# Perceptions, attitudes and perceived benefits of local residents about tourism development in and around European Protected Area Network Parks

Stuart P. Cottrell

Abstract — This paper presents the European Protected Area Network (PAN Parks) approach (mixed methods) for monitoring resident beliefs about the benefits of PAN Parks status and satisfaction with tourism development. Comparison of results and lessons learned from studies done in Poland, Bulgaria, and Finland are given. Hypothesizes imply that economic, socio-cultural, ecological, and institutional dimensions of sustainable tourism influence perceived benefits of PAN Park status and satisfaction with tourism development. As residents' satisfaction with the economic, socio-cultural, institutional and ecological aspects of sustainable tourism increase, so do beliefs about the benefits of PAN Park status and satisfaction with tourism development in the PAN Park regions.

Index Terms — Sustainability, tourism, indicators, monitoring.



# 1 Introductions

onitoring the role of PAN Parks (Protected Area Network) in community development via sustainable tourism is a goal of the PAN Parks foundation [1]. In 2005, the PAN Parks Foundation implemented a research methodology to examine the success of the PAN Parks certification program. PAN Parks argues that apart from improved protection and management practice, local businesses and communities profit from PAN Park's status as well. Yet, the socio-economic benefits are less visible than those for conservation.

An important part of the PAN Parks concept is cooperation with local stakeholders on implementation of sustainable tourism, in other words, the socio-economic aspects [2]. These aspects are examined by the PAN Parks research network. The ecological aspects are not the focus of the network since the National Parks involved in PAN Parks conduct much of the scientific research related to biodiversity.

A sustainability framework provides the theoretical lens to guide the research process [3]. Figure 1 shows those dimensions important to a holistic approach to sustainable development.

This presentation examines the relative contribution of four sustainability dimensions in predicting residents' beliefs about the benefits of PAN Park status at PAN Park locations in Finland, Bulgaria, and Poland and satisfaction with tourism development as determined from three studies using a similar methodol-

E-mail: cottrell@ cnr.colostate.edu.

S.C. is with the Human Dimensions of Natural Resource Department, Colorado State University, Fort Collins, CO 80523.

ogy. It is hypothesized that economic, sociocultural, ecological, and institutional dimensions of sustainable tourism would influence perceived benefits of PAN Park status and satisfaction with tourism development. The ecological dimension emphasizes the need to reduce pressure on the physical environment. The economic dimension considers human needs for material welfare (e.g., employment) in a framework that is competitive and stable. The social dimension refers to individuals' skills, dedication, experiences and resulting behavior. The institutional dimension calls for strengthening people's participation in political governance. Dimension indices were based on 5-10 survey items with reliability coefficients ranging from .66 to .91 for each of the studies.

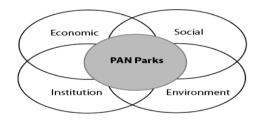


Fig. 1. Sustainability Framework [3]

### 2 Methods

### 2.1 Techniques

A mixed methodology including a 4-page questionnaire and a 10 question semi-structured interview protocol was developed as the basis of the research method. In 2005, the methodology was pilot tested at Bieszczady National Park in Poland using a Polish translation. A PAN Parks methods manual [5] was written as a guide to conduct similar studies in all certified PAN Parks. Baseline studies among all of the parks using a similar methodology will allow the PAN Parks Foundation to compare data between parks and to help learn from the different studies. The

methodology will be repeated over the years to measure change in beliefs, opinions, attitudes, values and impacts over time.

To date, the research has been done at Bieszczady NP in Poland (as a pilot test) [4], Retezat NP in Romania, Central Balkan NP in Bulgaria and Oulanka NP in Finland [4].

The PAN Parks methodology is a tool used to gain insight into who the protected area stakeholders are, in what way they are involved in tourism development, and in what way they perceive the four dimensions of sustainability. Several sub-questions are included to measure general feelings about tourism development, PAN Park benefit to local businesses. local communities, and sustainable development. In addition, questions address social change and perceptions of those changes, company involvement in the decision making processes in the park region, and economic benefits for local entrepreneurs. Both PAN Park partners and non-partners are included in the study which consists of two phases as a mixed methods approach.

# 2.2 Sampling Technique

Sample methods include onsite self-administered surveys and mail surveys with follow-up mailings (e.g., post card reminder).

An onsite self-administered survey was conducted in Poland and partially in Bulgaria and in Finland, and was primarily directed towards PAN Park's partners and tourism stakeholders that participated in the interviews as well. This was done as a means to corroborate findings between the questionnaire and stakeholder interviews. A mail survey with a postage paid self-return envelope was done in Romania, Bulgaria and Finland. An 80% response rate was received from a convenience sample (n=92) in the Central Balkan NP region of Bulgaria [6]. In Finland, we received a 31% response rate from a random sample of households in the summer of 2007 [5]. This is a moderate response level considering the post card reminder with its drawing for prizes; however the modified mail survey approach (2 mailings versus 3 or 4) resulted in a response rate equivalent to other studies using a mail survey and postcard reminder only. In Romania only a few returns were received with most of the surveys done onsite.

The studies at both Retezat NP in Romania and Central Balkan NP in Bulgaria were done by Masters students and would be considered pilot studies with small samples. The study recently completed at Oulanka NP in Finland is the first study with a relatively robust sample and serves as a model approach for future studies [5]. Researchers from the Oulanka Research Station, PAN Parks Foundation, and Colorado State University conducted the study as an interdisciplinary team and represents the ideal approach sought for future studies.

Semi-structured interviews tend to provide the most insightful knowledge about the effectiveness of PAN Parks. There have been modifications to the questions given at each study site due to the type of interviewees, cultural context and experience of the interviewer. Interviews were conducted in Romania and Poland using onsite native speakers as the interviewers with direct translation into English at some point following the interview. In Bulgaria, the researcher was a Bulgarian while both Finnish and English speakers conducted the interviews in Finland. Interviews are meant to be voice recorded, however as was the case in Romania, interviewees were much more open to talk when the voice recorder was turned off. Although a standard interview protocol is available, onsite conditions such as language, terminology, and interviewer experience are always considered.

Statistical analysis for the studies include descriptives and multivariate analysis (e.g., regression, analysis of variance, and structural equation modeling. Textual analysis is used for the qualitative data.

### 3 RESULTS & DISCUSSION

Results are presented as implications for sustainable tourism development, park managment and PAN Parks<sup>1</sup>.

## 3.1 Sustainable tourism development

People living around protected areas expect the park to serve as a magnet for tourists. Is tourism marketing the park's responsibility for the region? Local expectations are often too high with short term expectations. The study in Poland showed that local businesses expected an increase in domestic and international visitors to the park since its verification in 2002. Obviously unrealistic, such expectations led to local dissatisfaction and disillusion with PAN Parks

Direct contact between local stakeholders and park management is necessary for the Sustainable Tourism Development Strategy's<sup>2</sup> (STDS) to work effectively. All stakeholders feel better informed and more committed to achieving the set goals, and the process contributes to the feeling of having a say in the decision making process.

Indicators and standards for sustainable tourism: Survey questions measuring the four dimensions of sustainability (see Fig. 1) in essence represent potential sustainable tourism indicators. Indicators are measurable and manageable variables that reflect the essence or meaning of management objectives. Study items have been consistent across research locations validating the application of a sustainability framework to monitor resident beliefs in the value of PAN Parks, benefits derived and feelings about sustainable tourism development. The next step is to create standards for the indicators. Standards are the minimum acceptable condition for each indicator variable. For example, what percent of local residents need to be satisfied with each dimension to claim that PAN Parks has made a positive contribution to the local region? Development of indicator specific standards is only possible with continued monitoring of tourism development.

<sup>&</sup>lt;sup>1</sup>Actual data are not presented from the Polish, Bulgarian, and Finnish studies due to space limitations (see [2], [5], [6]).

<sup>&</sup>lt;sup>2</sup>Parks must develop an STDS with representatives of the various interest groups (e.g., tourism, local community).

# 3.2 Park management

The various studies provide insight and understanding of the local situation and provide data that may be useful for park management and tourism development in the region. Although, most of the results are park or site specific, findings show that people find it important to be informed about issues and to be involved in decision-making processes. Often opportunities exist for local participation, yet awareness of or familiarity with those opportunities is limited. The need for improved communication from park representatives to local communities has been a key recommendation in many of the studies.

All over the world, people living close to protected areas tend to be less satisfied with tourism development. The Oulanka NP study revealed similar findings in a location well noted for quality management, nature protection, and tourism development. This alludes to the importance of communication strategies and the goals of the areas STDS – which forces parks to look externally to the buffer zones and local regions while thinking internally.

### 3.3 PAN Parks

At this point, local knowledge about PAN Parks is very limited, as you might expect for any initiative in its infancy. People know about PAN Parks but are not familiar with what the concept actually represents; this will take more time. However, in all the studies done, local expectations are quite positive, especially as it pertains to the environmental contribution of the PAN Parks certification as well as the socio-cultural contributions.

Although cause-effect is not claimed, research consistently shows that when familiarity with PAN Parks increases, satisfaction and positive feelings about tourism development in the region is higher than in those respondents not familiar with PAN Parks. As beliefs in the benefits of PAN Parks increases, so do the positive feelings about the various aspects of sustainable tourism in the PAN Parks regions. We cannot claim that in-

creases in satisfaction with tourism development and the various aspects of sustainability are solely because of PAN Parks certification; however, study results allude to potential attitudinal changes which support the need for further research.

Local people tend to have limited knowledge about the activities the Foundation engages in to support their region. Improved communication and cooperation with the park are key aspects of the Foundation's criteria: the Sustainable Tourism Development Strategy and the work with local businesses. This work is done behind the scenes and will not be seen by local people as an outcome of the PAN Parks partnership. Although not important, this may deter local beliefs in the benefits or value of PAN Parks contribution to local and/or regional development.

### 4 Conclusions

Findings suggest that as residents' satisfaction with the economic, socio-cultural, institutional and ecological aspects of sustainable tourism increase, so will their beliefs about the overall benefits of PAN Park status as well as their subsequent satisfaction with tourism development in the PAN Park regions. Results allude to the importance of achieving resident satisfaction with each dimension and the importance of the institutional dimension to achieve sustainable tourism development. As resident familiarity with PAN Park's increases, resident satisfaction with tourism development and beliefs in the benefits of PAN Park status increase. Implications for monitoring sustainable tourism development in European protected areas are given.

The PAN Parks research process has only just begun and results encourage PAN Parks to seek more knowledge: What is the situation in the other parks and should we focus on similar aspects in those parks? It will take time to determine if PAN Parks benefits sustainable development in PAN Park locations and initial results provide benchmarks for further study. Based on this research, valuable information is produced for potential

investors, to satisfy board members and to guide management of certified PAN Parks.

Although cause effect (PAN Park concept) cannot be claimed, perhaps those stakeholders familiar with the ideals supported by PAN Parks have a better understanding of what sustainable tourism involves; consequently they tend to value the importance of the various aspects of sustainability more than those people not informed about PAN Parks. PAN Parks primary benefit tends to be environmental sustainability, yet there is evidence that it contributes to aspects of socio-cultural sustainability as well. Institutional benefits regard the development of a sustainable tourism network via linking park policy and activities to that of local businesses and communities. Stakeholders value the PAN Park concept and this will improve and spread to other stakeholders in the future.

PAN Parks with its sustainable tourism development strategy process is viewed as a driving force for sustainable development combining protected area concern for environmental protection with active involvement of tourism businesses. The PAN Parks Foundation continues to examine the benefits of PAN Park certification with studies at park locations in Bulgaria and Italy in 2008. Similar results found at Central Balkan National Park in Bulgaria and Retezat National Park in Romania imply that PAN Park status enhances resident involvement in tourism development. improved park management and belief in the value of nature conservation due to international recognition.

### REFERENCES

- [1] C. van den Berg, F. van Bree, and S.P. Cottrell, "PAN Parks principles: cross-cultural comparison - Poland/ Slovakia," Proc. 2nd Ann. Visitor Flows and Monitoring Conf. Pp. 227–234, http://www.metla.fi/julkaisut/ workingpapers/2004/mwp002-32.pdf. 2004.
- [2] S.P. Cottrell and J. Raadik, "Socio-cultural benefits of PAN Parks at Bieszscady National Park, Poland," *Finnish Journal of Tourism Research*, vol. 4, no. 1, pp. 56–67, 2008.
- [3] M. Eden, L. Falkheden and B. Malbert, "Interface. The Built Environment and Sustainable Development: Research Meets Practice in a Scandinavian Context," *Planning Theory & Practice* vol. 1, no. 2, pp. 259- 284, 2000.
- [4] S.P. Cottrell, "PAN Parks Methods and Techniques Manual. Monitoring Socio-Economic Aspects of PAN Parks," Technical Report, Human Dimensions of Natural Resources. Colorado State University, 2006.
- [5] S.P. Cottrell, M. van der Donk, and P. Siikamäki, "Results of Questionnaire Study 2007. Report 1 of Socio-Economic Analysis of PAN Parks: Oulanka National Park, Finland," Technical Report, PAN Parks, http://www.panparks.org/Projects/Research/Downloadablestudies/S2, 2008.
- [6] P. Mateev, "Analysis of the Benefits of PAN Parks: Central Balkan National Park, Bulgaria," Unpublished Master's Thesis, Wageningen University, The Netherlands.

Stuart P. Cottrell is an Associate Professor of Human Dimensions of Natural Resources at Colorado State University where he teaches eco/sustainable tourism, and conducts sustainable tourism research. His PhD is from Penn State University (1993), MS from Florida International University (1987) and BS from Western Illinois University (1981). He has taught at Wageningen University, NL and Christopher Newport University, Virginia USA. He is an active member of the PAN Parks Research Network.