAP	2	2	3	3	10	
TBOs	5	5	6	0	16	
Guides	3	4	5	0	12	
Tourists	5	4	8	0	17	
Total	15	15	22	3	55	

Table 8. Stakeholders formally interviewed at each location.

A majority of the ACAP employees interviewed have over 15 years of experience working within the organization (Table 9), although two of the employees interviewed (participants 5 and 6) joined ACAP relatively recently. These newer employees were interviewed because the Tourism Assistant and Officer in Charge at the ACAP field office in the sample site were away during the data collection period due to unforeseen circumstances and available ACAP employees were interviewed instead. One of these employees, however, was born and raised in the sample location and is experienced with tourism in the region.

ACAP Employees						
Participant	Age	Gender	Area of Focus	Length of Employment (years)		
1	40-49	М	Tourism	10-19		
2	40-49	F	Social	20-29		
3	30-39	М	Tourism	10-19		
4	40-49	М	Natural Resources	10-19		
5	20-29	М	Natural Resources	0-9		
6	20-29	F	Management	0-9		
7	40-49	М	Social	20-29		
8	40-49	М	Management	10-19		
9	30-39	М	Tourism	10-19		
10	50-59	М	Management	0-9		

Table 9. Demographic attributes of ACAP employees interviewed.

Since key informants with a great deal of tourism business experience in the ACA were sought, a majority (62.5%) of TBOs interviewed owned lodges that have been family owned for over 25 years (Table 10). Additionally, those with a greater amount of experience were more likely to be involved with various local-level institutions. Although most businesses were hotels and restaurants, owners of other tourism business types were sought including museums, home-stays, stores, and tour companies.

Guides with a range of experience were selected for interviewing. Although most guides were employed by an agency, two also worked as independent, privately-hired guides (Table 11). Half of the guides interviewed worked for established trekking agencies that have been operating for 11 years or greater while the other half worked for newer agencies that have been operating for 10 years or less.

Tourists with a range of attributes were selected for interviewing (Table 12). Although tourists from countries outside of Europe were sought, a majority (88.2%) of tourists interviewed were from European countries (primarily Western Europe) while two were from countries outside of this region: Brazil and Australia. Wrobel and Kozlowski (2012) and Nepal (2007c) found that 55.4% and 63.0% of the tourists they sampled in the ACA were from Western European countries, respectively.

Tourist Business Owners							
Participant	Age	Gender	Business Type	Family Ownership (years)			
1	30-39	М	H/R	20-29			
2	60-69	М	H/R	40-49			
3	50-59	М	H/R	30-39			
4	30-39	М	Museum	10-19			
5	50-59	F	Homestay-Culture Experience	20-29			
6	40-49	F	H/R	50-59			
7	20-29	F	H/R	60-69			
8	50-59	М	H/R-Buses & Jeeps & Tours	10-19			
9	50-59	М	H/R-Tour Agency	30-39			
10	30-39	F	H/R	10-19			
11	40-49	М	H/R-Store	10-19			
12	30-39	М	H/R	20-29			
13	40-49	М	H/R	20-29			
14	20-29	М	H/R	20-29			
15	50-59	М	H-Store-Museum	10-19			
16	30-39	F	H/R	10-19			

 Table 10. Demographic attributes of TBOs interviewed. Note that H = hotel and R = restaurant.

Table 11. Demographic attributes of guides interviewed.

Guides							
Participant	Age	Gender	Length of Career (years)	Independent or Agency	Type of Agency		
1	40-49	М	10-19	Both	Various new		
2	20-29	М	0-9	Agency	Established		
3	20-29	F	0-9	Agency	Established		
4	30-39	М	10-19	Both	Various new		
5	30-39	М	10-19	Agency	Various new		
6	20-29	М	0-9	Agency	Various new		
7	40-49	М	10-19	Agency	Established		
8	30-39	М	10-19	Agency	Established		
9	20-29	М	0-9	Agency	New		
10	40-49	М	10-19	Agency	Established		
11	20-29	М	0-9	Agency	Established		
12	30-39	М	10-19	Agency	New		

Tourists							
Participant	Age	Gender	Resident Country	Length in ACA (days)	Areas Visiting	Guide	Visited Before
1	30-39	F	Switzerland	14	Ghorepani-Ghandruk- ABC	N	N
2	20-29	м	Germany	5	Ghorepani-Ghandruk- ABC	N	N
3	30-39	F	Switzerland	6	Ghandruk-ABC	Y	Ν
4	30-39	м	Switzerland	14	Ghorepani-Ghandruk- ABC	N	N
5	20-29	F	Germany	5	Ghorepani-Ghandruk- ABC	N	N
6	60-69	М	Brazil	12	Upper Mustang	Y	Ν
7	50-59	М	England	12	AC to Jomsom only	Y	Y
8	50-59	М	Australia	3	Jomsom-Muktinath	N	Ν
9	20-29	F	Norway	12	AC to Jomsom only	N	Ν
10	60-69	М	Germany	13	AC to Jomsom only	Y	Y
11	20-29	F	Hungary	24	AC-ABC	Y	Y
12	60-69	М	France	45	AC-ABC	Y	Y
13	40-49	М	Holland	12	AC to Jomsom only	Y	Y
14	20-29	М	Germany	24	AC-ABC	Y	Y
15	30-39	М	Finland	24	AC-ABC	Ν	N
16	30-39	М	Switzerland	12	AC to Jomsom only	Ν	N
17	40-49	М	Holland	12	AC to Jomsom only	Y	Y

Table 12.	Demographic	attributes	of tourists	interviewed.
TUDIC IL.	Demographic	uttibutes	or tourists	million wie wea.

The length of time tourists were spending in the ACA varied from as little as three days to as long as 45 days. Those spending fewer days were doing shorter treks in the southern part of the ACA while those spending more time in the region were doing the AC trek or multiple treks. Just over half (52.9%) of the tourists interviewed had hired a guide for their trek and seven (41.2%) of the tourists interviewed had visited the ACA previously (Table 12).

4.1.2. Age

The age range of guides was the smallest of all stakeholder groups. Five of the guides interviewed (41.7%) were between the ages of 20 and 29, four (33.3%) were between the ages of 30 and 39 and three were between the ages of 40 and 49 (Figure 9). The fact that no guides interviewed were in
either of the two highest age categories is not surprising given the physical requirements and demands of guides working in the ACA. Guides spend a great deal of time at high altitude and often carry additional packs for tourists, increasing the physical demands of them.



Figure 9. Participant age distribution among stakeholder groups.

Five (50.0%) of the ACAP employees interviewed were between the ages of 40 and 49 while two (20.0%) were between the ages of 20 and 29, two (20.0%) were between the ages of 30 and 39, and one (10.0%) was between the ages of 50 and 59 (Figure 9). The high proportion of ACAP staff between the ages of 40 and 49 can be explained by the fact that key informants with the most experience were selected from this stakeholder group and experience generally increases with age.

Ten of the tourists interviewed (58.8%) were under the age of 39 while two (11.8%) were between the ages of 40 and 49, two (11.8%) were between the ages of 50 and 59, and three (17.6%) were between the ages of 60 and 69 (Figure 9). The fact that over half of the tourists interviewed were under the age of 39 is not surprising given the physical requirements of trekking at high altitude and the generally basic accommodations in the ACA. Holden and Sparrowhawk (2002) found 68% of the 156 trekkers they interviewed in the ACA were under the age of 35 while Nepal (2007c) found that over 75% of the 120 trekkers he interviewed in the ACA were under the age of 35. The tourist group, however, also had the highest proportion of participants in the 60 to 69 years of age category. According to Eagles

et al. (2002), older travellers tend to be interested in the kinds of experiences offered by natural areas and PAs like the ACA. Additionally, given that these tourists were all retired, they could afford the time required for trekking in the ACA and each was spending at least two weeks in the region.

The majority of TBOs (81.3%) were between the ages of 30 and 59 while only two (12.5%) were between the ages of 20 and 29 and one (6.3%) was between the ages of 60 and 69 (Figure 9). The lack of younger TBOs can be explained by the aim of the researcher to interview key informant business leaders.

4.1.3. Gender

The majority of participants were male in all stakeholder groups: 10 (64.7%) in the TBO group; eight (80%) in the ACAP group; 11 (91.7%) in the guide group; and 12 (70.6%) in the tourist group (Figure 10).



Figure 10. Participant gender distribution among stakeholder groups.

The skewed gender ratio among Nepali participants in the ACAP, TBO and guide groups is not surprising given that management positions and business ownership is dominated by men, and women have only recently begun to work as guides in Nepal. The availability of female guides to interview was very low. The skewed gender ratio in the tourists group may reflect the researcher's consideration of other important demographic attributes that were sought in the sample other than gender. Given that the researcher was aware that the gender ratio was likely to be heavily skewed towards males in the other three groups, gender was not an attribute that was expected to be necessarily suitable for comparison to knowledge and interpretation of the ST concept among these groups. Additionally, given that a cross-section of the range of tourists entering the ACA was sought, attributes such as age and whether the tourist had visited the ACA before were given greater consideration than gender at times if diversity in these attributes was lacking. Consequently, the tourist stakeholder group was skewed towards males in this study.

4.2. Knowledge of the Sustainable Tourism Concept

All ACAP staff had knowledge of the ST concept, meaning they had heard of the concept and could explain what they understood it to mean. Three of the TBOs interviewed lacked knowledge of ST, meaning they had not heard of the term and concept, while two guides and one tourist interviewed lacked knowledge of ST. The TBO group had the largest proportion of participants lacking ST knowledge followed by the guides and tourist groups (Figure 11).



Figure 11. Knowledge of the ST concept among stakeholder groups.

The one tourist lacking ST knowledge indicated that she was not familiar with the term in English but she may know of it in her native language. Thus it could not be accurately determined if her lack of ST knowledge was due to a language barrier or a true lack of knowledge.

Of the TBOs lacking ST knowledge, two of them were under the age of 30 and had more recently taken over or were in the process of taking over the management of the family's lodge while the other had taken over management of the business due to the death of her husband. When these participants were asked about whether they had received any tourism training or information by ACAP, their responses suggest a lack of access to ST knowledge and training and may explain their lack of knowledge of ST:

In the past they used to have [tourism] training programs. My father told me they used to have that program. [TBO 14]

They used to give training, like cook training, 10-15 years ago. But nowadays there is no training or assistance. [TBO 7]

Previously there was training before I came here, they used to give training. Nowadays they are not updating it and there is none. [TBO 10]

The two guides lacking ST knowledge both had over 13 years of experience working as trekking guides in Nepal. Their lack of knowledge may be explained by the fact that these guides went through guide training a great deal of time ago and had not received any additional training since. Additionally, given the time span since their guide training, it may be that the training they received did not yet incorporate tourism concepts like ST.

The lack of ST knowledge among these TBOs and guides indicates a need for continued periodic training with updated tourism information and knowledge for both guides and TBOs. This is discussed in greater detail in Section 4.4.

4.3. Interpretation of the ST concept

It was hypothesized that interpretations of the ST concept differ both among and within stakeholder groups.

As discussed in the previous chapter, the node *longevity of the industry* was coded if a participant's understanding of ST was in line with the weakest interpretation of the ST concept. In this study, the weakest interpretation is defined as the perception that the tourism industry must be sustained for ST without an understanding of aspects of sustainability in the economic, environmental, or social dimensions required for the sustainability of the tourism industry. To eliminate confusion, a

stronger interpretation of ST (defined as the perception that there are important aspects and dimensions of sustainability other than simply the longevity of the tourism industry) will be referred to as a greater-than-weakest (GTW) interpretation.

The following two sections present and discuss the weakest and GTW interpretations of the ST concept among stakeholders.

4.3.1. Weakest Interpretations

Of the 13 guides with knowledge of ST, five (38.5%) had the weakest interpretation of the ST concept while the remaining eight had a GTW interpretation (Table 13). These five TBOs understood the ST concept as "long-lasting tourism." When asked what they thought was important and necessary for long-lasting tourism, the following were the responses received:

We have to make it so that people come more and more here. That is sustainable tourism. [TBO 1]

We should focus on the attraction of tourists so more and more tourists. [TBO 4]

I think that we need more attractions to bring tourists so that they come for ever and ever. [TBO 6]

There should be no [entry] permit for tourists to enter the area and visit...then much more tourists come. [TBO 11]

[The government] has to spend money to promote trekking here, to bring more tourists. [TBO 15]

Table 13. Coding matrix of nodes coded in the responses to the question of what participants with ST knowledge understand it to mean. The node indicative of the weakest interpretation is emphasized. Values refer to numbers of participants.

	Nodes Coded				
Stakeholder Group	Longevity of the industry	Economic Dimension	Environmental Dimension	Social Dimension	Total
TBOs	5	8	4	6	13
ACAP	0	8	8	8	10
Guides	1	7	4	6	10
Tourists	0	4	15	11	16

Only one of the 10 guides (10%) with knowledge of ST had the weakest interpretation of the concept (Table 13):

I think that the permit charge should be reduced and the area should be increased to encourage the number of tourists. [Guide 1]

When these responses were given, the researcher would repeat what was said to clarify that this was the participant's interpretation of ST, allowing the participant to add anything more. The researcher chose not to specifically ask participants about other aspects or dimensions of sustainability they had not mentioned given that authentic interpretations were sought and the researcher did not want to impart any ideas on participants in any way that would influence their authentic interpretation and response.

Among the participants with the weakest interpretation, there was a focus on the need to increase the number of tourists visiting the ACA and generally all of these participants felt that the region could absorb more visitors. This perception among TBOs was acknowledged by some of the ACAP staff as being problematic for them:

They are always saying just high number of tourists so that's the major problem. [ACAP 7]

The ACA has experienced the highest tourist numbers to date and evidently these participants perceive there to be a need for even greater numbers. There was no mention by any of these participants of the need to manage tourist numbers in the region. This is problematic in that these perceptions do not take into account the ACA's PA status or the environmental limitations of the region: the ACA is a high altitude environment with limited resources and vulnerable to environmental disturbances. These perceptions pose a challenge for ACAP in terms of capacity building for ST management among locallevel institutions comprised of TBOs, including CAMCs and TMsCs, which will be responsible for tourism management in the region in the future. Without an understanding of the environmental limitations of the region and the environmental impacts of increasing tourist numbers, the ability of TBOs to manage tourism in a sustainable fashion is questionable.

The perception that greater numbers of tourists are needed for ST is also problematic for the success of the international tourism industry in the ACA. This perception does not consider the motivations and expectations of tourists visiting the region. Tourists visiting the ACA have been found to be generally motivated by the image of unspoilt nature (Holden & Sparrowhawk, 2002; Wrobel & Kozlowski, 2012). At the same time, however, tourists have become increasingly aware of the rise in tourist numbers and the associated impacts on their tourist experience and the environment. Over a

third of the 156 trekkers interviewed by Holden (2003) perceived the ACA to be overcrowded with trekkers. Nepal (2007c) found that some trekkers interviewed complained of the lodges becoming too large and often overcrowded and chaotic. Informal conversations between the researcher and tourists in both 2011 and 2012 indicated that many expected the environmental quality to be higher and the unsightly presence of waste and garbage was often mentioned, an observation supported by Magditsch and Moore (2012). The expectation of greater environmental quality was also found by Nepal (2007c) and environmental quality was found to be rated as one of the most important attributes of their trekking experience. If the region were to continue to experience a rise in tourist numbers, it can be assumed that the challenges of overcrowding and waste management experienced during tourist season would be worsened. If unmanaged, these challenges may negatively impact the image that attracts tourists to the region, subsequently reducing the competitive advantage of the ACA as a tourist destination.

Based on the number of participants with a tourism-centric perspective of ST, just over a third (38.5%) of TBOs and 10% of guides with ST knowledge interpreted the concept as one that is achieved through what Hunter (1997) identifies as a "tourism imperative" (p. 860). This interpretation is equated with the weakest position on the sustainability scale and it is characterized by perceptions that are heavily skewed towards the development of tourism and emphasis on satisfying the needs of both tourism operators and tourists. The major challenge associated with this interpretation is that a substantial loss of the natural resource base may be incurred (Hunter, 1997), potentially leading to a loss of important ecological functions or the degradation of the primary tourist attraction itself.

4.3.2. Greater-than-Weakest Interpretations

The following sections present the GTW interpretations of the ST concept among the four key stakeholder groups: TBOs, guides, tourists, and ACAP.

4.3.2.1. Tourism Business Owners

All eight TBOs with a GTW interpretation of ST mentioned the economic dimension either in terms of the longevity of the tourism industry or support for the local economy (Table 14). The social dimension was mentioned by six (75%) of the TBOs, either in the context of the need for cultural preservation or the important of tourist satisfaction. The environmental dimension was mentioned by only four (50%) TBOs, either in the context of the importance of a healthy environment or the need to preserve nature.

Dimension Coded	Aspect mentioned	Example of response
Economic	Longevity of the industry	"I understand it to mean long lasting tourism." [TBO 5]
	Support for local economy	"Not only [good for] tourism but also agriculture because here we grow very good vegetables and then we can sell more." [TBO 8]
Environmental	Healthy environment Nature preservation	"The environment should be clean." [TBO 9] "We have to preserve our nature also." [TBO 16]
Social	Preservation of culture	"Culture is also very important and must be preserved for sustainable tourism to be achieved." [TBO 5]
	Tourist satisfaction	"Sustainable tourism means to focus on the service rather than the business so that the tourists will come here ever and ever. Because of the service." [TBO 2]

Table 14. Aspects of sustainability dimensions mentioned by TBOs with a GTW interpretation of ST.

The interpretations of the ST concept among these eight TBOs were heterogeneous (Table 15). Three (37.5%) of the TBOs had a holistic understanding of the concept (meaning they mentioned all three dimensions of sustainability). Four participants mentioned two dimensions of sustainability: three (37.5%) mentioned both the social and economic dimensions while one (12.5%) mentioned both the environmental and economic dimensions. One participant (12.5%) mentioned the economic dimension only.

Participant	Dimensions Coded	Aspects mentioned
2	Social + Economic	Tourist satisfaction; longevity of the industry
3	Social + Economic	Preservation of culture; longevity of the industry
5	Economic + Social + Environmental	Preservation of cultural/natural attributes; longevity of the industry
8	Economic	Support for the local economy
9	Economic + Environmental	Support for the local economy; need for healthy environment
12	Social + Economic	Tourist satisfaction; longevity of the industry
13	Economic + Social + Environmental	Preservation of cultural/natural attributes; longevity of the industry
16	Economic + Social + Environmental	Preservation of cultural/natural attributes; longevity of the industry

 Table 15. Dimensions coded among TBOs with a GTW interpretation.

The number of coding references to each dimension of sustainability, or the number of times that each dimension was mentioned during participants' explanation of what they understood by ST, were examined among the three TBOs with a holistic interpretation of the concept (Figure 12). This was done to examine if emphasis was placed on any particular dimension of sustainability based on the assumption that importance is directly related to number of references made. Among these three participants, the environmental and social dimensions were both mentioned equally and slightly emphasized over the economic dimension.

The heterogeneity in interpretations of ST among TBOs indicates that as a group, they do not have a shared understanding of the ST concept; however, there was agreement by all that the tourism industry itself must be sustained (Figure 13). Although these eight TBOs agree on the importance of the local and tourism economy, the results suggest that not all perceive the natural and cultural attributes as being important for tourism sustainability. This may be problematic in the future if TMsCs, comprised of TBOs, assume responsibility for tourism management as achieving consensus on ST management approaches and policies is likely to be difficult.



Figure 12. Proportion of responses by TBOs with a holistic understanding of the ST concept that were coded for each dimension of sustainability.

When looking at the interpretation of TBOs as a group, the economic dimension of sustainability was mentioned most often (Figure 13). The emphasis or focus on the economic side is supported by comments made in interviews with other stakeholders. Many ACAP staff mentioned the limited

knowledge and understanding of TBOs in terms of ST and how this posed challenges for them in terms of capacity building, and responses such as these were common:

Only [TBOs] knowing for tourists paying money and the number of tourists coming for the night. This is limitation for them. And their view is that only. [ACAP 2]

People here, I don't want to blame, but people here are more money minded. I want to say that. It is my experience working here nearly nine years. [ACAP 3]

[It is] very difficult to deliver the message for the local people because they have not fully understand those things, only how to earn money. Only how to earn money. [ACAP 7]

A few guides also expressed similar sentiments, for example:

Almost money-minded. That is not good idea. Every white skin, they are not rich. Some white skin are lower than Nepali peoples, of course. That's why the hotel owners should know about that. [Guide 11]

Some TBOs mentioned the focus of TBOs to be on the economic side of tourism:

They just think about the money, they do not care about the service. Their feeling is only towards to money. That is not good. [TBO 2]

How we can sustain the tourists we never think with ourselves because I'm running it just to earn money. But I do not think about how it be sustained for long time. I never think it. [TBO 4]

Additionally, some tourists the researcher spoke with complained about being overcharged for services rendered at some lodges and the unpleasant encounters with lodge owners that ensued when addressing this. The researcher herself experienced this at one lodge during a three week trek along the AC trail in 2011. However, this only occurred at one out of the 18 lodges visited, a small proportion overall.

Based on these findings, it appears that the economic focus of TBOs may be a contentious issue among local stakeholders and a challenge for ACAP. The fact that other TBOs have voiced concerns about this indicates that this may foster or lead to increased conflict among TBOs. This is turn may pose a challenge for ACAP in terms of capacity building of TMsCs, composed of TBOs, as conflict and resentment among TBOs is unlikely to lead to constructive cooperation and consensus on management approaches and actions. Additionally, a focus on increasing the economic benefits of tourism without consideration of the potential impacts on the tourist experience may lead to a decrease in tourist satisfaction, affecting the number of repeat visitors to the ACA.

Although the TBOs with a holistic understanding placed slight emphasis on the environmental and social dimensions, the environmental dimension was mentioned the least among the other TBOs (Figure 13). The low proportion of TBOs who mentioned the environmental dimension is likely attributed to a generally low level of environmental awareness among many TBOs and support for this can be found in the literature. Although the conservation and education programs implemented by ACAP have been successful at garnering support for conservation efforts among many residents of the ACA (Bajracharya *et al.*, 2005; Parker, 2003), local residents have been found to still perceive fewer negative and more positive impacts of tourism on the environment relative to ACA managers. Nyaupane and Thapa (2006) found that local residents in the ACA did not perceive there to be a solid waste disposal or deforestation problem due to tourism yet this is an ongoing and increasing challenge for ACAP as tourist numbers continue to increase. Furthermore, despite the emphasis of ACAP on the use of alternative energy sources and the provision of technical support, many TBOs continue to use firewood for cooking (Nepal, 2002; Nyaupane & Thapa, 2006). This is supported by the observations of the researcher – large piles of firewood are often visible along or behind lodges in the ACA.

Various reasons for this low environmental concern or awareness have been suggested. Some suggest that environmental impacts may be justified by individual economic gains, leading to an ignorance of the consequences of tourism on the environment (Mehta & Kellert, 1998; Walpole & Goodwin, 2001). This logic is based on the perception that individual benefit is higher than environmental cost. Nyaupane and Thapa (2006) suggest that a sufficient level of environmental knowledge may still be lacking among residents to realize the negative impacts of tourism on the environment, leading to an overall lack of environmental concern. This may be attributed to a low proportion of residents with formal education (Spiteri & Nepal, 2006) and an insufficient level of relevant tourism education and training that addresses the importance of the environment for the sustainability of tourism.

Overall, three of the TBOs interviewed (18.8%) had a holistic understanding of the ST concept and placed slight emphasis on both the environmental and social dimensions (Figure 14). However, a majority of TBOs did not mention more than two dimensions of sustainability or the environmental dimension. Five (31.2%) of the participants with ST knowledge interpreted the concept as one that is achieved through a tourism imperative, equated with the weakest interpretation of the concept.



Figure 13. Proportion of the eight TBOs with a GTW interpretation of ST that mentioned each dimension of sustainability. Number in parentheses indicates proportion of total TBO sample with a holistic understanding.

Figure 14. Flow chart depicting the knowledge and interpretation of the ST concept by TBOs.

Another five (31.2%) of the participants interpreted the concept as one that is achieved through what Hunter (1997) identifies as "product-led tourism" (p. 860) or what with other may refer to as an economic or developmental perspective (Hediger, 1999; McKercher, 1993). This approach is equated with a weak interpretation of the concept and it is based on the rationale that "changes in environmental quality can be evaluated and traded off against changes in aggregate income" (Hediger, 1999, p. 1127). The environmental side of the tourism-environment system may be given some consideration but it is secondary to the primary desire to maintain current and develop new tourism products to allow growth in the tourism sector as far as is feasible (Hunter, 1997). Although there was consideration of the environment among some TBOs, and a greater level of consideration for the local culture, the sustainability of the local and tourism economy was most mentioned by this stakeholder group.

4.3.2.2. Guides

Of the nine guides with a GTW interpretation of the ST concept, seven (77.8%) mentioned the economic dimension either in terms of the longevity of the tourism industry, the distribution of tourism benefits, or increased employment opportunities (Table 16). The social dimension was mentioned by six (66.7%) of the guides, either in the context of cultural preservation or tourist satisfaction. The environmental dimension was mentioned by four (44.4%) of the guides, either in the context of nature conservation or a healthy, clean environment.

Dimension Coded	Aspect mentioned	Example of response
Economic	Longevity of industry	"I think it is tourism that lasts for future." [Guide 6]
	Distribution of tourism benefits	"If one tourist is coming to Nepalgenerally 9 people are benefitting. Some are directly and some are indirectly benefiting." [Guide 9]
	Employment opportunities	"If I have no difficulty finding the jobs in the future, that's what I view about sustainable tourism." [Guide 6]
Environmental	Conservation of nature	"Sustainable tourism, it helps to conserve the nature itself." [Guide 2]
	Healthy and clean environment	"That is sustainable tourism. Keeping the environment clean and staying like naturally." [Guide 3]
Social	Preservation of culture	"Saving the culture, saving the religion, then people make sustainable tourism" [Guide 9]
	Tourist satisfaction	"People need to give good service and good food. Even guide also need to give good service, no cheating. That's very important." [Guide 11]

Table 16. Aspects of sustainability dimensions mentioned by guides with a GTW interpretation of ST.

Similar to TBOs, the interpretations of ST among these nine guides were heterogeneous (Table 17). Two of the guides (22.2%) had a holistic understanding of the concept while four (44.4%) mentioned both the economic and social dimensions. Two participants (22.2%) mentioned only the environmental dimension while one participant (11.1%) mentioned only the economic one.

Participant	Dimensions Coded	Aspects mentioned
2	Environmental	Nature conservation; minimization of resource usage
3	Environmental	Nature conservation; healthy and clean environment
5	Economic + Social	Distribution of tourism benefits; tourist satisfaction
6	Economic	Longevity of the industry; employment opportunities
8	Economic + Social + Environmental	Preservation of nature and culture; longevity of industry
9	Economic + Social	Distribution of tourism benefits; preservation of culture
10	Economic + Social	Longevity of industry; tourist satisfaction
11	Economic + Social	Longevity of industry; tourist satisfaction
12	Economic + Social + Environmental	Preservation of nature and culture; longevity of industry

Table 17. Dimensions coded among guides with a GTW interpretation.

The number of coding references to each dimension of sustainability was examined among the two guides with a holistic interpretation of the concept (Figure 15). Between these two guides, the economic and social dimensions were both mentioned equally and emphasized over the environmental dimension.





The heterogeneity in interpretations of ST among guides indicates that as a group, they do not have a shared understanding of the ST concept or agree on what exactly needs to be sustained.

Although a majority of guides agree on the importance of the local and tourism economy, this view was not shared by all. The results also suggest that not all guides perceive the natural and cultural attributes as being important for tourism sustainability, the natural ones in particular given that only 40% of guides with ST knowledge mentioned the environmental dimension; the social dimension was mentioned by 60% of the guides with ST knowledge. This indicates a failure to recognize the necessary interrelationship between environmental and social sustainability and the sustainability of the tourism industry among many of the guides interviewed. This is problematic given the pivotal role of guides in both the tourist experience and tourism management. Guides are expected to act as role models through environmental and local culture (Black *et al.,* 2001). In PAs in particular, guides generally have the added responsibility of delivering minimum impact and conservation messages (Weiler & Davis, 1993). It is questionable whether guides who do not recognize or understand the importance of the environment and local culture to the sustainability of the tourism industry will be able to deliver in terms of these responsibilities and expectations, especially with regards to delivering minimum impacts and conservation messages.

Various informal conversations with tourists suggest that many guides are not providing environmental or cultural information and some guides do not even act in an environmentallyresponsible manner. Some tourists the researcher spoke with mentioned that they had to ask their guide to stop littering or they found themselves picking up garbage after guides and porters. Others mentioned that they had asked their guide to stop using illegal firewood for cooking. One of the tourists interviewed in this study later mentioned that he was upset that his guide had not informed him of the safe drinking water stations along the trail and he had been buying bottled water. Other tourists had informed him of the water stations a week into his trek but he expressed his frustration with not having known this from the start given how many plastic bottles he had gone through. A couple of ACAP staff also voiced some concern over the lack of environmental awareness of guides, for example:

I am not happy with the attitude of guides also. Maybe there is a lack of awareness but there is trekking guide training where they include things [like] protected area management and how to become ecofriendly. They should be aware of that but many are not. [ACAP 3]

Although to date there have been no studies that explore the level of environmental awareness and concern among guides in the ACA and Nepal, evidence from interviews and informal conversations with tourists and ACAP employees suggest a low level of environmental awareness among many guides in the region. It is suggested that this may be attributed to a lack of higher level formal education or a

lack of sufficient information about the environment in the training available to guides in Nepal. Without a sufficient understanding of the fragile environment of the ACA and its importance to the local communities and overall sustainability of the tourism industry, it is unlikely that guides will be able to effectively fulfill their role not only in the tourist experience but also in the facilitation and management of ST in the ACA.

Not all guides interviewed were lacking environmental awareness, however, and although a smaller proportion of guides mentioned the environmental dimension relative to TBOs, two (16.7%) of the guides interviewed mentioned environmental sustainability as being of primary importance for ST. Given that the sustainability of the environment was the only aspect mentioned by these two guides, it can be assumed that they deem this to be of primary importance for ST. Interestingly, these two guides work for well-established and reputable trekking agencies with their own approaches to training. The potential relationship between the environmental awareness of guides and the type of guide training received will be discussed in Section 4.4.2.

Similar to the TBO group, the economic dimension of sustainability was mentioned most often by guides as a group, followed by the social and environmental ones (Figure 16). Interpretations of the ST concept among guides, however, were more heterogeneous compared to TBOs. Almost half (41.7%) of the guides interviewed had a weak interpretation of ST with a product-led approach or with an economic/developmental perspective while only one guide (8.3%) had the weakest interpretation of the concept (Figure 17). Two (16.7%) guides had a holistic interpretation with emphasis on the economic and social dimensions over the environmental one. At the same time, two (16.7%) guides had a strong or ecological interpretation of the concept and viewed environmental sustainability as being of primary importance but did not mention any other dimension of sustainability. The high proportion of guides with a weak interpretation of the concept suggests that many are lacking knowledge about the important interrelationship between environmental and social sustainability and the sustainability of the tourism industry and local economy. The greater heterogeneity among guides relative to TBOs may be a reflection the different training approaches taken by trekking agencies in Nepal.



Figure 16. Proportion of the nine guides with a GTW interpretation of ST that mentioned each dimension of sustainability. Number in parentheses indicates proportion of total guide sample with a holistic understanding.

Figure 17. Flow chart depicting the knowledge and interpretation of the ST concept by guides.

4.3.2.3. Tourists

Of the 16 tourists with a GTW interpretation of the ST concept, almost all (93.8%) of them mentioned the environmental dimension either in terms of nature preservation or waste/pollution management (Table 18). The social dimension was mentioned by 11 (68.8%) of the tourists, either in the context of preservation of culture, intercultural understanding, or respect for the local communities. The economic dimension was mentioned by only four (25%) tourists and only in the context of the longevity of the tourism industry.

Dimension Coded	Aspect mentioned	Example of response
Economic	Longevity of the industry	"[So] you can still do the same tourism in let's say 100 years." [Tourist 15]
Environmental	Preservation of nature Waste and pollution management	"[It is] tourism that doesn't destroy the environment." [Tourist 7] "Not to leave too much waste or garbage in the place so that they have not too much work getting rid of the stuff you left there." [Tourist 5]
Social	Preservation of culture Cultural understanding Respect for local communities	"I think the idea is to try to not disturb [or] change the culture" [Tourist 6] "Perhaps you get a better understanding for the people living here." [Tourist 16] "Also to behave with other well with other people, the local people." [Tourist 3]

Table 18. Aspects of sustainability dimensions mentioned by tourists with a GTW interpretation of ST.

Table 19. Dimensions coded among tourists with a GTW interpretation.

Participant	Dimensions Coded	Aspects mentioned
1	Environmental + Social	Nature conservation; preservation of culture
2	Social	Respecting the local communities
3	Environmental + Social	Pollution and waste management; respecting locals
4	Environmental + Social	Nature conservation; preservation of culture
5	Environmental + Social	Waste management; respecting the local communities
6	Environmental + Social	Minimization of waste; conservation; preservation of culture
7	Economic + Environmental	Longevity of industry; nature conservation
8	Environmental	Waste management; nature conservation
9	Environmental	Waste management; nature conservation
10	Environmental + Social	Nature conservation; preservation of culture
12	Economic + Social + Environmental	Longevity of industry; preservation of nature and culture
13	Environmental	Nature conservation
14	Economic + Social + Environmental	Longevity of industry; preservation of nature and culture
15	Economic + Social + Environmental	Longevity of industry; preservation of nature and culture
16	Environmental + Social	Waste management; cultural understanding
17	Environmental	Nature conservation; waste management

Similar to TBOs and guides, the interpretations of the ST concept among these 16 tourists were heterogeneous (Table 19). Three (18.8%) of the tourists had a holistic understanding of the ST concept. Eight tourists mentioned two dimensions of sustainability: seven (43.8%) mentioned the environmental and social dimensions while one (6.3%) mentioned both the environmental and economic ones. Five tourists mentioned only one dimension of sustainability: four (25.0%) mentioned the environmental dimension only while one (6.3%) mentioned only the social dimension.

The number of coding references to each dimension of sustainability was examined among the three tourists with a holistic interpretation of the concept (Figure 18). Among these three tourists, the environmental dimension was mentioned slightly more often and emphasized over the social and economic ones.

Similar to TBOs and guides, the heterogeneity among tourists in terms of their interpretation of ST indicates that as a group, tourists do not have a shared understanding of the concept. There was, however, general agreement that the environment must be sustained for ST and almost all (93.8%) tourists mentioned the environmental dimension (Figure 19). This is not surprising given the type of tourists that visit the ACA and the generally high level of environmental awareness among them.





Tourism in the ACA has been developed based on the image of unspoilt nature, and to a lesser degree unique culture. A majority (88.2%) of the tourists interviewed in this study indicated that the natural environment was the main attraction that brought them to the ACA. This was also found in other

studies. Holden and Sparrowhawk (2002) found that 95% of the 156 trekkers they interviewed were motivated by a desire to enjoy nature. Wrobel and Kozlowski (2012) found that 74% of the 101 tourists surveyed indicated the enjoyment of nature to be the most important motivation for visiting the ACA while another 25% indicated it as being important. It can be argued that tourists motivated by a desire to experience nature are more likely to consider its importance to the sustainability of tourism given it is the very thing that attracted them to the region in the first place. Additionally, a generally high level of environmental awareness has been found among trekkers in the ACA (Holden & Sparrowhawk, 2002; Wrobel & Kozlowski, 2012). Thus the high proportion of tourists that mentioned the environmental dimension can be explained by the primary motivation of tourists visiting the ACA being the experience of nature as well as the general environmental ethos of these tourists.

The economic dimension of sustainability was mentioned least often by tourists when asked about their understanding of the ST concept (Figure 19). Tourists were the least likely of all stakeholders to mention the economic dimension: it was mentioned by only four tourists and only in the context of the longevity of the tourism industry. Interestingly, when tourists were asked what positive impacts they may have on the area, all of them mentioned the injection of money into the local economy. The only other response given was the empowerment of women through exposure to Western women by one participant. Evidently, tourists were aware of the positive economic impact they have on the area. At the same time, however, tourists did not seem to recognize this aspect as being an important component of ST, which many of them perceived as the need to maintain the environmental and cultural integrity of the destination. This indicates a failure to recognize the necessary interrelationship or linkage between environmental and social sustainability and economic sustainability among a majority of the tourists interviewed, suggesting limited knowledge of the holistic nature of the ST concept among these tourists.

The sustainability of the tourism industry was the only aspect of the economic dimension mentioned by tourists in the context of ST. The view of the four tourists who did mention this aspect seemed to be based on the premise that sustainability of the tourism industry would be enabled through environmental sustainability since it is the environment of the ACA that attracts tourists to begin with. None of these four tourists, or any others interviewed, considered other important economic aspects such as the equitable distribution of tourism benefits among local communities, the provision of employment and economic opportunities to prevent the exodus of residents to cities in search of greater economic opportunities, or the prevention or reduction of unfair competition among businesses. In fact, many tourists were observed by the researcher to fuel competition between

businesses as they went from lodge to lodge in search of the best deal and threatening to choose another if the price offered was not reduced. In addition to a lack of sufficient knowledge of the importance of economic sustainability for ST, this may be partially explained by the fact that trekkers seem to have little awareness of the social and economic problems and the complexities and challenges of rural life in the ACA. Interviews and Informal conversations with tourists in this study indicate that they do not seem to be aware of important issues facing the region, such as the exodus of young people to the cities or abroad for better economic opportunities. Support for this can be found in previous studies in the ACA, including those of Hepburn (2002) and Holden (2010). Thomsom (2007) found little awareness of the economic, social, political or environmental problems present in the ACA among the 30 trekkers he interviewed. It is argued that this limited knowledge of tourists of the local communities in the ACA and the economic challenges associated with their rural lifestyles often results in behaviours of tourists that do not sufficiently contribute to, or in fact hinder, economic sustainability of the local communities in the region. This is supported by recent tourism trends reported by the Ministry of Culture, Tourism and Civil Aviation (2010, 2011) that indicate that although the number of tourists visiting both Nepal and the ACA is increasing annually, the average daily amount tourists are spending is decreasing.

Another interesting finding is that tourists seem to be very concerned about the environment of the ACA yet they do not seem to recognize the role that a strong local economy plays in supporting environmental initiatives. In other words, tourists do not necessarily see a connection between satisfying the economic needs of the community in order to enable environmental awareness, and concern for the environment. For example, the use of alternative fuels or energy sources to reduce the use of firewood is a costly investment for TBOs. Not only is kerosene, and propane especially, more expensive but there are the additional costs of transportation from the city. Many tourists the researcher spoke with over the two periods of data collection indicated that they sought out lodges that did not use firewood for cooking. At the same time, however, during these visits the researcher observed many tourists haggling over room charges (often over amounts that equate to fifty cents or a dollar), looking for deals, or even cooking their own food in the dining rooms of lodges using the woodfired heating furnace (the only source of heating in all lodges) to avoid purchasing food from the establishment. Essentially, there seems to be a disconnect where tourists desire or expect TBOs to be environmentally focussed, often requiring the use of more expensive alternative fuel and energy sources, and yet they do not necessarily consider their role in supporting the income of these TBOs to facilitate this.

Although most tourists emphasized the importance of environmental sustainability or conservation, interestingly they largely did not associate their presence in the ACA with increased use of natural resources and pressure on the environment. When tourists were asked if they thought their presence in the ACA had any negative impacts, responses like this were common:

No, I mean I haven't used any of the jeeps or anything like that. [Tourist 9]

I don't know if we are disturbing anybody here. [Tourist 5]

We bring in money. That's it. I don't think I am really influencing anything here. [Tourist 2]

I don't know what other impacts we are having by being here other than injecting money. [Tourist 4]

Of the tourists that did perceive their presence to have negative impacts, only the impact on local culture was mentioned, for example:

The local life is changing with tourism. The tradition is destroyed because [locals] see tourists, other life styles, and it changes with tourism. [Tourist 3]

This observation is supported by the findings of Holden (2010) who also found that although changes in the natural environment were viewed unfavourably by tourists in the ACA, tourists generally did not link their own presence in the region to the incremental pressure on resource usage. In addition to the observations by Hepburn (2002) and Holden (2010) that tourists generally have limited knowledge about the local communities in the ACA, these findings suggests that the current tourist information system available is inadequate in terms of effectively providing tourists with relevant information about the region that can inform and guide their decisions and behaviours. This theme is explored and discussed in Section 4.4.3.

Overall, tourists were most likely to mention the environmental dimension, followed by the social dimension, and only a small proportion of tourists mentioned the economic dimension (Figure 19). Compared to TBOs and guides, the interpretations of ST were more homogeneous among tourists (Figure 20). The three tourists with a holistic understanding of the ST concept placed emphasis on the environmental dimension. At the same time, a majority of the others interviewed largely interpreted the concept as one that is achieved through what Hunter (1997) identifies as "environment-led tourism" (p. 861) or with what others may refer to as an environmental perspective (Hediger, 1999; McKercher, 1993). This interpretation is considered strong on the sustainability scale and it is characterized by primary concern and emphasis on sustaining the environment. An issue identified in the strong

sustainability or ecological perspective of these tourists, however, was a failure to recognize the necessary interrelationship between environmental and economic sustainability and important aspects of economic sustainability other than simply the longevity of the tourism industry.



Figure 19. Proportion of the 16 tourists with a GTW interpretation of ST that mentioned each dimension of sustainability. Number in parentheses indicates proportion of total tourist sample with a holistic understanding.

Figure 20. Flow chart depicting the knowledge and interpretation of the ST concept by tourists

4.3.2.4. ACAP

All 10 ACAP employees interviewed had GTW interpretations of the concept. Eight (80%) of these mentioned the environmental dimension, either in terms of nature conservation or natural resource management. The social dimension was mentioned by eight (80%) of the employees, either in

the context of cultural preservation or improved living standards of the local communities. The economic dimension was also mentioned by eight (80%) of the employees, either in the context of longevity of the tourism industry, increased employment and economic benefits, or support for the local economy (Table 20).

Dimension Coded	Aspect mentioned	Example of response
Economic	Longevity of the industry	"Then it will become long lasting tourism." [ACAP 2]
	Increased employment and economic benefits	"Also it will generate employment and also it the people of that area will be economically benefitted." [ACAP 3]
	Support for local economy	"Sustainable tourism is that type of tourism which supports the local economy." [ACAP 9]
Environmental	Conservation of nature	"The tourists come here to see the natural beauty of the area [so] this must be maintained." [ACAP 1]
	Natural resource management	For us, managing natural resources, that is the point [of ST]" [ACAP 2]
Social	Preservation of culture	"The major thing is conservation, protection and preservation [of resources] including culture resources." [ACAP 8]
	Improved standard of living	"To improve the [living] conditions of the people" [ACAP 10]

Table 20. Aspects of sustainability dimensions mentioned by ACAP staff with a GTW interpretation of ST.

Similar to the other stakeholder groups, the interpretations of the ST concept among these 10 ACAP employees were heterogeneous (Table 21). This group had the largest proportion of participants (60%) with a holistic understanding of the concept where all three dimensions of sustainability were mentioned. Two participants mentioned two dimensions of sustainability: one mentioned both the environmental and social dimensions while another mentioned both the economic and social ones. Two of the participants mentioned only one dimension of sustainability: one mentioned the environmental dimension only while the other mentioned only the economic one.

Participant	Dimensions Coded	Aspects mentioned
1	Economic + Social + Environmental	Support for local economy; preservation of nature and culture
2	Economic + Social + Environmental	Longevity of industry; preservation of nature and culture
3	Economic + Social + Environmental	Increased employment and economic opportunities; preservation of nature and culture
4	Environmental	Environmental conservation
5	Environmental + Social	Environmental and cultural conservation
6	Economic	Longevity of industry; support for local economy
7	Economic + Social	Distribution of economic benefits; tourist satisfaction
8	Economic + Social + Environmental	Support for local economy; preservation of nature and culture
9	Economic + Social + Environmental	Support for local economy; nature conservation; improved standards of living
10	Economic + Social + Environmental	Support for local economy; nature conservation; improved standards of living

Table 21. Dimensions coded among ACAP staff with a GTW interpretation.

The number of coding references to each dimension of sustainability was examined among the six employees with a holistic interpretation of the concept (Figure 21). Among these six employees, slightly greater emphasis was placed on the environmental and economic dimensions relative to the social one.



Figure 21. Proportion of responses by ACAP employee with a holistic understanding of the ST concept that were coded for each dimension of sustainability.

The heterogeneity among ACAP employees indicates that they do not have a shared understanding of the ST concept. When comparing the interpretations among these employees, it is evident that interpretations were related to their area of focus or capacity within ACAP. Those who work specifically in a tourism-related capacity had a holistic understanding of the concept. A typical response of a participant with a holistic interpretation of the concept was:

Sustainable tourism means it will not have negative impact on the environment, culture, or society or a particular destination or host community. And also it will generate employment and the people of that area will be economically benefitted. So it can be said with maximum benefits and least negative impacts. [ACAP 3]

Those employees who work specifically in a natural resources-related capacity mentioned the environmental dimension, although one also mentioned the social dimension. The employee who works in a health-related capacity mentioned the social and economic dimensions while the employee who works in an administrative capacity mentioned the economic dimension. This is not surprising given that interpretations of the concept are likely to be influenced by the needs, expectations, education, and ethical stances of participants (Getz & Timur, 2004; Hunter, 1997). ACAP employees stationed at the field offices in the ACA, however, work in an integrated manner and may find themselves working in other capacities. Thus employees are expected to be knowledgeable in the other programs implemented by ACAP. As explained by one employee:

I work in the Natural Resource Conservation Program, but it is integrated so I work in other fields as well. I also provide tourist information and collect tourist perceptions and provide them information. Tourism is not my focus program but I have some information and I get information from tourists. [ACAP 5]

The interview from which the example above was taken was with an employee whose focus is on natural resource management. The Tourism Assistant at the sample site was away from the area for a month's time, leaving tourism-related tasks in the hands of the other staff at the site. Given that employees often work with programs outside of their normal focus, it is suggested that they should all have the same understanding of important concepts and objectives related to these programs, including ST.

As a group, ACAP employees had the most balanced interpretation of the ST concept in that no single dimension dominated (Figure 22). Compared to the other stakeholder groups, participants in the ACAP group were the most likely to have a holistic understanding of the ST concept: a majority (60%) of ACAP employees interviewed mentioned all three dimensions of sustainability and slight emphasis was placed on the environmental dimension. Of the remaining four participants, two interpreted the

concept from an ecological perspective whereas the other two interpreted the concept from an economic or developmental perspective (Figure 23). The results suggest that the interpretations of ST among ACAP employees were related to their employment capacities within the organization.



Figure 22. Proportion of the 10 ACAP staff with a GTW interpretation of ST that mentioned each dimension of sustainability.

Figure 23. Flow chart depicting the knowledge and interpretation of the ST concept by ACAP staff.

4.4. Channels and Sources of ST Information

Key tourism stakeholders in the ACA very in terms of their access to different channels and sources of tourism and ST information. Communication channels can be classified as either interpersonal or non-personal. Interpersonal channels involve the sharing of information among individuals in an interactive setting, including formal and informal education, meetings and workshops or seminars. Non-personal channels involve the transmission of information through sources like news, radio, television, and the internet. It was hypothesized that differences in the interpretations of ST among key tourism stakeholders are influenced by the different channels and sources of ST information available to them. In the following sections, the primary channels and sources of ST information used by and available to the stakeholders interviewed are presented and discussed in the context of interpretations of ST.

4.4.1. Tourism Business Owners

When TBOs with ST knowledge were asked how they had learned about the concept, all participants cited training workshops and awareness camps organized by ACAP (Table 22). Only two of the participants indicated that they had also learned about the concept from newspapers and radio.

Communication Channel	Information Sources	Participants who used source
Interpersonal	ACAP workshops and awareness camps	13 (100%)
Non-Personal	Newspaper and radio	2 (15.4%)

Table 22. Channels and sources of ST information used by TBOs.

TBOs in the ACA have primarily received their tourism knowledge through training workshops and awareness camps organized by ACAP. However, when speaking with these stakeholders about the current state of these information sources, an important theme emerged in the data: a current lack of access to relevant tourism information among TBOs (Table 23).

Theme	Pattern Node	Sub-theme Nodes	Proportion of TBOs Coded at the Node
	Lack of access to training	a) Need for more training b) Inactivity of ACAP	68.8% 56.3%
Lack of access to relevant tourism information	Lack of updated and relevant training	a) Need for updated trainingb) Need for refresher training	37.5% 31.3%
	Interpretations of ST concept among TBOs	a) Longevity of the industry (weakest interpretation)b) No knowledge of ST	31.2% 18.8%

Table 23. A code map illustrating how the theme of insufficient access of TBOs to relevant tourism information and training was generated based on the initial nodes and the patterns identified.

A majority (56.3%) of the TBOs interviewed voiced concerns over what they perceive as the recent inactivity of ACAP (Table 23). The need for more training was also mentioned by a majority (68.8%) of TBOs. Many participants stated that although ACAP used to provide tourism education and training, they are no longer doing so. Some examples of typical responses include:

ACAP has quite a big responsibility and it did a really good job at the beginning. But currently...they are being a bit lazy nowadays. They are passive. They only focus on the computer works and they do not focus on the field work. [TBO 3]

[ACAP] are very silent. They should come to our hotel and make meeting to our hotelier and they should teach us and train us about the environment and everything. How to run the tourism sector. But they don't. [TBO 8]

[ACAP was] responsible for providing training related to tourism before. But nowadays they are a bit passive and they are not giving the training. [TBO 1]

They used to give training like cook training, 10-15 years ago. But nowadays there is no training or assistance. [TBO 7]

Nowadays they are not giving anything. We are not quite happy. [TBO 12]

Many TBOs also voiced that not only should there be more training available, but it is should also be

updated with relevant tourism knowledge and information and offered more often to "refresh"

knowledge. Some examples of typical responses include:

Now the time has changed and the methods may have changed but they have not updated the training. [TBO 1]

Nowadays they are not updating it and there is none. [TBO 10]

Every year they give the training for cooking but every time the same thing. People want new but they are giving the same lesson every year, every coming year. That is not useful for the local people. [TBO 15]

But currently, it is not refreshed, not updated. [TBO 3]

They provide already, but they should provide in more periods. Because old [residents] they forget. And new one, the next generation up, it should be given. So every two years. Update training and refresh. [TBO 4]

The researcher spoke with ACAP about the prevalence of these perceptions among TBOs and it was

explained that tourism training is still provided and available but not as often as it once was:

We focus on trainings at the beginning. Now we think it is not necessary to provide them with more training like cooking or other kind because they don't need it. Sometimes we are providing training camps, refreshment kind of, within two or four years. [ACAP 9]

This may be explained by Holden's (2010) observation that ACAP has decided to concentrate future resources on agricultural development rather than on tourism. When speaking with another ACAP employee, it was revealed that even if training programs are available, ACAP has difficulty organizing or convincing TBOs to attend:

Sometimes the hoteliers don't provide time. We have a workshop or some kind of meeting maybe at 10 o'clock and then they come at 2 or 3 o'clock because they have many customers at home. That is the [problem], but I think also we can be doing that during the off season. [ACAP 3]

Informal conversations with TBOs during both visits suggest that many do not go if these workshops or sessions are offered during high tourist season, or if they are just providing the same kind of training that they always do.

It is evident that the issues surrounding tourism knowledge sharing with TBOs in the ACA are threefold: training is longer being provided on a regular basis; when it is being provided, the information is not being updated to provide current and relevant tourism information; and ACAP has difficulty organizing TBOs to attend training that is offered. At the same time, TBOs were the most likely of all the stakeholders to be lacking in ST knowledge while those with ST knowledge were likely to have a limited, parochial understanding of the concept rather than a holistic one. Of the 13 TBOs with ST knowledge, five had the weakest tourism-centric interpretation of the concept while another five had a weak interpretation. Addressing the specific issues surrounding tourism knowledge sharing with TBOs is beyond the scope of the study. It is, however, suggested that these issues can explain the heterogeneity among TBOs in terms of their knowledge and interpretations of the ST concept, as well as the generally limited understanding of the important and interrelated dimensions of sustainability that must be considered when managing for ST.

4.4.2. Guides

When guides with ST knowledge were asked how they had come to know of the concept, all participants cited their guide training and only one participant additionally cited radio and television (Table 24). It is evident that guide training is the primary source of ST knowledge among these stakeholders.

The guide stakeholder group was the most heterogeneous in terms of interpretations of the concept, ranging from the weakest tourism-centric interpretation to a strong interpretation with an ecological perspective. It is suggested that the heterogeneity in interpretations of the ST concept among

guides can be explained by varying levels of access to updated tourism training seminars and workshops and the different approaches to guide training taken by more reputable agencies.

Communication Channel	Information Sources	Participants who used source
Interpersonal	Guide training	10 (100%)
Non-Personal	Radio and television	1 (10%)

Table 24 Channels and sources	of ST information used by guides
	of ST information used by guides.

Guides were asked if they had access to any additional training sessions or workshops once they had received their guide licenses. Five (41.7%) of the guides interviewed said that there was no additional training available to them. However, they also stated that if it were to be available, they would be receptive to going. Some typical responses include:

I did not get any special training after that. If someone wanted to give special training, I would like to go there because I want more experience and I want to know more things I don't know about. [Guide 7]

I would like. They should have classes and courses about the nature and things like that. [Guide 9]

Four (33.3%) of the guides interviewed said that although their trekking agency had occasionally offered to send them to training seminars organized by the Trekking Agencies' Association of Nepal (TAAN), they did not always go due to time constraints or a lack of new knowledge being offered, for example:

If I have time I go. But many times I am working. [Guide 4]

But the same thing they are doing 20 years before is the same thing they are doing now. [Guide 5]

Evidently, some guides have access to additional training once they complete their guide training while others do not. Based on the interviews and informal conversations with guides, it seems that the provision of and access to additional and updated guide training varies among trekking agencies in Nepal. This may partially explain the heterogeneity in interpretations of ST among guides. Additionally some guides indicated that the current training provided or available to them is in need of updating with new and more relevant tourism information, an issue similar to that found among TBOs.

There are over 926 registered trekking agencies and hundreds of unregistered ones in Nepal (TAAN, 2012). Most guides receive the standard 45-day training provided by the government and TAAN.

As mentioned previously, however, some of the more reputable trekking agencies or agencies with parent companies in other countries provide their own guide training. Interestingly, the only four guides who mentioned the environmental dimension of sustainability work for well-known and reputable trekking agencies with which the researcher is familiar. One of these agencies has received international recognition and awards from the likes of National Geographic for their commitment to ST. According to personal conversations with the owner, special attention is paid to conservation and environmental awareness during the guide training they provide for employees.

When speaking with a guide employed by another well-known, international trekking agency, he explained that the parent company of his trekking agency emphasizes environmental education and awareness among their guides:

Our company, we employ the local people and we provide food and accommodations for the porters and we don't use firewood. It's based on Australia but there is a local office in Kathmandu. We don't make any campfire at all and we provide all materials, for porters too. [Guide 8]

According to the owner of a trekking agency based in Germany with whom the researcher spoke while in the ACA, the more reputable agencies operating in Nepal often provide their own comprehensive training to ensure that their guides are providing a high quality tourist experience. Based on guide interviews and informal conversations with guides working for these generally more expensive, reputable, and sometimes internationally-based trekking agencies, environmental awareness and consideration is an important part of their training.

The heterogeneity in interpretations of the ST concept among guides can be explained by varying levels of access to additional tourism training as well as the different approaches to and expectations of guide training among trekking agencies operating in Nepal. Given that the only guides to have mentioned the environmental dimension and who demonstrated environmental awareness worked for reputable national or international trekking agencies with their own approach to guide training, it is suggested that the current standard training available to most guides may not be sufficient for fostering environmental awareness. Unfortunately, to date there has been limited analysis of guide training in developing countries (Black *et al.*, 2001), none of which has occurred in Nepal, and further systematic evaluations of guide training programmes are needed.

4.4.3. Tourists

When the 16 tourists familiar with ST were asked how they had come to know of the concept, 10 (62.5%) indicated they had learned of it through non-personal communication channels, including

television, newspapers, and the internet while researching their travels (Table 25). Four tourists (25%) stated this to be common knowledge these days and they were not exactly sure of how they had come to know of it. Typical responses from these four tourists were:

I don't remember how I heard about it. I think most people know about it or ecotourism these days though, don't they? [Tourist 5]

I am not sure how I know it. Maybe because I travel. I think if you travel you have heard it. [Tourist 14]

Only two tourists (12.5%) had learned about ST through formal education. Thus as opposed to TBOs and guides, non-personal communication channels were found to be the most important sources of ST information for tourists.

Communication Channel	Information Sources	Participants who used source
Non-Personal	Internet	10 (62.5%)
	Television	10 (62.5%)
	Newspapers/magazines	10 (62.5%)
Other	Common knowledge	4 (25%)
Interpersonal	Formal education	2 (12.5%)

Table 25. Channels and sources of ST information used by tourists.

As opposed to TBOs and guides who generally receive their ST information from specific interpersonal channels and sources, tourists primarily receive their ST information from a range of nonpersonal sources. Additionally, tourists visiting the region come from many different countries and regions themselves. For these reasons, assessing the influence of their information sources on their interpretations is not quite feasible. However, a few important explanatory inferences can be made about their interpretations of the concept.

Tourists' interpretations of the concept seem to be shaped by their societies, where notions of ST are rooted in Western ideals and values that emphasize environmental conservation. Discussions of sustainability emerge primarily in the context of the environment when environmental issues or challenges are faced. Additionally, international tourists live in societies shaped by very different histories and faced with very different challenges than those of rural communities in Nepal. As Wearing and McDonald (2002) point out: "the concept of conservation originates from a western world that is indeed very different from village life" (p. 199). Thus perceptions of the human-environment

relationship among Western tourists are likely to be dramatically different than those of rural societies, especially ones in developing countries.

Tourists were most likely of all the stakeholders to have an ecological perspective or strong interpretation of the ST concept. This is not surprising given the motivations and general environmental awareness among tourists visiting the ACA (Holden & Sparrowhawk, 2002; Wrobel & Kozlowski, 2012). At the same time, tourists were also the least likely to mention the economic dimension when discussing ST and of those who did, the only aspect mentioned was the sustainability of the tourism industry itself. These findings indicate an insufficient understanding of the important interrelationship or linkage between local economic sustainability and environmental sustainability. It is suggested that this gap in knowledge or understanding could be minimized through the provision of information about economic and social challenges facing local communities and the human-environment relationship that dominate them. A potential obstacle to this that emerged in the data, however, is the inadequate tourism information-sharing system in the ACA (Table 26).

Tourists were asked whether they perceived there to be enough information available to them about ACAP, the ACA, the local society and culture, and the environment. A majority of tourists interviewed indicated an insufficient level of information in all areas inquired about, as indicated in Table 26.

Theme	Pattern Nodes	Sub-theme Nodes	Proportion of Tourists Coded at the Node
Inadequate tourist information sharing system	General lack of information for tourists	a) Lack of info about ACAP	88.2%
		b) Lack of info about the ACA	64.7%
		c) More info: Society and culture	82.4%
		d) More info: Environment	70.6%
	Internet as important	a) Internet as primary info source	82.4%
	but poor info source	b) Did not see ACAP website	100.0%

Table 26. A code map illustrating how the theme of an inadequate tourist information sharing system was generated based on the initial nodes and the patterns identified.

When asked if they were familiar with ACAP and the role they have in the ACA, 15 (88.2%) tourists indicated a lack of information and responses like these were common:

We know this thing exists and we had to pay a licence fee so we have heard about it that way. But really that is the extent of what we know. [Tourist 1]

Not really, no. I know the name, but I don't really know what they do. [Tourist 13]

Not at all. [Tourist 12]

Not really. We know that we have to pay for the permit and that the money is spent on...I don't know. [Tourist 2]

These findings are supported by those of Thomsom (2007) who found that tourists surveyed in the ACA

were largely unaware of ACAP, its role, and its initiatives in the region.

A majority (64.7%) of tourists indicated a lack of information about the ACA in terms of trails

and trekking information and responses like these were common:

I think it would be great if there were quite clear options and descriptions of the different options you could take. I mean a description of different treks and what to expect. [Tourist 4]

I was thinking that maybe there should be more signs to show the way but we got along quite well because the people are so nice. [Tourist 5]

Signage would be good around the place. To get somewhere it's hopeless and trying to ask to directions somewhere is hopeless again. [Tourist 8]

These findings are supported by those of Nepal (2007c) who found that tourists he interviewed in the

ACA complained of not being informed well enough about what to expect while trekking in the region.

A majority of tourist also mentioned a lack of information about the local society and culture

(82.4%) and the environment (70.6%) and responses like this were common:

Very little information, if any, was provided. [Tourist 7]

There should be more information about that. We don't know too much about this. [Tourist 2]

I know there's the mountains. That's it. [Tourist 5]

Nope, wouldn't have a clue. Again, no information. [Tourist 8]

Nobody give me. This was one limit for me. I would like understand a little bit more things I saw. [Tourist 6]

It's a shame that there is not more information. [Tourist 12]

These findings are supported by those of others who found a generally low level of awareness of tourists about social and economic challenges (Hepburn 2002; Holden, 2010) and environmental issues (Thomson, 2007) facing the region.

The perception that there is not enough information available to tourists in the ACA can be partly explained by how the information has been presented by ACAP. If one looks closely enough there is a fair amount of information available in the ACAP offices and checkposts; however, it may not be an issue of a sufficient level of information but rather how that information is being presented. As one tourist lamented:

At the checkpoint there is no information. There is some paper on the wall. [Tourist 12] Currently ACAP utilizes non-personal and non-verbal media and information is primarily presented in an instructional manner in small brochures, typed information taped to the walls of ACAP offices and checkposts, and signs around the ACA. When looking at the primary sources of information used by tourists, however, a majority indicated the internet as the most important source (Table 26). Unfortunately, the ACAP website is largely inaccessible and of the 101 tourists interviewed by Wrobel and Kozlowski (2012), only six had seen the website. None of the tourists interviewed in this study had seen the website. Thus most of the information available to tourists on the internet is provided by trekking agencies and travel blogs, rendering ACAP unable to ensure adequate and important information is being provided. Experiences of the researcher confirm a limited amount of information currently available on the internet about the ACA.

The results suggest that the current tourist information system in place is inadequate in providing important information about the local environment, economy, and society to tourists visiting the ACA. Evidence for this can be found in the behaviours of many of the tourists observed by the researcher that contradict the established Minimum Impact Code for the region. As mentioned in the previous section, many tourists were observed to haggle for their room and food charges. Often tourists could be heard asking for a free room in exchange for a promise of a purchase of two or three meals in the lodge's restaurant, even when the room charge would only equate to a couple of US dollars. The researcher spoke with some of these tourists about this and they explained that they understood haggling to be a custom in Nepal. Although the Minimum Impact Code for the ACA asks tourists not to engage in this behaviour and to pay fair prices, these tourists were not familiar with the code and said they had not seen it. This suggests that the tourist code of conduct is not being viewed by many of the tourists and requires greater dissemination, a finding supported by Holden and Sparrowhawk (2002). Consequently, many tourists are likely to be unaware of how their behaviours and actions may negatively impact the local economy, environment, and society.

The primary challenge with informing tourists about ST in the ACA is not their ability to understand the important interrelationship between the dimensions of sustainability. Rather, the
challenge lies in how to provide this information to tourists spending limited time in the region in a manner that is accessible and captures their attention. Evidently, the current tourist information system is inadequate and tourists have little awareness among tourists of the economic and social problems faced by local residents and the complexities and challenges of rural life in the ACA. It is argued that an improved tourist information sharing system may better inform tourists and guide their decisions and behaviours that impact the local economy, environment, and society. Additionally, it is argued that in order for tourists to understand the important interrelationship between local economic, social, and environmental sustainability in the ACA, this information must be incorporated into the tourist information sharing system.

4.4.4. ACAP

When ACAP employees were asked how they had come to know of the ST concept, all 10 of them cited training and seminars organized by ACAP and the NTNC, for example:

I attended several workshops and training on sustainable ecotourism so this is the forum from where it came. This is where we are being able to get knowledge and update on sustainable tourism. [ACAP 8]

Seven of the employees also cited formal education (Table 27).

Communication Channel	Information Sources	Participants who used the source
Interpersonal	Training seminars and workshops	10 (100%)
	Formal Education	7 (70%)

 Table 27. Channels and sources of ST information used by ACAP.

ACAP employee were the most likely to have a holistic understanding of the ST concept of all stakeholders and six (60%) of the employees interviewed mentioned all three dimensions of sustainability that must be considered for ST. The holistic understanding of the ST concept among these six participants is not surprising given their formal higher-level education and the fact that they work directly in the capacity of the ST management program. The other four participants did not have a holistic understanding of the concept and it was evident that their knowledge of the concept is shaped by the capacity in which they work in the organization. All ACAP employees learned of ST through training seminars and workshops but not all had a shared understanding of the concept and recognized the importance of and interrelationship between the three dimensions of sustainability. Those who work directly in a tourism-related capacity had a holistic understanding of the concept while those who work in other capacities did not. This suggests that these seminars and workshops have not been effective at imparting ST knowledge among ACAP staff not working directly with tourism or these employees have not been had sufficient access to tourism-related training. If ACAP employees are to work in an integrated manner regardless of their primary focus in the organization, as discussed previously, it is important that they have a shared understanding of the primary tourism objectives of the organization and the relevant tourism concepts.

5. CONCLUSIONS

This chapter begins with a summary of the research findings, followed by a discussion of the implications on ST development and management. A general conclusion of the thesis is then presented that includes a discussion of the contribution of this research, followed by a brief discussion of the limitations of the research. The final section highlights where future research should be directed.

5.1. Summary of Findings

Given the amount of information that has been presented, a summary of the research findings is presented for clarity.

Knowledge of the ST concept varied among stakeholders. The TBO stakeholder group had the largest proportion of participants lacking ST knowledge, followed by guides and tourists. All ACAP employees had knowledge of ST.

Interpretations of the ST concept varied among both stakeholders and stakeholder groups (Table 28). TBOs were most likely to have a weakest (tourism-centric) or weak interpretation of the concept and emphasis was placed on the economic dimension of sustainability while environmental awareness was found to be generally low. Those with the weakest interpretation of ST viewed increasing the number of tourists in the region a welcome move without regard for the potential impacts on the environment. Only three participants had a holistic understanding of the concept. It is suggested that a lack of access to updated and relevant tourism information among TBOs can explain the generally limited and narrow understanding of the ST concept among TBOs.

Guides were the most heterogeneous group and interpretations ranged from weakest to strong (Table 28). There was evidence to suggest a generally low level of environmental awareness among many guides, although some guides expressed a high level environmental awareness and concern. Only two guides had a holistic understanding of the concept. It is suggested that varying levels of access to additional, updated guide training and the different approaches to guide training taken by the plethora of trekking agencies operating in Nepal can explain the heterogeneity among guides in terms of their understanding of the ST concept.

Tourists were the most homogeneous of all the groups and were the most likely to have a strong interpretation of the concept with an ecological perspective and emphasis on environmental sustainability (Table 28). At the same time, tourists were the least likely to understand the importance of local economic sustainability for environmental sustainability and ST in general. Only three tourists had a holistic understanding of the concept. It is argued that in order for tourists to understand the

important interrelationship between local economic, social, and environmental sustainability in the ACA, this information must be provided and accessible. At the same time, an inadequate tourist information-sharing system was identified as an obstacle to this.

Although ACAP employees were the most likely to have a holistic understanding of the concept, this understanding was not shared by all (Table 28). Those directly involved with tourism had a holistic understanding of ST. Among those that did not have a holistic understanding of the concept, it was evident that their interpretation of the concept is shaped by the capacity in which they work in the organization.

	Stakeholder Group			
Variable	ACAP (n=10)	Tourists (n=17)	Guides (n=12)	TBOs (n=16)
With knowledge of the ST concept	10 (100%)	16 (94.1%)	10 (83.3%)	13 (81.2%)
Weakest interpretation of the ST concept	-	-	1 (8.3%)	5 (31.2%)
Weak interpretation of the ST concept	2 (20%)	1 (5.9%)	5 (41.7%)	5 (31.2%)
Strong interpretation of the ST concept	2 (20%)	13 (76.4%)	2 (16.7%)	-
Holistic understanding (recognition of all 3 dimensions)	6 (60%)	3 (17.6%)	2 (16.7%)	3 (18.8%)
Primary dimension of sustainability	All 3 Dimensions	Environmental	Economic	Economic
Secondary dimension of sustainability	-	Social	Social	Social
Tertiary dimension of sustainability	-	Economic	Environmental	Environmental

Table 28. Summary of the knowledge and interpretation of ST between stakeholder groups.

5.2. Implications on ST Development and Management

The findings of the study have important implications on ST planning and management at the destination level. The results of this study indicate that there is a high degree of heterogeneity among stakeholder groups in terms of their knowledge of ST and how they interpret or understand the concept. Although the researcher recognizes the importance of the social dimension of sustainability for a holistic conception of ST, the implications of the results will largely be discussed in terms of economic and

environmental sustainability given that the polarization of interpretations among the stakeholder groups was primarily based on these two dimensions.

Given that tourism is an integrated system with multiple linked or interrelated dimensions, it is generally accepted that ST requires a holistic approach that considers each dimension and how changes within it impact the others (Butler, 1999; Sharpley, 2000; Swarbrooke, 1999). Only a small proportion of TBOs, tourists, and guides had a holistic understanding of ST and recognized the importance of all three dimensions of sustainability. The primary difference between the weakest/weak and strong interpretations of ST among the stakeholder groups was different conceptions of capital and perceptions of what should be sustained. The generally weakest/weak position of TBOs and guides was based on perceptions that the tourism and local economies must be sustained and emphasis was placed on human capital with little to no regard for the importance of natural capital. In contrast, the strong position of tourists was based on perceptions that the environment must be sustained and emphasis was placed on natural capital with little to no regard for the importance of human capital or social wellbeing. This is problematic in that these conceptions are mutually exclusive rather than reinforcing of the principles of ST and SD. According to Hediger (1999), what is needed is an integration of these conceptions where the interdependence of both natural and human capital is both recognized and emphasized. He suggests that an environmental-economic system perspective that recognizes the importance of both the environment and economy as our life-support systems is necessary for overcoming these divergent perspectives. The challenge lies in how to effectively facilitate this among stakeholders in the ACA.

A majority of ACAP staff had a holistic understanding of the ST concept and recognized the interdependence of the primary dimensions of sustainability. At the same time, ACAP was identified as a key actor with a key role in communicating and diffusing tourism information at the destination level, including ST, to TBOs through training and workshops, and to lesser but still important extent international tourists through the tourist information system (Figure 24). The results, however, indicate that current access to updated and relevant tourism information and training among TBOs is limited while the current tourist information. Evidently, the inadequacies of these information-sharing systems need to be addressed to increase ST knowledge-sharing and facilitate an understanding of the concept that recognizes the interdependence of the primary dimensions of sustainability among TBOs and tourists. Additionally, as illustrated in Figure 24, currently there is no means of knowledge sharing between ACAP and guides at the destination level, rendering ACAP incapable of ensuring that guides

have important and relevant knowledge related to ST in the ACA. Thus, the results also suggest a need for a knowledge-sharing pathway to be established between ACAP and guides, which may assist with fostering environmental awareness among guides visiting the ACA.





A majority of TBOs did not recognize the importance of environmental sustainability for tourism sustainability. Tourism, however, is a natural resource-dependent industry (McKercher, 1993). Additionally, the impacts of unsustainable tourism development and management are more rapid and more challenging to mitigate or correct in mountain systems compared to other ecosystems due to the fragile nature of these systems (Körner *et al.*, 2005). Among TBOs, the requirement to consider the environment can be justified because the fragile natural environment is not only the most important tourist attraction but a higher volume of tourists can threaten this attraction, the availability of natural resources for the local communities, and the future of tourism in the ACA. Tourism information-sharing and training must not only incorporate this knowledge and strive to establish this important link but also be made available and accessible to TBOs in the ACA, especially given the eventual handover of resource and tourism management to local communities largely comprised of these stakeholders and the need for capacity building among them.

Tourists generally recognized the importance of environmental sustainability but were lacking in knowledge of how this is interrelated or linked with local economic sustainability. As Cater (1993) stated: "True sustainability includes the human dimension" (p. 89). It is suggested that this gap in knowledge or understanding could be minimized through the provision of information about economic and social challenges facing local communities and the human-environment relationship that dominate them. This is based on the premise that the better tourists understand the areas they visit, the more likely it is that they will behave responsibly towards the area, the local people, and the natural and cultural attributes (Krippendorf, 1987; Orams, 1994; Tubb, 2003). Moscardo (1998) argues that if tourists are to be influenced to behave in a certain way, they must be provided with knowledge about the impacts of various behaviours and appropriate alternatives. Although the region's Minimum Impact Code sets a foundation for this, more information is needed about the region's economic, environmental and social issues to inform tourists' about their behaviours and the associated impacts. This information also needs to be presented in a manner more accessible and visible to tourists.

In order for a message or information to be effective, a large proportion of visitors must be exposed to or have access to it. The internet is now a common and efficient technology that can facilitate this and many people are now accessing information about PAs and travel options through this medium (Eagles *et al.*, 2002). It also provides an effective means for park managers to provide current and important information to visitors at a low cost. Park managers in developing countries, however, often have difficulty in maintaining websites (Eagles *et al*, 2002). This seems to be the case with the ACAP website. Consequently, information about the ACA and trekking activities is primarily controlled by

trekking agencies and travel blogs. This renders ACAP incapable of managing the accuracy of information about the ACA, its management, and associated activities. This also limits their ability to build support for park management objectives by visitors. Thus the internet must be considered as an important component of the tourist information-sharing system in the ACA with the provision of information aimed at increasing tourists' understanding of local communities and the important link between environmental and local economic sustainability for ST.

Guides were the most heterogeneous in terms of their interpretations of ST and it is suggested that this may be explained by the number of trekking agencies operating in Nepal with various approaches to guide training. Those working for larger, reputable or international agencies that provide their own guide training were the only ones to have a holistic understanding of the concept or to recognize the importance of the environmental dimension. This suggests that the standard government training available to guides employed with the many newer or smaller agencies is not sufficient at linking environmental sustainability with local economic and tourism sustainability. Additionally, if guides working in PAs in Nepal, including the ACA, are to fulfill their role as models of environmentally sensitive practices while providing a high-quality experience to tourists motivated by the natural attributes of the area, the training provided must facilitate some degree of environmental awareness among them. The current standard training should not only strive to impart greater ST knowledge and environmental awareness among guides but it should also include access to refresher training or courses to facilitate knowledge sharing of updated and relevant tourism information and concepts.

Management responsibility is being handed over to the local communities sooner than anyone anticipated given the surprising recent decision of the government. Currently, there is no limit on the number of tourists that can enter the ACA. At the same time, the number of tourists visiting the ACA has increased in recent years beyond levels previously experienced, increasing the demand for and placing even greater strain on these limited resources. If ecological integrity and environmental services are to be maintained in the region, some form of limitation on tourist numbers will be a likely requirement. Several frameworks have been suggested as means to setting limitations on visitation to PAs, including the limits of acceptable change (LAC) and the protected area visitor impact management (PAVIM) frameworks.

Developed by Stankey *et al.* (1985), the LAC requires that residents and managers define the issues and resources of primary concern, define the amount of change that is deemed acceptable, and select and monitor various indicators to measure changes related to the issues and resources of concern. McCool (1994) suggests the LAC is a planning framework that can assist with the

operationalization of sustainability given that it embodies important prerequisites for sustainable tourism: pro-active planning; limitations on growth; policy coordination; and a long-term vision and commitment. The primary challenge with frameworks like LAC is that they require substantial time, funding, and staffing to implement, which is often not feasible in developing countries (Ceballos-Lascurain, 1996; McCool & Cole, 1997).

The PAVIM framework, proposed by Farrell and Marion (2002), is similar to LAC in that it incorporates impact problem analyses, utilizes multiple strategies, and involves the public. It differs from LAC, however, in that it recognizes management constraints and addresses them by using a simpler and more flexible approach through the removal of the steps involving indicators and monitoring (see Farrell & Marion, 2002). Although an assessment of which framework would be most suitable for visitor management in the ACA is beyond the scope of this study, it is suggested that some form of visitor management must be considered by ACAP and the local-level institutions if ecological integrity and environmental services are to be maintained in the face of increasing tourist numbers in the region.

It has been suggested that the present situation in the ACA is a win-win scenario where the local communities, tourists, and the environment are all benefitting (Bajracharya, 2011). This implies that there is a positive link between the environment and development resulting in both environmental improvements and economic growth (Cater, 1995). With increasing numbers of tourists beyond levels previously experienced, a lack of consensus on what the ST concept entails and what exactly should be sustained, and the handover of management responsibility to the local communities in the near future, this win-win situation may be threatened. Without a necessary understanding of the linkage between international tourism and the natural (and cultural) attributes of the ACA by local managers, this may lead to a lose-win scenario, where economic interests may benefit at the expense of the environment. However, it is likely that this scenario would be short-lived given the fragile environment of the ACA and its importance as a tourist attraction. This may eventually lead to a lose-lose scenario where tourists are no longer attracted to the ACA due to poor environmental quality and increased congestion during peak tourist seasons and consequently economic benefits gradually decrease.

Although the results of this study are based on the findings from a particular destination, a number of issues have been raised that may have important implications in a wider context of ST and community-based ST in developing countries.

The consideration of various tourism stakeholders and agreement among them is widely perceived as a requirement for ST (Hardy & Beeton, 2001; Hardy *et al.*, 2002; Marien & Pizam, 1997; McKercher, 1993; Twinning-Ward & Butler, 2002; Yuksel *et al.*, 1999). Evidence from this study suggests

that achieving this is likely to be a daunting task. The findings illustrate the heterogeneity that exists both among and within stakeholder groups in terms of knowledge and understanding of ST and perceptions of what should be sustained. The knowledge and perceptions of stakeholders were also found to be contextual and largely shaped by access to information and communication channels. Given that conceptions of ST are related to knowledge and the concept itself is not objective, stakeholder groups are likely to differ in terms of what they perceive the goals of ST to be. Getz and Timur (2004) argue that sustainability can only be reached when stakeholder groups share goals of ST; however, the findings suggest that in order to share goals, stakeholder groups must first have an understanding of each other's' goals and the motivations behind them. It is argued that in order for some degree of consensus or agreement among stakeholders at a destination, the different and potentially conflicting viewpoints first need to be identified before they can be reconciled. Given the polarized view among some stakeholders, however, goals or values may not necessarily be compatible and it is questionable as to whether true consensus can be achieved among all tourism stakeholders and stakeholder groups.

A community-based approach to tourism development involving the participation of local communities has been generally advocated as an important requirement for ST. Woodley (1993), for example, argues that "a community-based approach to tourism development is a prerequisite to sustainability" (p. 137). If local communities are to truly participate in the tourism development and management processes, however, these stakeholders should be clear about the objectives of the tourism plan they agree to (Eagles et al., 2002; Murphy, 1985). Accordingly, they should also be clear about the meaning of the concepts integral to the objectives set out in the tourism plan, such as ST, especially if they are to have a role in managing tourism. The findings of this study suggest that the understanding of ST and what it entails among local residents greatly differs from the understanding of those working in the capacity of tourism planning and management within ACAP, who drafted the region's tourism plan with the consultation of the local communities. Evidence from this study suggests that one of the key challenges of informing and educating tourism stakeholders about ST is that knowledge of the concept is not effectively diffused to local stakeholders at the destination level. Without an understanding of what the tourism objectives for the region entail, the ability of the local communities to truly participate in the tourism development and management processes is questionable. Local communities need to be adequately informed, educated, and trained if they are to be empowered to make informed decisions in line with the principles and objectives of ST. This also has implications on the overall ability of a community-based tourism destination to move towards sustainability given that shared understandings of the destination's tourism objectives and of the

tourism concepts that define these objectives among tourism stakeholders are to likely reduce or minimize obstacles to achieving them (Choi & Sirakaya, 2006; Ko, 2005; Kruk, 2011). Thus a communitybased approach to ST must address the necessary elements of education and training for capacity building and true participation among local communities at the destination level.

The results of the current study also highlight the need for ongoing and long-term commitment to capacity building among local communities in PAs if they are to participate in the development and management of ST. As McCool *et al.* (2007) point out, the education and training of local communities to participate in tourism development is often a "one-shot process" (p. 340). Some initial training and new ideas are provided at the beginning but continued training to facilitate the necessary capacity building among the local communities is often not available or insufficient due to a lack of necessary organizational capital among PA managers (McCool *et al.*, 2007). This creates an obstacle to the true participation of local communities and their ability to assist with managing tourism in a manner consistent with the values intrinsic to PAs: biodiversity conservation, sustainable use of natural resources, and maintenance of important environmental services and cultural attributes. If local communities are to be truly empowered and capable of developing and managing tourism in PAs, they must have the knowledge and skills to enable this provided through an ongoing training and capacity development process. As one participant from ICIMOD the researcher spoke with stated, "Development [in PAs] is not building but rather engaging locals to understand the importance of conservation."

5.3. Conclusions

The aim of this study was two-fold: to provide insight into and compare the knowledge and interpretations of the ST concept among key tourism stakeholders in the ACA, and to explore if and how access to and availability of different channels and sources of ST information influence the knowledge and understanding of ST among these stakeholders.

The findings of the study indicate heterogeneity both among and within stakeholder groups in terms of their knowledge and interpretations of the ST concept. Although some heterogeneity can be expected among and within stakeholder groups, the findings suggest that much of this heterogeneity is contextual and shaped by access to different channels and sources of ST information. Local TBOs from rural villages who had the least amount of access to ST information and capacity training were most likely to be lacking knowledge of ST or to have the weakest, tourism-centric or a weak, economicallyfocussed interpretation of the concept. Guides with varying levels of access to different types of guide training, dependent on the trekking agency that employs them, were the most heterogeneous of the

stakeholder groups in terms of their interpretations of the concept. International tourists from Western countries visiting the ACA, motivated by a desire to enjoy unspoilt nature in a unique natural setting and with access to various different channels and sources of ST information, were most likely to have a strong, environmentally-focussed interpretation of the concept. ACAP staff working directly in a tourism-related capacity and with access to tourism-related education and training were the most likely to have a holistic understanding of the concept with recognition of the importance of all three dimensions of sustainability; the interpretations of those not directly involved with tourism were shaped by the capacity in which they work in the organization.

At the destination level, the findings highlight the need for renewed and updated tourism information sharing and training among TBOs to improve their knowledge of ST and facilitate a more holistic understanding of the concept that recognizes the importance of the environmental dimension. This is especially important given the eventual handover of resource and tourism management to local communities largely comprised of these stakeholders.

The current standard guide training available to most guides needs to impart greater environmental awareness and ST knowledge among guides given their important role in the tourist experience in a PA with unique and fragile natural attributes. The establishment of a knowledge-sharing pathway between ACAP and guides may assist with facilitating this. The need for greater access to refresher training with updated information among guides is also evident.

The aim of the study was not to determine which interpretation of the ST concept is "correct" for the ACA but rather to identify where and how interpretations and perceptions of the concept differ among key stakeholders in the ACA. However, given the fragile nature of the natural attributes of the region and their importance as a primary tourist attraction, it is suggested that a greater understanding of the importance of the environmental dimension to the sustainability of the tourism industry itself is needed among TBOs and guides.

The findings also suggest the need for improvements to the current tourist information-sharing system in terms of the type and quality of information presented, the manner in which it is presented, and the accessibility of the information to tourists.

Last, although a majority of ACAP employees are knowledgeable of the need for a holistic approach to ST, given that employees work in an integrated manner and ST is one of the primary objectives of region's management plan, it would be valuable for this level of understanding to be imparted among all employees.

The results are important to tourism planners and managers in PAs with community-based tourism for several reasons. In a wider context of community-based ST, the findings of the study support the notion that a community-based approach to ST must address the necessary elements of education, information sharing, training and capacity building for success. Evidence from this study suggests that one of the key challenges of informing and educating tourism stakeholders about ST is that knowledge of the concept is not effectively diffused to stakeholders at the destination level. A lack of a shared, holistic understanding among managers and stakeholders involved in tourism development and management, or who can influence the success of ST in an area, can create a gap between ST theory and practice. Furthermore, given the intrinsic environmental values upon which PAs are based, stakeholders must have a sense of the importance of the environmental dimension of sustainability if they are to be able to effectively participate in or facilitate ST development and management. According to Kruk (2011), successful development and management of ST requires an approach that unifies environmental, economic, and social factors, facilitates cooperation among stakeholders, and emphasizes "a common understanding of integrated tourism concepts" (p. 21). Unless key tourism stakeholders of a community-based tourism destination have a shared understanding of the ST concept and the interrelated dimensions it entails with access to ST information to facilitate this, it is unlikely that they will be able to truly participate in the development and management of ST. It is also unlikely that the destination will be successful in achieving or moving towards and managing ST.

5.4. Limitations

Given the qualitative and contextual nature of the study, the findings are specific to the participants interviewed in the ACA and cannot deduced to large scale generalizations. Despite the generalizability of this work being limited, however, the issues that emerged regarding information sharing and capacity building among key tourism stakeholders may be insightful, useful, or even applicable to other community-based ST operations in PAs in other parts of the developing world faced with similar challenges.

An important limitation that must be addressed is that the resident stakeholder group utilized in this study included local residents directly involved with tourism in the region only. Residents of the ACA not directly involved with tourism, including farmers and herders, were not interviewed due to realistic time, money, and logistical constraints. These residents generally live in smaller villages away from the tourist trekking routes and speak much less English than TBOs or speak a dialect of Nepali different to

that spoken in the major areas of the country. Sampling of these residents would have not only required more time but also may have presented a challenge in terms of translation.

The study was also limited by the restriction to only four stakeholder groups. Several other groups could be considered key tourism stakeholders in the ACA, including government officials and domestic and SAARC tourists; however, the researcher's decision to limit the study to these four groups was primarily due to the realistic constraints of time and money.

5.5. Future Research

This study has provided insight into the knowledge and interpretations of the ST concept among four key tourism stakeholder groups in the ACA. The findings, implications, and limitations of this study, however, suggest a need for more research in various areas.

As noted in the preceding section, local residents not directly involved with tourism were not included in the study. To obtain a more holistic view of the knowledge and perceptions of ST the local communities in the ACA, residents not directly involved with tourism should be included in future research. The inclusion of additional stakeholder groups, such as government officials and domestic tourists, should also be included in future research given the potential for these stakeholders to influence the success of ST in the ACA.

Given the inadequacies of the current tourist information-sharing system identified in this study, future research should also explore exactly what kind of information is most needed to assist with the ST objectives of the ACA, as well as what kind of information is most desired by international tourists visiting the region. Different information-sharing strategies should also be explored to facilitate greater educational efficacy and accessibility.

Currently, there is no information or evaluation of the standard guide training provided to guides in Nepal. Developing an effective and successful guide training program requires research to identify training needs, suitable or realistic program aims, and appropriate structure and content of the program. An assessment procedure is also required to ensure that the training program is meeting its objectives and meeting the needs of employers, tourists, and PA managers.

Appendix A: Information and consent form used for the study

Ryerson University Consent Agreement

<u>Study title</u>: Knowledge and Perceptions of Sustainable Tourism in the Annapurna Conservation Area, Nepal: A Comparison of Key Stakeholder Groups and Implications for Sustainable Tourism Management

You are being asked to take part in a research study. Before you agree to be a volunteer, it is important that you read the following information and ask any questions to make sure you understand what you are being asked.

Investigator: Caroline Wrobel – M.A.Sc. Candidate at Ryerson University

Purpose of the Study: The purpose of this study is to gain information about people in the Annapurna Conservation Area (ACA) who are involved with tourism and: a) if they know about sustainable tourism; b) what sustainable tourism means to them; c) how they came to know about sustainable tourism; and d) who they think is responsible for sustainable tourism in the Annapurna Conservation Area (ACA). Getting this information is important for making tourism in the ACA more sustainable and protecting the local communities and environment.

Confidentiality: Names of people who participate will be kept confidential and only the researcher will have access to this information. Information such as age, gender, experience, etc. and specific quotes will be used in the final paper but no participants' names will be used with this information.

The data collected for this study will be used for educational purposes and only the investigator will have access to the data. The data, which is the information from the interviews, the consent forms and investigator observations, will be carried under lock and key. Any hard copies of data will be destroyed once the research has been completed. Computer data will be kept for a period of 7 years on an online data storage system which only the investigator will have access to. After this time period, computer data will be destroyed. Confidentiality will be maintained as much as the law allows.

The interview will take at least 30 minutes to complete.

Incentives to Participate: Participants will not be paid to take part in this study.

<u>Voluntary Nature of Participation</u>: Participation in this study is voluntary. Your choice of whether or not to participate will not affect your future relations with Ryerson University. If you decide to take part, you are free to change your mind and leave at any time during the study. At any point in the study, you may refuse to answer any question. If you would like at any time, your responses to interview questions can be erased and destroyed.

Questions about the Study: If you have any questions about this research at this point in time, please ask. If you discover that you have questions in the future, please contact me:

Caroline Wrobel <u>cwrobel@ryerson.ca</u> If you have any questions about this research or about Ryerson University and the Environmental Applied Science and Management Program, please contact:

Dr. Michal Bardecki Program Director for Environmental Applied Science and Management Ryerson University <u>bardecki@GEOGRAPHY.ryerson.ca</u> 416-979-5000 x6175

If you have questions regarding your rights as a human subject and participant in this study, you may contact the Ryerson University Research Ethics Board for information.

Research Ethics Board c/o Office of the Vice President, Research and Innovation Ryerson University 350 Victoria Street Toronto, ON M5B 2K3 416-979-5000 x7112

Agreement:

Your signature below means that you have read and understand the information in this agreement and have had a chance to ask any questions you have about the study. Your signature also means that you agree to be in the study and have been told that you can change your mind and leave the study at any time. You have been given a copy of this agreement.

You have been told that by signing this consent agreement you are not giving up any of your legal rights.

Name of Participant (please print)

Signature of Participant

Date

Signature of Investigator

Date

Appendix B: Sample transcription of an informal conversation

Casual conversation with X^3 , a key informant, in a dining lounge in Ghandruk on the evening of March 18th, 2012.

X came up to the dining lounge and asked how my interviews were going. We started to talk about the future of Ghandruk and X seemed really quite concerned for the future of tourism in this area. X's main concerns are due to the road that is nearby. Although X doesn't feel like it will be built all the way to Ghandruk because it is more likely it would go to a more popular tourist destination, like somewhere along the ABC, its presence nonetheless affects tourism. According to X, rather than requiring 5 or 6 hours of trekking to reach Ghandruk, tourists (both domestic and international) now commonly take taxi or jeep up the where the road currently ends, about a 45-60 minute walk to Ghandruk. This means that they only maybe stop in Ghandruk for tea or lunch but fewer are staying overnight. And because their final destination is not Ghandruk majority of the time, but the ABC, even if they do stay the night they just have a late lunch, go to bed, wake up early and leave. Tourists do not spend any time in Ghandruk anymore according to X.

X was also talking about the need for more education about sustainable practices related to tourism here in Ghandruk. X thinks that education is key and without it, people cannot understand theoretical things or why certain practices should be adopted. X talked about all of the work of the women education programs and how ACAP has assisted women in learning to run their own businesses and become part of the working tourism industry. X talked about how difficult it was for women before ACAP. Apparently X has had to be very active at making home visits to women to convince them to take part in the education programs and if they do not have any support, their success is unlikely.

I asked how X became so concerned about the environment...was it education? X said that when X was taking Hotel Management in college, there was only one class related to the environment and it wasn't very good. X said that it was ACAP that turned X's attention to the environment and made X passionate about working towards conservation and environmental protection.

X talked about a visit to Canada for a few months when X worked in one of the parks in Newfoundland. X said for them this was a very eye-opening time. X really liked the way this park in Canada was run and saw how environmentally focussed the planning and management was. X said it was this exposure that gave X the idea to come back and give the same type of exposure to other women in the village, so that they could see how things could be by seeing how they were elsewhere.

 $^{{}^{3}}X$ has been used to anonymize the identity of the participant.

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