

Matkailututkimus 6: 1-2, 7-29 (2010)

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Tourism, Poverty Alleviation and Nature Conservation

The State of Contemporary Research

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This literature review analysed 112 scientific papers published in 17 different social science journals from 2003 to the end of 2007 discussing the relation between tourism, poverty alleviation and nature conservation. The majority of the articles is problem-oriented, concentrates on the relation between tourism and nature conservation and focuses on impact assessment and management issues. The relation between tourism and poverty alleviation is still under researched. Based on the literature review this article not only provides an overview of past scientific research work, but also explores research gaps and suggests main directions of a future research agenda.

In the past years the dominant discourse on sustainable development has drawn the attention to the need to link tourism with nature conservation and poverty alleviation issues. It has become clear that natural areas cannot exist in isolation from the human systems that share the same space; especially in developing countries where natural resources are not only the main attractions for tourists, but also the major assets on which poor communities rely for their survival (MEA 2005). Consequently, sustainable tourism development has increasingly been put forward by international and national nature conservation and development organisations, governments and the tourism industry as a promising mechanism to resolve vicious circle of nature degradation and poverty in many developing countries and a way to achieve the UN Millennium Development Goals. As a consequence new institutional arrangements, policies and practices emerged at different levels of scale (from the global to the local). However, many of these have neither been theoretically nor empirically judged on their merits and contributions to sustainable development (Tassone, Van der Duim

& Kloek 2007). Research studies are scattered and there are relatively few studies available mapping the scientific knowledge produced on tourism, poverty reduction and nature conservation at the same time.

Recent studies have analyzed the making, the state and the evolution of tourism academic knowledge; some researchers (i.e. Xiao & Smith 2006a, 2006b; Jogaratnam Chon, McCleary, Mena & Yoo 2005) analyzed broadly trends and productivity in tourism scientific research, whereas others (Weaver & Lawton 2007) focused on examining the state of ecotourism research. However, while the first examined tourism from a very general perspective, the latter based their analysis on articles selected according to a number of specific key words which were very much tourism and nature-oriented. These studies did not specifically investigate the state of knowledge on tourism, poverty reduction and nature conservation research concurrently.

This article aims to address this gap. By analyzing 112 scientific papers published in 17 different social science journals from 2003 to the end of 2007 and discussing tourism, poverty alleviation and nature conservation issues, this study maps past scientific research work and explores research gaps and suggests a research agenda (see also Tassone & Van der Duim 2008; Tassone, Van der Duim & Kloek 2007). This article first presents the methodology used for mapping scientific knowledge. Second, it identifies and classifies the main research topics addressed by past studies. Third, it presents an examination of the modes of knowledge production. Fourth, it introduces a framework to cluster the knowledge produced according to the underlying focus and key objectives of past research. Fifth, and based on the findings described in the previous sections, it discusses the direction of future research efforts in this field.

Mapping scientific knowledge: the method

In order to be able to make an informed decision on the direction of a research agenda in this domain (see Tassone, Van der Duim & Kloek 2007), we analysed a large number of past studies discussing tourism, poverty reduction and nature conservation. Considering the scientific focus of this analysis, it was decided to scrutinize research papers published in a number of scientific journals in the field of social sciences. Research studies published elsewhere, for example in books, conference proceedings and magazines were not taken into account, although there are highly relevant for the development of a body of knowledge in this domain. Many case studies get published in project reports, theses and similarly inaccessible forms (Krüger 2005). Part of the knowledge production and innovation in this field stems from these kind of outlets, just as consultancy assignments and reports commissioned and/or published by INGO's and many of this 'grey literature' never or at a much later stage reaches scientific journals. For example collaborative research initiatives of the International Institute for Environment and Development (IIED), the Centre for Responsible Tourism (CRT) and the Overseas Development Institute (ODI) on pro-poor tourism, which started around 2000, only very recently penetrated the academic journals (see for example the special issue of *Current Issues in Tourism*, 2007). Although fully acknowledging the importance of this 'grey literature', this article only maps articles published in a number of scientific, peer-reviewed, journals.

After examining a number of scientific journals that could represent the richness and variety of social sciences perspectives and disciplines, a total number of 17 journals were selected, including top journals in the tourism field and journals dealing with sustainability, global change issues and focusing on a variety of social, environmental and economic issues. The selected journals are: *Annals of Tourism research*, *Current Issues in Tourism*, *Journal of Ecotourism*, *Journal of Sustainable Tourism*, *Journal of Tourism Research*, *Journal of Travel Research*, *Tourism Economics*, *Tourism Management*, *Tourist Studies* and also *Biodiversity and Conservation*, *Ecological Economics*, *Environmental and Development Economics*, *Environment Development and Sustainability*, *Environmental Monitoring and Assessment*, *Journal of Environmental Management*, *International Environmental Management*, *World Development*. Although we would have preferred to make an analysis of articles published over a period of 10 or even 15 years, time constraints forced us to only analyse articles published in the last 5 years (from 2003 to 2007). They were selected and analysed in 2008 and 2009. In this selection we used keywords that directly or indirectly address some typical issues in tourism, poverty reduction and nature protection. The keywords were chosen by considering the key issues raised and discussed among researchers and representatives from international governmental and non-governmental organizations, during the International Conference on Sustainable Tourism held in Breda in December 2006. The articles selected are those that contain in the title words and/or paper's keywords at least one of the following keywords: *sustainability*, *community*, *stakeholder*, *poverty*, *nature*, *environment*, *protected area*, *impact*, *management*, *decision making*, *social*, *cultural*, *fund raising*, *market mechanisms* and that discusses in a general or specific manner *tourism* issues related to poverty reduction and nature conservation. In order to keep the analysis focused it was decided to not take into account (and therefore not included as keywords) other important issues and aspects, for example pollution and energy related problems, climate change, urban tourism, specific air and sea-coastal tourism issues that are gaining more and more attention in the research agenda. The total number of articles selected was 112.

Domains of knowledge

These articles were examined and sorted out according to the theme they refer to. The analyses showed that some articles exclusively dealt with *Tourism and Poverty Reduction*; others exclusively with *Tourism and Nature Conservation*; while in total 26 articles dealt with *Tourism, Poverty Reduction and Nature Conservation*. Finally, 18 papers mainly focussed on conceptual or methodological issues. This fourth category of papers was labelled as *Tourism and Sustainability*.

The first theme *Tourism and Poverty* deals with the relation between tourism and poverty issues. Poverty is intended in its broad term including not only its economic dimensions of jobs and income, but also fair distribution of resources, gender equality, health and education, community involvement, and any other tourism related social or political arrangements and assets that may play a role in the life of the poor (see also Simpson, 2007). Although the relation between tourism, poverty and nature is of particular importance in developing countries, this analysis includes also studies

discussing tourism and social poverty related problems of developed nations, but it does not refer to issues related to the economic development of these developed countries as a whole.

The second theme *Tourism and Nature Conservation* includes all studies discussing the relation between tourism and nature conservation. The term nature conservation refers to the conservation of the natural environment comprising animals, micro-organism and vegetation. It refers to preservation of threatened species, conservation of scarce resources, restoration or protection of ecosystems and biodiversity upon which human and other life on earth depends. Specific air and water issues are not included in this analysis.

The third theme *Tourism, Poverty Reduction and Nature Conservation* deals with the relation among tourism, poverty reduction and nature conservation, it investigates theoretically and practically the linkages, the potentials and the outcomes of this relation. The fourth theme *Tourism and Sustainability* discusses sustainable tourism in more general terms and includes concepts, theories, and values in relation to sustainability. Papers under this theme discuss various issues related to nature and poverty but the accent lies on more general sustainability issues.

After selecting the papers according to keywords and themes as explained above, these papers were sorted out by topic, i.e. domain of knowledge. Only one main topic addressed in each paper was taken into account. This means that if a study simultaneously addresses more than one topic, this study was classified only according to the main topic discussed. Domains of knowledge were identified and classified, within each of the selected themes, by analyzing the specific key research questions and aim that each selected paper is addressing. Table 1 presents an overview of research topics of selected studies.

According to this analysis the theme *Tourism-Poverty* appears to be quite overlooked until 2006. Starting from 2007 the number of studies has considerably increased (see for example Chok, Macbeth & C. Warren 2007; Scheyvens 2007; Zhao & Brent Ritchie 2007; Harrison & Schipani 2007; Spencely & Goodwin 2007). Past studies focus on *conceptual defining and critically assessing* the relation between tourism and poverty. Other studies focus on the *ex-post evaluation of tourism impacts* on livelihood and aim to assess the socio-cultural and socio-economic impacts of tourism. Past research deals also with *communities' participation*, examines typologies of participation in tourism development and investigates opportunities for the development of tourism through community participation and co-operation and partnerships between local areas.

Tourism-Nature Conservation appears to be a very well studied theme. A number of papers focus on *ethics and discourses*, discussing the philosophical changes in the conceptions of protected areas and conservation principles in relation to tourism management and presenting a conceptual analysis of human relationships and the natural world. *Impact evaluation* studies deal with ex-post assessment of impacts of tourism projects, policy and plans on natural resources. Some other studies focus on *management* issues while dealing with impacts in a more indirect way. They analyze strengths and weakness of management measures, identify new management strategies and discuss problems and consequences of tourism management. Some

researchers examine the *environmental performance of tourism enterprises*, and the sustainability of these enterprises. Two studies dealing with *financing mechanisms* look at the pricing of protected areas in nature based tourism and possible economic incentives for nature conservation. Another group of papers investigate *stakeholder roles, values and partnerships*. They focus on the role of stakeholders in planning and decision making, look at stakeholder's values, perspectives and behaviours related to tourism, investigate people's preferences and willingness to pay for protected areas and discuss partnerships among stakeholders.

Within the theme *Tourism-Poverty-Nature* a number of studies deal with the *impacts* of tourism on economic, socio-cultural and environmental aspects. The majority of authors focus on ex-post evaluation of tourism impacts. Some studies discuss tourism *management* issues in relation to the environment and to poverty. A number of papers deal with *stakeholder's roles and involvement* in decision making and tourism development. *Community attitudes and intentions* towards potential tourism development are also investigated.

Finally, the theme *Tourism-Sustainability* includes a number of research studies describing *concepts and approaches* to sustainability, and focusing on *methods and application to evaluate sustainability* of projects, plans and policies.

Table 1: Domains of academic knowledge

Tourism-Poverty		Nr
Concepts & critical assessment	Chok et al., 2007; Scheyvens, 2007; Zhao & Brent Ritchie, 2007	3
Ex-post impact evaluation	Akama & Kieti, 2007; Clifton & Benson, 2006; Dyer et al., 2003; Harrison & Schipani, 2007; Nyaupane et al., 2006 ; Saayman & Saayman, 2006; Spencely & Goodwin, 2007	7
Community participation and approaches	Briedenhann & Wickens, 2004; Hawkins & Mann, 2007; Manyara & Jones, 2007; Tosun, 2006; Ying & Zhou, 2007; Zorn & Farthing, 2007	6
Tourism-Nature		
Ethics and discourses	Jamal et al., 2003; Holden, 2005; Shultis & Way, 2005	3
Ex-post impact evaluation	Guillemain et al., 2007; Heil et al, 2007; Hill & Pickering, 2006; Kuvan, 2005; Li et al., 2006; Li et al., 2005; Pickering & Hill, 2007; Priskin, 2003	8
Management	Bujosa Bestard & Rosselló Nadal, 2007; Brown, 2006; Buultjens et al., 2005; Cheng et al., 2005; Gios et al, 2006; Hannam, 2005; Henderson, 2005; Kenneth et al., 2004; Kruger, 2005; Li, W., 2004; Marion & Reid, 2007; Mason, 2005; Phillips & Jones, 2006; Okello & Kiringe, 2004; Shrestha et al., 2007; Sorice et al., 2006; Stein et al, 2003; Tisdell & Wilson, 2005; Wachowiak, 2005	19
Environmental performance of tourism enterprises	Clarke, 2004; Jackson, 2007; Herremans et al. 2005; Masau & Brideaux, 2003; Spenceley, 2006; Van der Duim & Van Marwijk, 2006	6
Financing mechanisms	Alpizar, 2006; Lindsey et al, 2007	2
Stakeholder roles, values and partnerships	Buckley, 2004; De Oliveira, 2005; Duffy, 2006; Fairweather et al., 2005; Fennell & Butler, 2003; Lewis & Newsome, 2003; Medina, 2005; Moore & Polley, 2007; Naidoo & Adamowicz, 2005; Nyaupane et al., 2004; Su et al., 2007; Svoronou & Holden, 2006; Watson et al, 2007 ; Wurzinger & Johansson, 2006	14
Tourism-Poverty-Nature		
Ex-post en ex-ante impact evaluation	Ex-post: Gossling, 2003; Harrison, 2007; Kontogeorgopoulos, 2005; Silori, 2004; Stone & Wall, 2004; Ex-ante: Mbaiwa, 2004	6
Management	Fennel & Weaver, 2005; Hawkins, 2004; Jamal et al., 2006; Nepal, 2004; Northcote & Macbeth, 2006; Osland & Mackoy, 2004; Tsaour et al., 2005; Weaver & Lawton, 2007	8
Stakeholders roles and involvement	Adams & Infield, 2003; Garrod, 2003; Li, 2006; Li, Y., 2004; Novelli & Gephardt, 2007; Palmer, 2006; Sithole, 2005; Southgate, 2006	8
Communities attitudes and intentions	Kuvan & Akan, 2005; Lai & Nepal, 2006; Lepp, 2007; Sekhar, 2003	4

Tourism-Sustainability		
Concepts and approaches	Choi & Sirakaya, 2006; Farrell & Twining-Ward 2005; Ko, 2005; Macbeth et al., 2004; Schianetz et al., 2007	5
Applications and methods to evaluate sustainability	Cottrell et al., 2004; De la Barre, 2005; Gezici, 2006; Helmy, 2004; Jamal & Tanase, 2005; Johnston & Tyrrell, 2005; Mbaiwa, 2005; Mycoo, 2006; Parker & Khare, 2005; Rodger et al., 2007; Sausmarez, 2007; Van der Duim & Caalders, 2004; Woodland & Acott, 2007	13

Modes of knowledge production

The academic research agenda and the output of a researcher or research institute is often the result of complex negotiations between the agendas of universities, financing institutions, conservation and development organizations, international communities, governmental agencies, the tourism industry, and the theoretical and paradigmatic interests and programs of the researcher and the scientific community he or she participates in.

Although we, consequently, in practice have to deal with boundaries which are difficult to draw, analytically we can make a distinction between two ways in which the selection of a research topic is made (see also Lengkeek & Platenkamp 2006). First, a wide variety of practical concerns may present topics for research. In this mode of knowledge production research is first and foremost *problem-oriented*. The knowledge produced by research is oriented towards (possible) application and use. This type of knowledge production often accepts the socio-political, economic or cultural context as given and source of problem. Second, an equally wide range of topics for research primarily derives from scientific and intellectual interest. Here the research is *concept-oriented*, that is oriented towards development of theory, concepts and (new) methodologies, which should enable us to explain societal phenomenon (in a more positivistic tradition) or to interpret and understand meanings in a more phenomenological perspective. Here concepts are, as far as possible, abstracted from the daily context.

In this study the mode of knowledge production of the selected studies in tourism, nature conservation and poverty reduction is discussed by classifying these studies according to the problem- or concept-oriented modes. As depicted in figure 1, results of this research indicate that 77 % of the total papers analyzed are problem-oriented. They aim to increase clarity and understanding on specific problem-oriented questions and issues, to assess the impacts and the effectiveness of policies and projects (e.g. Clifton & Benson 2006; Hill & Pickering 2006; Li et al. 2006; Pickering & Hill 2007, Spencely & Goodwin 2007; Tisdell & Wilson 2005), to identify specific management strategies that bring sustainable outcomes (e.g. Alpizar 2006; Lindsey et al. 2007; Phillips & Jones 2006; Sorice et al. 2006; Stone & Wall 2004), to analyze stakeholders relationships and values (e.g. Brown 2006; De Oliveira 2005; Gios et al. 2006; Lewis & Newsome 2003; Naidoo & Adamowics 2005; Sithole 2005; Svoronou & Holden 2006; Watson et al. 2007) and to investigate outcomes and pros-

pects of partnerships among various actors (e.g. Buckley. 2004). Although there is a remarkable amount of papers dealing with problem-oriented research, results appear fragmented, scarcely comparable and limited in their scope. Methodologically these studies mainly focus on the application of existing approaches such as for example regression analysis, contingent valuation, Delphi method and GIS applications.

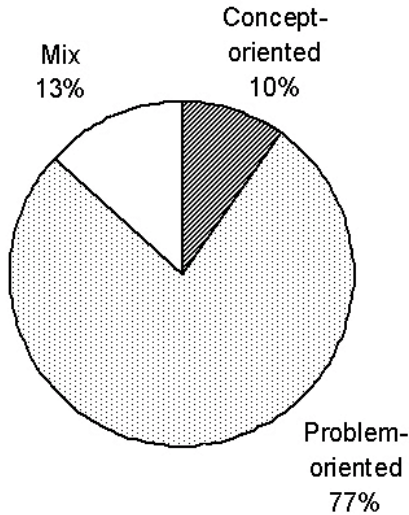


Figure 1. Modes of knowledge production

Only 10 % of the papers analyzed are concept-oriented. Some of these studies are focusing on ethical issues, discourses and philosophical reflections about the role of protected areas and the relation between humans and nature and conceptual approaches to manage natural assets (Jamal et al. 2003; Holden 2005; Kenneth et al. 2004; Shultis & Way 2005). Few recent studies are critically analyzing the relation between tourism and poverty (Chok et al. 2007; Scheyvens 2007; Zhao & Brent Ritchie 2007). A number of authors are discussing concepts and aspects of sustainability science, and its evolution and meaning (Farrel et al. 2005; Johnston & Tyrrell 2005). Conceptual studies focusing on integrating discourses from the different domains of knowledge and focusing on the development of innovative tourism theories are lacking.

At first sight there seems to be a gap between problem- and concept-oriented modes of knowledge production, not only in relation to how knowledge is produced but also in terms of outcomes. Problem-oriented research may be perceived as useful and able to provide concrete answers and solutions to policy agendas and daily issues but may not necessarily contribute to advancement in science. On the other hand concept-oriented research may be scientifically appealing but may be perceived as too abstract or practically irrelevant. However, this dichotomy is partly false as the two modes of knowledge production are and should be closely linked and inter-related. The development of new theories and models as well as reflective thoughts about concepts and methods can in fact provide the philosophical, conceptual and methodological ground upon which practical research can be implemented. At the

same time concrete results in the field can inform science by identifying societal needs and current theoretical and methodological constraints that require attention and further investigation. This analysis suggests that 13 % of the selected studies are the results of a particular blending of problem- and concept-oriented research. This mix shows the existing link and inter-relation among the two modes of knowledge production. These studies are mainly focusing on conceptually discussing new approaches, frameworks or methods while presenting them in specific contexts or by means of particular case studies. Some of these papers examine the relation between tourism and poverty or tourism and nature conservation or their combination and investigate the nature of stakeholders interactions and partnerships (e.g. Fennell & Butler 2003; Fennel & Weaver 2005; Gossling 2003; Medina 2005; Spenceley 2006; Tosun 2006). Other authors examine the multi-dimensionality of the sustainability concept and sustainability evaluation issues (e.g. Choi & Sirakaya 2006; Farrel et al. 2005; Ko 2005).

The majority of problem-oriented studies and of studies developed through a mix of problem- and concept-oriented research are focusing on the application of specific case studies in a number of regions. Results depicted in figure 2 suggest that past case study driven research mainly focused on investigating the relation between tourism and nature conservation in different world regions (see also Krüger 2005). Figure 2 also shows those studies particularly focussing on tourism and poverty, either in combination with conservation issues or not, predominately address cases in Africa and Asia.

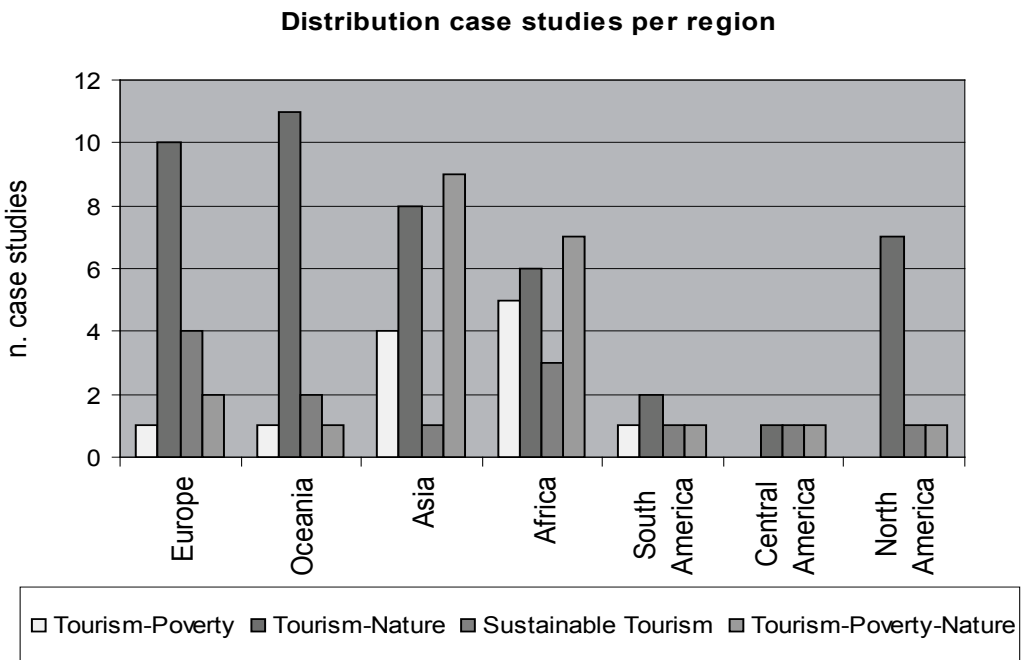


Figure 2. Geographical distribution of case studies

Clustering knowledge production

In a next step in this research project, the 112 scientific papers were classified and clustered according to the underlying focus and key objectives of the research carried out in each article. A variety of conceptual frameworks can be used to examine and structure the knowledge produced, but any clustering will be clearly arbitrary and imperfect. After analyzing the research approaches and methods presented in each paper and examining the research topics discussed, it was concluded that all papers could fit in one of the following four clusters presented in figure 3: 1. *Valuation*, 2. *Impact assessment & Management*, 3. *Stakeholder processes*, 4. *Critical analysis*. Clusters are often linked to one another and they may support and complement each other.

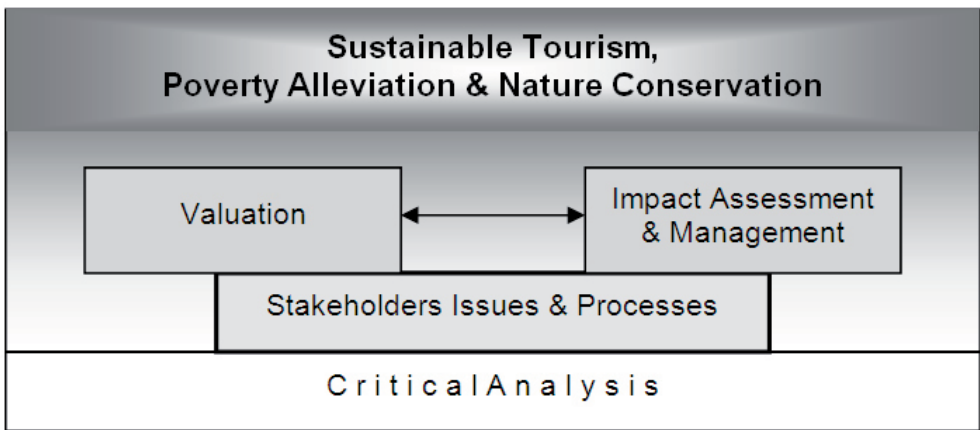


Figure 3: Clustering knowledge production (Source: adapted from Meyer, 2006)

Valuation studies include approaches and results related to the estimation of values that certain goods, services or experiences have for example for individuals or for society. The process and the results of such valuation studies are different according to the perspective considered. From the *economic* perspective valuation studies are often focusing on assigning a monetary value to goods and services through market price when feasible or through other indirect methods (see for example Pearce et al., 2006). From the *ecological* point of view the valuation process focuses on identifying and measuring the role and the importance of attributes or functions of an ecosystem (see for example De Groot 1992; De Groot et al. 2002). In *sociology* research focuses for example on qualitative analysis of social and cultural values, on exploring experience values of nature by tourists, etc. (see for example Lengkeek 2001). Findings of this research reveal that valuation analysis is overlooked in past tourism studies and should be addressed in future research. The few papers dealing with valuation are mainly focusing on investigating ecological values. Valuation is often used in order to estimate the benefits provided by natural resources which can turn to be useful for the development of appropriate tourism management strategies (e.g. Brown 2006; Gios et al. 2006; Naaido & Adamowicz 2005). Methodologically, little innovation is produced in this cluster.

Impact Assessment & Management studies focus on quantitative and qualitative assessment of impacts and management of these impacts. Research included in the previous cluster (i.e. valuation) differs from research on impact assessment and management, although the two types of studies are very often inter-linked. While valuation studies would for example focus on identifying and assigning the ecological, social and economic values a national park, the impact assessment and management studies could take advantage of this information, but they would mainly focus on assessing the positive or negative consequences of certain arrangements, projects and plans in that specific park and would strive toward the identification of good management strategies. Impact assessment and management studies include a variety of ecological, economic and sociological oriented studies. In the case of potential plans (i.e. ex-ante evaluation studies) they can facilitate the identification of management and planning strategies leading to the desirable outcome; in the case of current and past projects (i.e. ex-post evaluation studies) they can highlight consequences and propose changes. Some approaches available in *ecology*, for example Environmental Risk Assessment, Carrying Capacity Calculation, Ecological Footprint, Environmental Impact Assessment, etc. can be useful when assessing environmental impacts and identifying good environmental management strategies. In *economics* the different approaches available, such as for example Cost-Benefit Analysis and Cost-Effectiveness Analysis are mainly aiming at assessing the impacts in terms of economic profitability and identifying management strategies that are the most profitable ones or the cheapest ones. From a *social* perspective studies focus on the development of socially meaningful management strategies, on the analysis of the impacts on society and on the way people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society. Examples of social-oriented methods are Social Impact Assessment and Social Risk Assessment (see for example Barrow 2000; Becker 1997). From the *sustainability* point of view the ecological, economic, and social perspectives are considered simultaneously. In this case approaches and frameworks, such as Sustainability Indicators and Multi-Criteria Analysis, can look at issues from an integrated point of view by taking into account the different perspectives. The remarkable number of impact and management studies indicates the growing social concern about the effects of tourism and about how to effectively manage tourism. Research in this field is mainly case study driven and there is sometimes an attempt to integrate ecological, economic and social approaches and methods. However studies are scattered, empirical research is lacking, existing approaches lack a coherent framework around which natural assets and poverty issues can be clustered and managed consistently. Similar findings are presented by Weaver and Lawton (2007) which discuss, among other things, about the extensive number of papers analyzing the ecological impacts of ecotourism projects and plans whereas there is a lack of interdisciplinary research and not much is done to analyze impacts from an integrated perspective and to connect impact studies to other fields of research. Monitoring, evaluation and management frameworks should be further developed in order to take into account the complexity and uncertainty related to the tourism system. It should be examined what potential value the science of complexity holds for tourism management and governmental and non-governmental policies.

Research could focus also on adaptive management as a way of dealing with uncertainty and unpredictability. Furthermore research should not only look at the overall benefits derived from tourism, but also on equity issues and the distribution of environmental, economic and social benefits among stakeholders and especially among the poor. Additionally, studies are almost entirely focusing on ex-post evaluation of arrangements and policies, therefore a future research agenda could include ex-ante evaluation studies which can provide useful information when setting up new plans and strategies.

Stakeholder issues and processes refer to issues among stakeholders and processes that bring together different stakeholders into dialogue and constructive engagement. Often the valuation and impact assessment and management studies just discussed are directly or indirectly taking into account stakeholders preferences, opinions, needs, desires, well being, etc. Issues and processes among stakeholders can differ according to the objectives (e.g. policy making and implementation issues, natural resource management, distribution of resources), the scale (local, national, global), the type of participants involved (e.g. local communities, business, government, non-governmental organizations, scientists), etc. This analysis suggests that the majority of research studies in this cluster are mainly focusing on investigating the roles and perspectives of various actors in tourism. It appears clear that actors (like nature conservation organizations, developing organisations, market parties, governmental bodies, etc.) can differently give meaning to and deal with tourism and sustainability. In other words, they might have different modes of ordering (Van der Duim 2005). In order to contribute to global change, future research could investigate and identify new arrangements that integrate different stakeholder perspectives, new types of institutional mechanisms, new forms of multi-actor and multi-level governance. Therefore, innovative forms of global-local interactions, public-private partnerships, ecotourism ventures, pro-poor tourism strategies, etc. need to be found and to be set in place. These arrangements can contribute to reorder tourism by translating poverty and nature conservation into the process of tourism development and vice versa. Furthermore, attention should be given to the role of the poor in potential partnerships and arrangements. Modes of participation of poor communities in the decision making process according to the local socio-political constraints and existing institutional arrangements should be further investigated. Research could also explore various manners for social and political empowerment of local communities.

Finally *critical analysis* examines the relation between tourism, poverty alleviation and nature conservation and the previously mentioned clusters from a critical perspective, it makes use of insights from for example political economy, political geography, political ecology and political sociology. Here disciplines intersect with political sciences by conceptualising the relation between tourism, nature conservation and poverty alleviation in terms of more general development theories, and by linking this relation to political, economic and social structures and relations of power, politics, systems of government and economic organisation, and more recently processes of globalisation and complexity issues. The work of Farrell and Twining-Ward (2005), Scheyvens (2007), Duffy (2005) and Shultis and Way (2005) are some examples of critical studies in tourism research. Future research could focus on cri-

tically examining tourism and its role for nature conservation and poverty; especially it should focus on the role of tourism for poverty and the multi-dimensions of poverty, considering that there is a lack of studies addressing these issues.

Figure 4 shows the number of times (referred to as frequency) that a specific cluster is discussed in the papers under analysis. Each paper can refer to one or more clusters

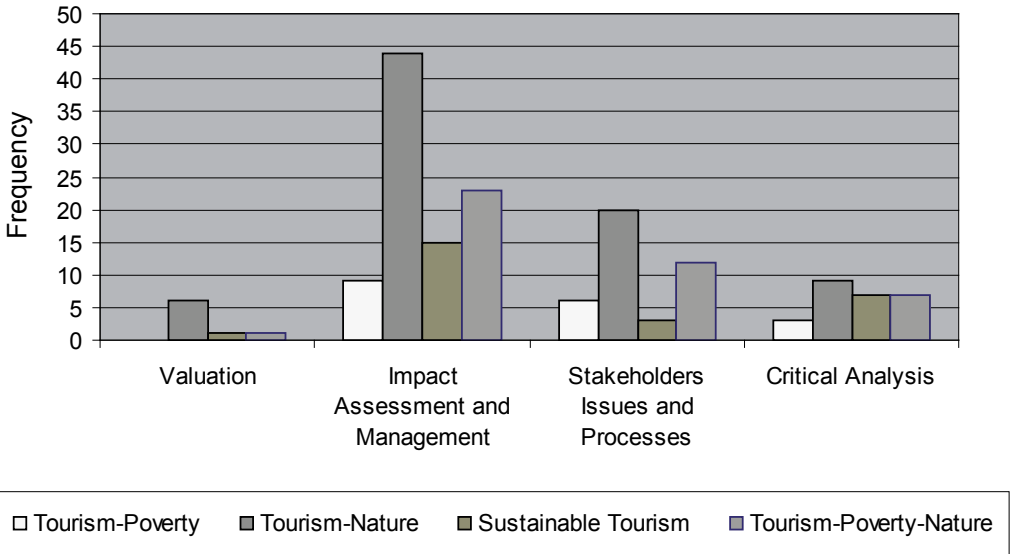


Figure 4: Distribution of papers according to research clusters

Discussion

The vast array of problem-oriented and case study driven research could at first give the impression that research carried out in the past years in tourism, poverty alleviation and nature conservation is very much focused on contributing to enriching knowledge concerning concrete societal issues and needs. A more comprehensive examination of the topics, research questions and findings of the papers under analysis shows that several major societal and global concerns are actually very much overlooked in past studies. The current fragmentation and imbalance persists for multiple reasons, including funding priorities, mutual citation cliques, disciplinary self-isolation (Weaver & Lawton 2007), as well as a still existing gap between practitioners, consultants and academic researchers. For example pro-poor tourism research is still dominated by a relatively small group of pro-poor tourism researchers, practitioners and consultants. But as many of them are lacking permanent academic posts and (relative) financial security, they remain largely outside academic debates and similarly, their insights into the relation between tourism and development in general and the relationship between tourism and poverty alleviation are similarly ignored or under-rated in academic circles (Harrison 2008: 9). Once more the gap between theory and practice

has to be bridged: pro-poor tourism practitioners and followers must engage with the academic community and in return pro-poor tourism insistence on looking at the very basic impacts of tourism at community level, insisting on ‘development’ and bringing about direct and quantifiable change, will reintroduce in tourism studies and politics a dimension which has been neglected for too long (Harrison 2008: 14). The way forward in this path of detection is discussed below.

First, there is a lack of studies focusing and discussing the *contribution of tourism to Millennium Development Goals* (MDGs), namely the eradication of extreme poverty and hunger (MDG 1); gender equality (MDG 3); environmental sustainability (MDG 7) and the development of global partnership (MDG 8). The UN clearly stated that in 2007, at the midway point between Millennium Development Goals adoption in 2000 and the 2015 target date for achieving these Goals, some countries, especially sub-Saharan Africa, are not on track to achieve *any* of the Goals (UN 2007). In these areas tourism can play an important role in the achievement of Millennium targets because of its already significant contribution to African economies and because tourism in Africa is proving increasingly competitive and long term prospect seems to very positive. For example Africa’s comparative advantage in wilderness and wild-life is likely to increase in value as such assets become scarcer globally (Ashley & Mitchell 2005). Although the UN, policy makers and researchers stresses that the capacity to systematic measure, monitor and report on progress of the various implemented initiatives is at the heart of a sustainable development policy and the achievement of Millennium Goals there is a lack of monitoring and evaluation studies. Research in the tourism field is needed to investigate, to monitor and to evaluate the actual or potential contribution of tourism to achieve any of these specific objectives. For example, Ashley and Mitchell (2008), discussing the challenges of monitoring impacts of pro-poor interventions in tourism value chains, contend that enhancing, and thus measuring impacts, is at the hart of the current shift in approach. However, at the same time they conclude that we still need to develop the methodology for good diagnostics, particular in order to get it done with reasonable resource investment and to make best use of data for decision making: “in developing an approach for baselines and monitoring, there is a long way to go” (ibid: 36).

Second and related, while monitoring impacts varies enormously between projects and in time, there is also the need for *longitudinal research* and *comparative analysis across destinations*. Research is characterized by fragmentation, lack of continuity and lack of a comparative perspective. As Weaver and Lawton (2007: 1176) contend, based on their review of twenty years of ecotourism research, fragmentation is evident “in the absence of longitudinal studies or of research that test outcomes from prior empirical research”. The literature analyzed consists predominantly of case studies about unique destinations in various regions. They provide results and reflections about management, impacts or other specific issues in a specific area. Although it is clear that constraints, challenges and opportunities posed by tourism differ across locations, it appears also evident that NGOs and other organizations are eager to increase their knowledge about a number of critical factors that influence the outcome of tourism for poverty alleviation and nature conservation. By taking into account the specific various institutional, socio-political, economic and ecologi-

cal contexts and inter-relations in which tourism projects are developed and implemented, research should attempt to identify and isolate underlying factors across destinations that contributed, or not, to the effectiveness of tourism for poverty and for nature. Rather than providing fixed set of rules, comparative analysis can provide a set of options and elements upon which to reflect before the implementation of certain tourism arrangements and plans. Methodologically there is the need to elaborate new comparative approaches. Meaningful frameworks for comparative analysis that take into account conceptual and methodological issues, limitations and constraint, while delivering the benefits of such analysis, should be developed and carefully investigated (Baum 1999; Simpson 2007). For this purpose tourism research could build on the experience gained in other fields within social science such as politics, sociology and public policy which have extensively invested in the development and application of comparative methodologies (Pearce 1993).

A third and related challenge is to strengthen the links between monitoring economic, social and environmental impacts. For example, since a number of years societal organizations point out that tourism can play a very important role in providing *sustainable financing for protected areas* and creating incentive measures for managing natural resources and for supporting the poor. INGO's and other organizations have made some attempts to investigate and evaluate current financing mechanisms and to identify new ones that can support both the poor and nature (Landell-Mills & Porras, 2002; Font, 2004, WWF, 2006). However, besides (entrance and user) fees, taxes and site-specific negotiation or donation, not much has yet been done to develop innovative types of payment schemes (Gutman 2003). Studies addressing the role of tourism in payment for environmental services are extremely scarce. Moreover, very little is also known with regard to the impact of such schemes on the locals and on the poor. Research can contribute by providing knowledge about the application and the effectiveness of current mechanisms like entrance, user and access fees, concessions and tourism conservation enterprises and by increasing their level of sophistication. New arrangements should also be investigated, like the role of tourism in conservation trust funds. The social and economic context in which new partnerships and arrangements are taking place should also be carefully examined.

Conclusion

In the last decades biodiversity loss and persistent poverty in large parts of the world have been recognized as major international problems that require urgent attention. Conservation and development organisations, governments and the tourism industry increasingly propose (various forms of) tourism development as a promising mechanism to address these conservation and development issues simultaneously, and as a means to achieve the UN Millennium Development Goals. New partnerships linking private, governmental, non-governmental and community organisations have been promoted as a way forward. However, many of these initiatives have neither been theoretically nor empirically judged on their merits and contribution, even though their examination is critical if we are to move towards constructive solutions.

The main objective of this study therefore was to map the development of scientific research in the field of tourism, nature conservation and poverty reduction and to provide an insight in research gaps and to define priorities in future research which can support this pressing societal issue. Ultimately this paper hopes to make a small contribution to the development of a scientific meaningful and social relevant research agenda in tourism, nature conservation and poverty alleviation.

This article examined a total of 112 articles published in 17 peer-reviewed journals in the period 2003–2007. Findings suggest that there is a clear need to investigate the effectiveness of tourism strategies for the poor. Distribution of resources, equity issues, community involvement, potential partnerships and institutional arrangements should be carefully examined. Researchers should also deepen their understanding about the inter-connection and inter-dependency between poverty, tourism and nature conservation issues. Problem-oriented research could be less fragmented and broader in its scope. Case studies should be more spread among regions, more comparative and should especially focus on less researched topics such as poverty and sustainability issues in developing countries. Concept-oriented research should gain more attention in the research agenda, also because it provides the philosophical, conceptual and methodological ground upon which practical research can be implemented. The development of new concepts and frameworks and innovative ways of combining existing approaches is very much needed.

Future research should also take into account the interdependence between science and society. Monitoring and evaluation studies in particular could provide meaningful answers to the contribution of tourism to Millennium Development Goals. Long term assessment of tourism arrangements, policies and plans, comparative analysis across destinations and innovative financing mechanisms could remarkably contribute to the knowledge and practices of sustainable development of tourism. Studies investigating how to integrate complexity theory to tourism management and governmental and non-governmental policies can provide useful insights to management and governance. Research is therefore required to promptly address and investigate these and other urgent critical issues in order to contribute to the production of scientifically robust and socially meaningful knowledge at a global and local level.

References

- Akama, J. & D. Kieti (2007). Tourism and Socio-economic Development in Developing Countries: A Case Study of Mombasa Resort in Kenya. *Journal of Sustainable Development*, 15, 6, 735–748.
- Alpizar, F. (2006). The pricing of protected areas in nature-based tourism: A local perspective. *Ecological Economics* 56, 294–307.
- Ashley, C. & J. Mitchell (2005). Can Tourism accelerate pro-poor growth in Africa? ODI Opinions 60, London.
- Ashley, C. & J. Mitchell (2008). Doing the right thing approximately not the wrong thing precisely: Challenges of monitoring impacts of pro-poor tourism interventions in tourism value chains. ODI Working Paper 291, London.
- Adams, W.M. & M. Infield (2003). Who is on the Gorilla's Payroll? Claims on Tourist Revenue From a Ugandan National Park. *World Development*, 31, 1, 177–190.

- Barrow, C. J. (2000). *Social Impact Assessment: an Introduction*, Arnold, London.
- Baum, T. (1999). Themes and issues in comparative destination research: The use of lesson-drawing in comparative tourism research in the North Atlantic. *Tourism Management*, 20, 5, 627–633.
- Becker, H. A., 1997. *Social impact assessment : method and experience in Europe, North America and the developing world*, UCL Press, London.
- Britton, S.G. (1982), The political economy of tourism in the third world, *Annals of Tourism Research* 9, 3, 331–58.
- Brown, G. (2006). Mapping landscape values and development preferences: a method for tourism and residential development planning. *International Journal of Tourism Research*, 8, 101–113.
- Briedenmann, J. & E. Wickens (2004) Tourism routes as a tool for the economic development of rural areas – vibrant hope or impossible dream? *Tourism Management* 25, 1, 71–79.
- Buckley, R. (2004). Partnerships in ecotourism: Australian political frameworks. *International Journal of Tourism Research*, 6, 75–83.
- Bujosa Bestard, A.& J. Rosselló Nadal (2007). Modelling environmental attitudes toward tourism. *Tourism Management*, 28, 3, 688–695.
- Buultjens, J., Ratnayake, I., Gnanapala, A. & A. Aslam (2005) Tourism and its implications for management in Ruhuna National Park (Yala), Sri Lanka. *Tourism Management* 26, 733–742.
- Cheng, Z., Zhang, J., Wu, B. & L. Niu (2005). Relationship Between Tourism Development and Vegetated Landscapes in Luya Mountain Nature Reserve, Shanxi, China. *Environmental Management*, 36, 3, 374–381.
- Choi, H.C. & E. Sirakaya (2006) Sustainability indicators for managing community tourism. *Tourism Management* 27, 1274–1289.
- Chok, S., Macbeth, J. & C. Warren (2007) Tourism as a Tool for Poverty Alleviation: A Critical Analysis of ‘Pro-Poor Tourism’ and Implications for Sustainability. *Current issues in Tourism*, 10, 2-3, 144–165.
- Clarke, J. (2004). Trade Associations: An Appropriate Channel for Developing Sustainable Practice in SMEs? *Journal of Sustainable Tourism* 12, 3, 194–208.
- Clifton, J. & A. Benson (2006) Planning for Sustainable Ecotourism: The Case for Research Ecotourism in Developing Country Destinations. *Journal of Sustainable Tourism* 14, 3, 238–254.
- Cottrell, S., Van der Duim, R., Ankersmid, P. & L. Kelder (2004). Measuring the Sustainability of Tourism in Manuel Antonio and Texel: A Tourist Perspective. *Journal of Sustainable Tourism*, 12, 5, 409–431.
- De Groot, R.S., 1992. Functions of nature. Evaluation of nature in environmental planning, management and decision making. Wolters-Noordhoff, Amsterdam.
- De Groot, R.S., Wilson, M., & R. Boumans, 2002. A typology for the description, classification and valuation of ecosystems functions, goods and services, 393-408. In: The dynamics and values of ecosystem services, integrating economic and ecological perspectives. Special issue of *Ecological Economics*, 41, 3, 367–567.
- De Kadt, E. (1979) *Tourism: Passport to Development?* Oxford University Press.
- De la Barre, S. (2005), Not ‘Ecotourism’?: Wilderness Tourism in Canada’s Yukon Territory. *Journal of Ecotourism*, 4, 2, 92–107.
- De Oliveira, J.A.P. (2005). Tourism as a Force for Establishing Protected Areas: The Case of Bahia, Brazil. *Journal of Sustainable Tourism* 13, 1, 24–49.
- Dyer, P., Aberdeen, L. & S. Schuler (2003) Tourism impacts on an Australian indigenous community: a Djabugay case study. *Tourism Management* 24, 1, 85–95.

- Duffy, R. (2006). Global Environmental Governance and the Politics of Ecotourism in Madagascar. *Journal of Ecotourism*, 5, 1-2, 128–144.
- Fairweather, J.R., Maslin, C. & D.G. Simmons (2005). Environmental Values and Response to Ecolabels Among International Visitors to New Zealand. *Journal of Sustainable Tourism* 13, 1, 82–98.
- Farrell, B. & L. Twining-Ward (2005). Seven Steps Towards Sustainability: Tourism in the Context of New Knowledge. *Journal of Sustainable Tourism* 13, 2, 109–122.
- Fennel, D. & D. Weaver (2005). The Ecotourism Concept and Tourism-Conservation Symbiosis. *Journal of Sustainable Tourism* 13, 4, 373–390.
- Fennell, D.A. & R.W. Butler (2003). A human ecological approach to tourism interactions. *International Journal of Tourism Research*, 5, 3, 197–210.
- Font, X., Cochrane, J. & Tapper, R. (2004). Pay per nature view: Understanding Tourism Revenues for effective management plans, Leeds, UK, Leeds Metropolitan University.
- Garrod, D. (2003). Local Participation in the Planning and Management of Ecotourism: Revised Model Approach. *Journal of Ecotourism*, 2, 1, 33–53.
- Gezici, F. (2006). Components of sustainability: two cases from Turkey. *Annals of Tourism Research*, 33, 2, 442–455.
- Gios, G., Goio, I., Notaro, S. & R. Raffaelli (2006). The value of natural resources for tourism: a case study of the Italian alps. *International Journal of Tourism Research*, 8, 77–85.
- Gossling, S. (2003). Market integration and ecosystem degradation: is sustainable tourism development in rural communities a contradiction in terms? *Environment, Development and Sustainability*, 5, 3-4, 383–400.
- Guillemain, M., Blanc, R., Lucas C. & M. Lepley (2007). Ecotourism disturbance to wildfowl in protected areas: historical, empirical and experimental approaches in the Camargue, Southern France. *Biodiversity Conservation*, 16, 3633–3651.
- Gutman (2003). From Goodwill to Payments for Environmental Services: A survey of Financing Options for Sustainable National Resource Management in Developing Countries. WWF.
- Hannam, K. (2005). Tourism Management Issues in India's National Parks: An Analysis of the Rajiv Gandhi (Nagarahole) National Park. *Current Issues in Tourism*, 8, 2-3, 165–180.
- Hawkins, E. (2004) A Protected Areas Ecotourism Competitive Cluster Approach to Catalyse Biodiversity Conservation and Economic Growth in Bulgaria. *Journal of Sustainable Tourism*, 12, 3, 219–244.
- Harrison, D. & S. Schipani (2007). Lao Tourism and Poverty Alleviation: Community-Based Tourism and the Private Sector. *Current Issues in Tourism*, 10, 2-3, 194–230.
- Harrison, D. (2007). Cocoa, conservation and tourism Grande Riviere, Trinidad. *Annals of Tourism Research*, 34, 4, 919–942.
- Harrison, D. (1992) *Tourism and the Less Developed Countries*. London, Belhaven.
- Harrison, D. (2008). What is wrong with Pro-poor tourism? Lecture at the Pro-poor tourism Conference, Leeds, 4th of January, 2008.
- Hawkins, D.E. & S. Mann (2007). The World Bank's role in tourism development. *Annals of Tourism Research*, 34, 2, 348–363.
- Helmy, E. (2004) Towards Integration of Sustainability into Tourism Planning in Developing Countries: Egypt as a Case Study. *Current issues in Tourism*, 2, 6, 478–501.
- Heil L., Juricic E.F., Renison, D., Cingolani A.M. & D.T. Blumstein (2007). Avian responses to tourism in the biogeographically isolated high Córdoba Mountains, Argentina. *Biodiversity and Conservation*, 16, 4, 1009–1026.
- Henderson, J.C. (2005). Planning, Changing Landscapes and Tourism in Singapore. *Journal of Sustainable Tourism*, 13, 2, 123–135.

- Herremans, I.M., Reid, R.E. & L.K. Wilson (2005). Environmental Management Systems (EMS) of Tour Operators: Learning from Each Other. *Journal of Sustainable Tourism*, 13, 4, 311–338.
- Hill, W. & C.M. Pickering (2006). Vegetation associated with different walking track types in the Kosciuszko alpine area, Australia. *Journal of Environmental Management*, 78, 24–34.
- Holden, A. (2005). Achieving a Sustainable Relationship Between Common Pool Resources and Tourism: The Role of Environmental Ethics. *Journal of Sustainable Tourism*, 13, 4, 39–352.
- Jackson, S. (2007). Attitudes Towards the Environment and Ecotourism of Stakeholders in the UK Tourism Industry with Particular Reference to Ornithological Tour Operators. *Journal of Ecotourism*, 6, 1, 34–66.
- Jamal, T., Borges, M. & A. Stronza (2006). The Institutionalisation of Ecotourism: Certification, Cultural Equity and Praxis. *Journal of Ecotourism*, 5, 3, 145–175.
- Jamal, T. & A. Tanase (2005). Impacts and Conflicts Surrounding Dracula Park, Romania: The Role of Sustainable Tourism. *Journal of Sustainable Tourism*, 13, 5, 440–445.
- Jamal, T., Everett, J. & G.M.S. Dann (2003). Ecological Rationalization and Performative Resistance in Natural Area Destinations. *Tourist Studies*, 3, 143–169.
- Jogarathnam, G., Chon, K., McCleary, K., Mena M. & J. Yoo (2005). An analysis of institutional contributors to three major academic tourism journals: 1992-2001. *Tourism Management* 26, 641–648.
- Johnston, R.J. & T.J. Tyrrell (2005). A Dynamic Model of Sustainable Tourism. *Journal of Travel Research*, 44, 124–134.
- Kenneth, F.D.; Hughey, K.F.D., Ward, J. C., Crawford, K. A., McConnell, L., Phillips, J.G. & R. Washbourne (2004). A classification framework and management approach for the sustainable use of natural assets used for tourism. *International Journal of Tourism Research*, 6, 349–363.
- Ko, T.G. (2005). Development of a tourism sustainability assessment procedure: a conceptual approach. *Tourism Management*, 26, 431–445.
- Kontogeorgopoulos, N. (2005). Community-Based Ecotourism in Phuket and Ao Phangnga, Thailand: Partial Victories and Bittersweet Remedie. *Journal of Sustainable Development* 13, 1, 4–23.
- Krüger, O. (2005). The role of ecotourism in conservation: panacea or Pandora's box? *Biodiversity and Conservation*, 14, 579–600.
- Kuvan, Y. (2005). The use of forests for the purpose of tourism: the case of Belek Tourism Center in Turkey. *Journal of Environmental Management*, 75, 263–274.
- Kuvan, Y. & P. Akan (2005). Residents' attitudes toward general and forest-related impacts of tourism: the case of Belek, Antalya. *Tourism Management* 26, 691–706.
- Landell Mills, N. & I.T. Porras (2002). Silver bullet or fools' gold? A global review of markets for forest environmental services and their impact on the poor. International Institute for Environment and Development (IIED), London.
- Lai, P. & S.K. Nepal (2006). Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan. *Tourism Management*, 27, 1117–1129.
- Leeuwis, C. (2003). Van Strijdonelen en Luchtkastelen. Inaugural Address, Wageningen University, Wageningen.
- Lengkeek, J. (2001). Leisure Experiences and imagination: rethinking Cohen's modes of tourist experiences. *International Sociology*, 16 (2), 173-185.
- Lengkeek, J. & V. Platenkamp (2006). The kaleidoscope of tourism studies. Paper presented at the ISA conference, July 2006, Durban, South Africa.

- Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. *Tourism Management*, 28, 3, 876–885.
- Lewis, A. & D. Newsome (2003). Planning for stingray tourism at Hamelin Bay, Western Australia: the importance of stakeholder perspectives. *International Journal of Tourism Research*, 5, 331–346.
- Li, W. (2006). Community decision making. *Participation in Development*. *Annals of Tourism Research*, 33(1), 132–143.
- Li, W. (2004). Environmental management indicators for ecotourism in China's nature reserves: A case study in Tianmushan Nature Reserve. *Tourism Management* 25(5), 559–564.
- Li, W., Zhang, Q., Liu, E.C. & Q. Xue (2006). Tourism's Impacts on Natural Resources: A Positive Case from China. *Environmental Management*, 38, 572–579.
- Li, W., Ge, X. & C. Liu (2005). Hiking trails and tourism impact assessment in protected area: Juzhaigou biosphere reserve, China. *Environmental Monitoring and Assessment*, 108, 279–293.
- Li, Y. (2004). Exploring Community Tourism in China: The Case of Nanshan Cultural Tourism Zone. *Journal of Sustainable Tourism* 12(3), 175–193.
- Lindsey, P., Alexander, R., Mills, M., Romañach, M. & R. Woodroffe (2007). Wildlife Viewing Preferences of Visitors to Protected Areas in South Africa: Implications for the Role of Ecotourism in Conservation. *Journal of Ecotourism*, 6, 1, 19–33.
- Macbeth, J., Carson, D., & J. Northcote (2004). Social Capital, Tourism and Regional Development: SPCC as a Basis for Innovation and Sustainability. *Current issues in Tourism*, 7, 6, 502–522.
- Manyara, G. & E. Jones (2007). Community-based Tourism Enterprises Development in Kenya: an Exploration of their potential as avenues of poverty reduction. *Journal of Sustainable Tourism*, 15, 6, 628–644.
- Marion, J. & S. Reid (2007). Minimising Visitor Impacts to Protected Areas: The Efficacy of Low Impact Education Programmes. *Journal of Sustainable Tourism*, 15, 1, 5–27.
- Masau, P., & B. Brideaux (2003). Sustainable Tourism: A Role for Kenya's Hotel Industry. *Current Issues in Tourism*, 6, 3, 197–208.
- Mason, P. (2005). Visitor Management in Protected Areas: From 'Hard' to 'Soft' Approaches? *Current issues in Tourism*, 8, 2-3, 181–194.
- Mbaiwa, J.E. (2005). The Problems and Prospects of Sustainable Tourism Development in the Okavango Delta, Botswana. *Journal of Sustainable Tourism* 13(3), 203–227.
- Mbaiwa, E.J. (2004). Prospects of basket production in promoting sustainable rural livelihoods in the Okavango Delta, Botswana. *Journal of Tourism Research*, 6, 221–235.
- MEA (Millenium Ecosystem Assessment) (2005) *Ecosystems and human well-being. Synthesis*. Island Press, Washington, D.C.
- Medina, L.K. (2005). Ecotourism and Certification: Confronting the Principles and Pragmatics of Socially Responsible Tourism. *Journal of Sustainable Tourism* 13, 3, 281–295.
- Meyer, D. (2006). Reactions to the research agenda, A UK Perspective. Power point presentation. International Conference Sustainable Tourism, Breda, 13-14 December, 2006.
- Moore S.A. & A. Polley (2007). Defining indicators and standards for tourism impacts in protected areas: Cape Range National Park, Australia. *Environmental Management* 39, 3, 291–300.
- Mycoo, M. (2006). Sustainable Tourism Using Regulations, Market Mechanisms and Green Certification: A Case Study of Barbados. *Journal of Sustainable Tourism*, 14, 5, 489–511.
- Naidoo, R. & W.L. Adamowicz (2005). Biodiversity and nature-based tourism at forest reserves in Uganda. *Environment and Development Economics*, 10, 159–178.

- Nature, 2007. Millenium Development Holes. Nature, editorial, 446 (7134), 347.
- NEPAD (2001). The New Partnership for Africa's Development. Abuja, Nigeria, see www.nepad.org, consulted January 2008.
- Nepal, K., (2004). Indigenous Ecotourism in Central British Columbia: The Potential for Building Capacity in the Tl'azt'en Nations Territories. *Journal of Ecotourism*, 3, 3, 173–194.
- Northcote, J. & J. Macbeth (2006). Conceptualizing yield: Sustainable Tourism Management. *Annals of Tourism Research*, 33, 1, 199–220.
- Novelli, M., & K. Gebhardt (2007). Community Based Tourism in Namibia: 'Reality Show' or 'Window Dressing'? *Current Issues in Tourism*, 10, 5, 443–479.
- Nyaupane, G., Morais, D. & L. Dowler (2006). The role of community involvement and number/type of visitors on tourism impacts: A controlled comparison of Annapurna, Nepal and Northwest Yunnan, China. *Tourism Management* 27, 6, 1337–1385.
- Nyaupane, G. P., Morais, D. B. & A.R. Graefe (2004). Nature tourism constraints, A cross-activity comparison. *Annals of tourism research*, 31, 3, 540–555.
- Okello, M.M. & J.W. Kiringe (2004). Threats to Biodiversity and their Implications in Protected and Adjacent Dispersal Areas of Kenya. *Journal of Sustainable Tourism* 12(1), 55–69.
- Osland, G. & R. Makoy (2004). Ecolodge Performance Goals and Evaluations. *Journal of Ecotourism*, 3, 2, 109–128.
- Palmer, N. (2006). Economic Transition and the Struggle for Local Control in Ecotourism Development: The Case of Kyrgyzstan. *Journal of Ecotourism*, 5, 1-2, 40–61.
- Parker, S, & A. Khare (2005). Understanding Success Factors for Ensuring Sustainability in Ecotourism Development in Southern Africa. *Journal of Ecotourism*, 4, 1, 32–46.
- Pearce, D. (1993). Comparative studies in tourism research. In D. G. Pearce, & R. W. Butler (Eds.), *Tourism research, critiques and challenges*, London, Routledge, 20–35.
- Pearce, D., Atkinson, G. & S. Mourato (2006). *Cost benefit analysis and the environment: recent developments*. OECD, Paris.
- Phillips, M.R. & A.L. Jones (2006). Erosion and tourism infrastructure in the coastal zone: Problems, consequences and management. *Tourism Management*, 27, 517–524.
- Pickering, C.M. & W. Hill (2007). Impacts of recreation and tourism on plant biodiversity and vegetation in protected areas in Australia. *Journal of Environmental Management* 85, 791–800.
- Priskin, J. (2003). Tourist Perceptions of Degradation Caused by Coastal Nature-Based Recreation. *Environmental Management*, 32, 2, 189–204.
- Rodger, K., Moore, S. & D. Newsome (2007). Wildlife Tours in Australia: Characteristics, the Place of Science and Sustainable Futures. *Journal of Sustainable Tourism*, 15, 2, 160–179.
- Saayman, M. & A. Saayman (2006). Creating a framework to determine the socio-economic impact of national parks in South Africa: a case study of the Addo Elephant National Park. *Tourism Economics*, 12, 4, 619–633.
- Sausmarez, N. (2007). Crisis Management, Tourism and Sustainability: The Role of Indicators. *Journal of Sustainable Tourism*, 15, 6, 700–714.
- Schianetz, K., Kavanagh, L. & D. Lockington (2007). Concepts and Tools for Comprehensive Sustainability Assessments for Tourism Destinations: A Comparative Review. *Journal of Sustainable Tourism*, 15, 4, 369–389.
- Scheyvens, R. (2007). Exploring the Tourism-Poverty Nexus. *Current Issues in Tourism*, 10, 2-3, 231–254.

- Sekhar, N.U. (2003). Local people's attitudes towards conservation and wildlife tourism around Sariska Tiger Reserve, India. *Journal of Environmental Management* 69, 339–347.
- Shrestha, R.K., Stein, T.V. & J. Clark (2007). Valuing nature-based recreation in public natural areas of the Apalachicola River region, Florida. *Journal of Environmental Management*, 95, 4, 977–985.
- Shultis, J.D. & P.A. Way (2005). Changing Conceptions of Protected Areas and Conservation: Linking Conservation, Ecological Integrity and Tourism Management. *Journal of Sustainable Tourism*, 14, 3, 223–237.
- Silori, C.S (2004). Socio-economic and ecological consequences of the ban on adventure tourism in Nanda Devi Biosphere Reserve, western Himalaya. *Biodiversity and Conservation* 13, 2237–2252.
- Simpson, M.C. (2007). An integrated approach to assess the impacts of tourism on community development and sustainable livelihoods. *Community Development Journal*, October 2007.
- Sithole, E. (2005). Trans-boundary Environmental Actors: The Zambezi Society's Campaign for Sustainable Tourism Development in the Zambezi Bioregion. *Journal of Sustainable Tourism*, 13, 5, 486–503.
- Sorice, M.G, Shafer, C.S. & R.B. Ditton (2006). Managing Endangered Species Within the Use–Preservation Paradox: The Florida Manatee (*Trichechus manatus latirostris*) as a Tourism Attraction. *Environmental Management*, 37, 1, 69–83.
- Southgate, C. (2006). Ecotourism in Kenya: The Vulnerability of Communities. *Journal of Ecotourism*, 5, 1-2, 80–96.
- Spenceley, A. (2006). Nature-based Tourism and Environmental Sustainability in South Africa. *Journal of Sustainable Tourism*, 13, 2, 136–170.
- Spencely, A. & H. Goodwin (2007). Nature-Based Tourism and Poverty Alleviation: Impacts of Private Sector and Parastatal Enterprises In and Around Kruger National Park, South Africa. *Current Issues in Tourism*, 10, 2-3, 255–277.
- Stein, T., Clark, J. & J. Rickards (2003). Assessing Nature's Role in Ecotourism Development in Florida: Perspectives of Tourism Professionals and Government Decision-makers. *Journal of Ecotourism*, 2, 3, 155–172.
- Stone, M. & G. Wall (2004). Ecotourism and Community Development: Case Studies from Hainan, China. *Environmental Management*, 33,1, 12–24.
- Su, D., Wall, G. & P. F. J. Eagles (2007). Emerging governance approaches for tourism in the protected areas of China, 39, 6, 749–759.
- Svoronou, E. & A. Holden (2006). Ecotourism as a tool for nature conservation. The role of WWF Greece in the Dadia-Lefkimi-Soufli Forest Reserve in Greece. *Journal of Sustainable Tourism*, 13, 5, 456–467.
- Tassone, V.C., Van der Duim, V.R. & M.E. Kloek, M.E. (2007), Towards a Research Agenda on tourism, nature conservation and poverty alleviation. Wageningen : Wageningen Universiteit.
- Tassone, V.C. & V.R. Van der Duim (2008). An analysis of research developments and opportunities in tourism, poverty alleviation and nature conservation. In: Pineda, F.D. & C.A. Brebbia, *Sustainable Tourism III*, WIT Press, Southampton, 253–266.
- Tisdell, C. & C. Wilson (2005). Perceived impacts of ecotourism on environmental learning and conservation: turtle watching as a case study. *Environment, Development and Sustainability*, 7, 291–302.
- Tosun, C. (2006). Expected nature of community participation in tourism development. *Tourism Management*, 27, 493–504.

- Tosun, C. (2005). Stages in the emergence of a participatory tourism development approach in the Developing World. *Geoforum*, 36, 333–352.
- Tsaur, S., Lin, Y. & J. Lin (2005). Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism. *Tourism Management* 27, 4, 640–653.
- UN (United Nations) (2007). Millennium Development Goals Report. New York.
- Van der Duim, V.R. & R. van Marwijk (2006) The Implementation of an Environmental Management System for Dutch Tour Operators: An Actor-network Perspective. *Journal of Sustainable Tourism*, 14, 5, 449–472.
- Van der Duim, V.R. (2005). *Tourismscapes*. PhD-dissertation, Wageningen University, Wageningen.
- Van der Duim V.R. & J. Caalders (2004) The Margins of Texel. *Journal of Sustainable Tourism*, 12, 5, 367–387.
- Wachowiak, H. (2005). Large Protected Areas and Visitor Information Management in Germany. *Current Issues in Tourism*, 8, 2-3, 245–257.
- Watson, A., Glaspell, B., Christensen, N., Lachapelle, P., Sahanatien, V. & F. Gertsch (2007). Giving Voice to Wildlands Visitors: Selecting Indicators to Protect and Sustain Experiences in the Eastern Arctic of Nunavut. *Environmental Management*, 40, 880–888.
- Weaver, D. & L. Lawton (2007). Twenty years on: the state of contemporary ecotourism research. *Tourism Management*, 28, 5, 1168–1179.
- Woodland, M. & T. Acott (2007). Sustainability and Local Tourism Branding in England's South Downs. *Journal of Sustainable Tourism*, 15, 6, 715–734.
- World Bank (2000). *Attacking poverty: World Development Report 2000-01*. New York. Oxford University Press.
- Wurzinger, S. & M. Johansson (2006). Environmental Concern and Knowledge of Ecotourism among Three Groups of Swedish Tourists. *Journal of Travel Research*, 45, 217–226.
- WWF (2006). *Species and people: Linked Futures*. Gland, WWF International.
- Xiao, H. & S.L.G. Smith (2006a). The making of tourism research. Insights from a social science journal. *Annals of Tourism Research*, 33, 2, 490–507.
- Xiao, H., & S.L.G. Smith (2006b). Case Studies in tourism research: A state-of-the-art analysis. *Tourism Management*, 27, 738–749.
- Ying, T. & Zhou, Y (2007). Community, governments and external capitals in China's rural cultural tourism: A comparative study of two adjacent villages. *Tourism Management*, 28, 1, 96–107.
- Zhao, W. & J.R. Brent Ritchie (2007). Tourism and Poverty Alleviation: An Integrative Research Framework. *Current Issues in Tourism*, 10, 2-3, 119–143.
- Zorn, E. & C. Farthing (2007). Communitarian tourism hosts and mediators in Peru. *Annals of Tourism*, 34, 3, 673–689.