

Community perceptions of ecotourism from Arslanbob, Kyrgyz Republic

by

Sean Heyneman

A thesis submitted
in partial fulfillment of the requirements
for the degree of
Master of Science
(School for Environment and Sustainability)
in the University of Michigan

Thesis Committee:

Professor Arun Agrawal, Chair

Professor Ivan Eastin

Abstract

Ecotourism has long been discussed as a means to provide income to poor and remote communities with minimal harm inflicted on local natural areas. Case studies examining ecotourism initiatives focus largely on the Global South and regions with high biodiversity and large numbers of tourists. Mountainous regions, the states of the former Soviet Union, and the Central Asian region in particular have received considerably less attention in English-language scholarship on ecotourism. This study contributes to a global understanding of ecotourism in practice by presenting a case from a neglected biophysical and social context. Using a mixed-methods approach, this study solicited attitudes of residents of the Arslanbob valley in southern Kyrgyzstan regarding conservation and Community-Based Tourism (CBT) Arslanbob, a small but accomplished tour operator subscribing to ecotourism principles. Results suggest that local people are concerned about threats to the environment and that CBT engages in various projects to address these threats. However, these efforts and the pro-conservation mission underpinning them remain largely unrecognized by the community, who intuitively associate CBT instead with financial success and a near-exclusively foreign clientele. Previous work on ecotourism suggests that prioritizing inclusivity and environmental education, as well as forming institutional relationships with the local protected area, will allow CBT to more effectively promote conservation behavior and more fully reflect its mission statement.

Acknowledgements

I would like to express gratitude to the following for their kind support in this research:

Dr. Arun Agrawal, University of Michigan School for Environment & Sustainability

Dr. Ivan Eastin, University of Michigan School for Environment & Sustainability

Dr. Robyn Meeks, Duke University

Ms. Yihan Wang, M.S. - University of Michigan School for Environment & Sustainability

Dr. Bakyt Kurmanakunov, Jalalabad State University

Ms. Kamola Azimova, Ohio State University

Dr. Dietrich Schmidt-Vogt, Director - University of Central Asia Mountain Societies Research Institute

Mr. Steve Borchardt - University of Innsbruck

Mr. Hayat Tarikov, Coordinator - CBT Arslanbob

The incredibly gracious and hospitable CBT homestay families, study participants, and all the people of Arslanbob and Gumkhana villages.

Table of Contents

Introduction.....	1
Research Objectives.....	4
Literature Review.....	4
Methods.....	6
Results.....	10
Limitations	20
Discussion and Recommendations	20
Conclusion	23
References.....	26

Introduction

Ecotourism, otherwise known as sustainable tourism or nature tourism, has been proposed as a way to thread the needle between sorely needed economic development to increase living standards in poor countries and sparing vital natural resources from destructive extractive industries (Brandon, 1996). Other scholars remain skeptical, cautioning that ecotourism does nothing to lessen the carbon footprint of air travel to tourist destinations, creates or widens wealth disparities among residents, and replaces foreign commoditizers of natural resources with local ones (Jones, 2005; King & Stewart, 1996; Marzouki, Froger, & Ballet, 2012). Regardless of hopes or doubts about its effectiveness, ecotourism is a multi-billion-dollar industry accounting for more than 5% of the global tourism market and growing 10-30% yearly (Hogenson, 2017; Wight, 1996; Wood, 2002).

Many case studies examine outcomes for the environment and wellbeing of local people in tourist destinations where service providers subscribe to an ecotourism model (Chandel & Mishra, 2016). Understandably, much of this research has focused on rainforests, sensitive maritime areas, and other biodiversity-rich areas in the Global South (Romero-Rito, Buckley, & Byrne, 2016). By contrast, significantly less attention has been paid to investigating or even defining ecotourism in the context of mountainous areas (Nepal, 2002). Ecotourism initiatives operating in the vast geographical region and socio-political milieu of the former Soviet Union have gone largely unexplored in English-language scholarship (Shokirov et al., 2014). This study aims to provide comparative lessons from the distinct experience of a small-scale ecotour company operating in the particular context of a remote alpine community in a former Soviet republic.

Regional context: Kyrgyz Republic

The Kyrgyz Republic, or Kyrgyzstan, is a landlocked country of about 6 million people situated amidst the Pamir and Tian Shan mountains of Central Asia (Osmonaliev et al., 2016). More than 90% of the country's landmass is higher than 1500 meters above sea level and home to rare and endemic plants and animals (Yamaguchi & Danilenko, 2007). The Kyrgyz ethnic group comprises the majority population of the country, at 73.2%. There is a substantial minority population (14.6%) of Uzbeks in the southwestern region of Kyrgyzstan, including the site of focus for this study, which borders the densely populated Ferghana Valley of neighboring

Uzbekistan (Osmonaliev et al., 2016). Kyrgyzstan ranks among lower-middle income countries, with a per capita GDP of \$1220 and poverty rate of 19.3% (The World Bank, 2018). The country's economy largely depends on mineral extraction and export, consumer good entrepot trade, and remittances from Kyrgyzstani citizens working abroad (The World Bank, 2018). Tourism constitutes an important and growing sector in the economic life of the republic, projected to grow from 1.4% to 7.6% in direct contribution to GDP over the coming decade (Turner & Freiermuth, 2017). Development of the tourism sector looms large in government policy as the country aggressively promotes itself as an idyllic alpine destination akin to an Asian Switzerland (Huskey, 2003). While long serving as a holiday destination for Russians and other socialist bloc visitors during the Soviet period, Kyrgyzstan's striking natural beauty and relatively low cost of travel has attracted increasing numbers of visitors from further afield in recent years (Schmidt, 2005; Sultanov, 2016). The influential travel publication Lonely Planet listed Kyrgyzstan among its top destinations for 2019 (Best in travel, 2018).

Research site: the Arslanbob valley

This study focuses on the Arslanbob valley, Bazar-Korgon District, Jalalabad Province, southern Kyrgyzstan. The Arslanbob valley is in the heart of the Dashman walnut forest covering the southern foothills of the Ferghana Mountains (Shamshiev & Perneev, 2017). The Dashman forest is one of very few large deciduous forests in Central Asia and the largest natural growth forest of fruit and nut-bearing trees on the planet (Schmidt, 2005). Outside of populated villages and their periphery, the entire forest is protected as the Dashman State Nature Reserve, access to which has been restricted for local residents and foreign tourists alike since its establishment in 2012 (Shamshiev et al., 2015). The Dashman forest is largely composed of old-world walnut (*Juglans regia*), thought to have originated in this area, which has played an important role in the economy, culture, and nutrition of local people from antiquity through the present (Schmidt, 2005). The roughly 13,000 inhabitants of Arslanbob village are overwhelmingly ethnic Uzbeks, a minority which enjoys little representation in national politics and faces discrimination and mistrust from the Kyrgyz majority and state authorities following interethnic violence in 2010 (Chislennost', 2010).

Tourism in the Arslanbob valley

With an important religious pilgrimage site, a pleasantly cool summer climate, spectacular waterfalls and alpine scenery, and spring water believed to have healing properties, Arslanbob has hosted visitors from afar for centuries (Schmidt, 2005). During the Soviet period, the valley was developed and promoted as a destination for mountaineering and spa tourism for groups from across the USSR (Watanabe et al., 2009). To this end, a resort and small amusement park, including rides, swimming pools, and a disco, collectively known as the Tour Base, were built to accommodate thousands of vacationers annually (Interview 21). The 1991 breakup of the USSR into independent states and accompanying closure of national borders drastically limited movement of people, including tourists, between previously fraternal republics (Schmidt, 2005). The Soviet-era Tour Base continues to operate under private ownership, although its clientele is now largely limited to day trippers from nearby towns and wealthier Kyrgyz visitors from the capital (Interview 7). Entrepreneurial Arslanbob families run small seasonal businesses, selling fruit and nuts, handicraft souvenirs, running restaurants, driving taxis from the village center to scenic vistas, and letting rooms to visitors (Interviews 11, 12, 43).

Community-Based Tourism

Tourists from outside of the former Soviet space were a relatively uncommon sight in the Arslanbob Valley until the establishment of Community-Based Tourism (CBT) Arslanbob by a former forest ranger and private tour guide in 2001 (Interview 50). CBT runs a tourist information office in the village center from which lodging, hiking and trekking excursions, guides, information, pack animals, and equipment can be obtained with little or no advance notice from English-speaking staff (Interview 50). This office serves as a dispatch center to a network of 21 homestays throughout the valley owned and operated by local families as members of CBT (Interview 39). Guests are lodged with local host families whom tourists pay directly for their stay, laundry, and meals (Interview 27). The homestay families pay CBT a small commission on revenue for their membership (Interview 15; About us, 2016).

CBT is a member of the Kyrgyz Community-Based Tourism Association (KCBTA), an umbrella organization based in the capital city, which coordinates activities between regional CBT groups nationwide (About us, 2016). Under the auspices of KCBTA, CBT Arslanbob and its fellow regional groups receive funding and training from the Swiss Association for

International Cooperation - Helvetas (Tönisson & Yassin, 2015). With guidance from Helvetas, KCBTA developed an ecotourism code of conduct affirming commitments to: **1)** Monitor, minimize, and mitigate harm to the environment; **2)** Foster meaningful and respectful cultural exchange between travelers and local people; **3)** Improve life in the host community by keeping tourism revenue and employment local, supporting local conservation and development projects, and ensuring community participation in decision making; **4)** Educate local residents and tourists on the importance of sustainability (About us, 2016).

Research objectives

This study is aimed at providing an understanding of ecotourism in practice from the perspective of the local community most closely affected by it. It examines how Arslanbob residents understand and value conservation of their natural resources and the relationship of CBT to these attitudes. The following three research questions were examined: What changes have residents experienced in their own lives and community parallel to the growth and success of CBT? What actions has CBT taken to preserve the valley's natural and cultural heritage and improve livelihoods? How do residents believe CBT can improve in the future?

Literature Review

Local roles in ecotourism: participatory and determinative

Since ecotourism was proposed as a solution to the riddle of how to foster economic growth without harming the environment, much scholarly attention has been devoted to the ways and extent to which involving residents of destination areas in ecotourism enterprises affect success in both aims. There is broad agreement that more local involvement is a net positive for ecotourism outcomes (Ross & Wall, 1999; Scheyvens, 1999; Pretty & Ward, 2001; Stronza & Gordillo, 2008). Local people possess unique geographical and ecological knowledge of their native land and provide labor and skills that can greatly aid implementation of conservation efforts (Kiss, 2004). However, there is also consensus that local people should meaningfully take part, if not lead, in management of a tourism enterprise that stands to affect their access to natural resources or the character of their community. Scheyvens (1999) suggests that the metric for success of ecotourism should include the degree of local input in decision making and equitable distribution of costs and benefits from it. Ross & Wall (1999) caution that ecotourism

only becomes sustainable with sufficient buy-in from local people and, without it, risks significant disruption to natural areas and daily life of the community. Local participation in ecotourism not only benefits the business itself but strengthens intra-community relationships and builds up social capacity to respond to broader environmental or other challenges in the long term (Pretty & Ward, 2001; Stronza & Gordillo, 2008). CBT presents a case of an organization ostensibly acknowledging these arguments by committing itself to local empowerment, as evidenced both in the participation provision of the KCBTA code of conduct and in the organization's very name, "Community-Based Tourism." This study seeks to understand how Arslanbob valley residents exercise agency in CBT's tourism activities and other projects. How successful does the community view the organization promoting it as a destination to the world? Recruiting those people most intimately affected by ecotourism to evaluate its performance allows more pertinent lessons to be drawn from the case (Stronza & Gordillo, 2008).

Local people can also determine ecotourism objectives based on the particular needs, circumstances, or aspirations of their bioregion or community, rather than general prescriptions based on an external "cosmopolitan" definition from academic or business sources (Fennell, 2001). Tailoring an understanding of ecotourism that accounts for local priorities over general principles should result in more relevant and realistic policy for the area in question (Pegas et al. 2013). This study aims to explore what members of a community engaged in tourism billed as ecological value highly. How do the people working and living in an ecotourism destination understand the term? In what ways do they distinguish ecotourism from conventional tourism?

Ecotourism and promotion of local conservation attitudes

Ecotourism has been proposed as an instrument to prevent degradation of threatened natural areas and ecosystems throughout the world (Brandon, 1996). Ecotourism is marketed to tourists who value conservation and wish to enjoy unspoiled natural beauty (Brandon, 1996). Activities organized as part of ecotourism are designed to minimize (e.g. careful hiking and trekking practices) or repair harm (e.g. volunteer trash cleanups and wildlife rescue) to the environment (Brandon, 1996). No less important, however, is the utility of ecotourism in fostering conservation in the communities in which it operates. While tourists come and go, local people remain the best potential stewards of nearby natural areas (Ross & Wall, 1999). No project concerned for the state of the environment can succeed without parallel sentiment from

nearby communities, as local people's understanding of the environment and the threats facing it shapes their behaviors while interacting with it (Waylen et al, 2009). Therefore, ecotourism should educate and encourage local people to take conservation seriously (Ross & Wall, 1999). This can be accomplished through active outreach measures to inform the community of threats to their natural resources, like town hall meetings, or partnering on environmental education with local schools, or training programs for local tour guides (Jacobson & Robles, 1992). Ecotourism can also provide a financial incentive for local communities to protect nearby natural areas or risk losing tourists drawn to them, fostering a sense of civic responsibility and pride (Ross & Wall, 1999; Pegas et al, 2013). Consumptive use of land and natural resources should decrease as local people spend more time employed in tourism and tourism-adjacent activities, allowing regeneration of vegetation and wildlife (Stronza, 2007).

The extent to which pro-conservation attitudes and altered behavior among the local population result in positive outcomes for the environment is disputed. Ross & Wall (1999) maintain that ecotourism can achieve no success in conservation objectives absent effective protection regimes and local governance. Particular bioregional context is also relevant. Ecotourism projects have been found to be less successful in achieving conservation objectives when located in Asia, at high altitudes, and in ecosystems lacking a charismatic "flagship" animal species (Wells, 1992; Krüger, 2005).

This study asks residents of the Arslanbob valley to articulate how they value their natural resources, to identify threats to the environment, and to detail ways in which CBT promotes conservation. Their perspectives can reveal contours of the "synergistic relationships" linking the destinies of natural areas, communities, and tourism and provide lessons of how balance between them might be achieved or lost (Ross & Wall, 1999).

Methods

Employing a mixed-methods approach, this study utilizes both face-to-face interviews and a quantitative survey to better understand perceptions and lived experiences of Arslanbob valley residents. Data collection was conducted in Arslanbob and Gumkhana villages, Bazar-Korgon District, Jalalabad Province, Kyrgyzstan, where CBT operates its guest house network and where tourists visiting the Arslanbob valley and nearby mountains stay. Surveys and

interviews were conducted between June 17th and July 13th, 2017, during the peak tourist season in the Arslanbob valley.

Demographic survey methodology

A quantitative instrument for capturing community makeup is recognized as an important first step in mixed-methods research (Frels & Onwuegbuzie, 2013). The preliminary phase of data collection for this study involved a survey designed to collect demographic information from respondents preceding in-depth interviews. The survey consisted of 10 items (7 multiple-choice, 3 open-ended) aimed at capturing gender, age, ethnicity, profession, distance of household from village center and CBT headquarters, household size, education level, average household income, involvement in tourism or tourism-related activities, membership in CBT, and importance of tourism (if applicable) as share of household income.

Data collection

This study used a snowball and convenience sampling method to recruit respondents. Prior to arrival at the research site, permission of the CBT coordinator was obtained to contact and recruit CBT members and staff for participation in this study. The coordinator introduced the researcher to CBT members and staff, 22 of whom volunteered to complete the survey. These initial participants then recommended friends, neighbors, relatives, and acquaintances for survey participation. Further participants were recruited through a convenience sample, which involved the researcher approaching other residents within walking distance of CBT headquarters and inviting them to complete the survey. Of the estimated 200 local residents approached in any manner to complete the survey, 55 residents agreed to participate. Of the 55 resulting completed surveys, 52 surveys yielded useable data. The remaining three completed surveys were excluded from data analysis due to incomplete or conflicting responses. Surveys were completed in respondents' homes and businesses. Surveys were made available on paper forms and translated from English into three local languages: Uzbek, Kyrgyz, and Russian. There is scholarly recognition that a sample of this size is sufficient for the population, given the methods employed by this study (Hill, 1998; Mason, 2010).

Data analysis

Upon collection of 52 paper-based surveys, responses were digitally transcribed into a spreadsheet. Survey responses were expressed as numerical values, whether binary (yes-no, male-female), categorical (low-medium-high), or reflective of actual values (amount of land leased in hectares). Respondents' stated professions were not thematically grouped or analyzed but left as is to provide additional context for survey results. Numerically-expressed survey responses were totaled and calculated as percentages of the whole sample.

Qualitative study methodology

Use of qualitative approaches for data collection is favored by researchers seeking local perspectives on environmental issues (Raymond et al., 2010). The qualitative portion of this study consisted of semi-structured and in-depth interviews designed to capture a ground-up perceptions Arslanbob valley residents both directly and indirectly affected by CBT activities.

Interviews were structured around 13 thematic clusters of questions: 1) knowledge of or involvement in CBT; 2) effect of CBT on respondent personally; 3) perceived effect of CBT on community at large; 4) knowledge and use of natural resources; 5) importance of conservation of natural resources; 6) perceived effect of CBT activities on natural resources; 7) cultural exchange with foreign tourists; 8) behavior of foreign tourists; 9) CBT outreach and training; 10) use of CBT revenue; 11) development projects in Arslanbob valley; 12) equity and responsiveness of CBT; 13) ideas and aspirations for the future. Each thematic cluster consisted of several questions to solicit a respondent's perceptions of ecotourism activities and their outcomes. Questions within a thematic cluster were adjusted or omitted based on the respondent's answers to previous questions. Follow-up questions and additional dialogue springing from original questions were permitted and included in data analysis.

Data collection

Upon completion of the demographic survey detailed above, respondents were then asked to participate in semi-structured, face-to-face interviews. Upon determination that survey data was usable, all 52 respondents were then invited to participate in the interview portion. In the majority of cases, interviews took place immediately following completion of the survey, in other cases interviews were scheduled at a later date and different location at the respondent's

convenience. The interview began with the selection of a language for further questions. Most interviews were conducted in Uzbek, the dominant local language of the Arslanbob valley. Interviews were also conducted in Kyrgyz, Russian, English, or some combination thereof. Most respondents did not consent to have their voices recorded during the interviews, in which case responses were instead recorded in written form.

Data analysis

Interview notes were written in English with the exception of relevant terms and phrases left untranslated to preserve contextual richness. Audio recordings, after translation into English, and written interview notes were digitally transcribed upon conclusion of interviews. Interview transcripts were then reviewed and coded for relevant themes. An inductive and data-driven approach was used for thematic content analysis (Boyatzis, 1998). Upon initial review of transcripts, preliminary codes were generated from patterns occurring in the text. Codes were given labels and numerically expressed in a codebook spreadsheet document for later summative analysis. Some codes were tallied in binary terms by the absence or occurrence of a given pattern from each interview transcript. When applicable, categorical or ordinally scaled values were also used to numerically convey type (positive, negative, neutral) or degree (mild, moderate, strong) of expression of other patterns in the text. Values reflecting codes generated from responses to all thematic clusters of questions were then totaled. Codes were then collated into themes expressed in sentence form, which were then reviewed against passages from the interview transcript text for accuracy.

Separating sample using demographic data

Qualitative data extracted from interview responses were disaggregated based on certain demographic characteristics selected from those detected in the initial paper-based survey. Salient demographic features selected included respondents' income, sex, and whether or not they were affiliated with CBT as an employee or member - homestay owner. Income and sex were highlighted as useful indicators for assessment of broader and more equitable provision of economic opportunities within the community, one of the key stated goals of CBT and ecotourism as a development strategy more generally. However, CBT affiliation was the most closely examined variable as it was most likely to impact the range of responses; it provides an

easy point of comparison between perspectives of insiders and outsiders and useful demarcation in observing to what degree CBT's activities may have influenced views of residents in the wider community.

Testing for significance

With demographic criteria selected as variables, study participants were divided into groups for comparative analysis of their survey responses and themes emerging from transcripts of semi-structured interviews. Numbers of occurrences of observed themes were compared between these subgroups and the differences between them tested for statistical significance. A binomial z-score test was used to establish significant difference between groups at the $\alpha = 0.05$ level. The z-score was calculated as:

$$z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{p(1-p)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$\text{Where } \hat{p} = \frac{n_1\hat{p}_1 + n_2\hat{p}_2}{n_1 + n_2}$$

When comparing demographic data expressed as ordinal variables, a two-sample t-test was used to determine statistical significance of differences in means. The t-statistic was calculated as:

$$T = \frac{Y_1 - Y_2}{S_p \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

Results

Demographic characteristics

The survey results show that 42% (n=22) of respondents were members or staff of CBT, the remaining 58% (n=30) were unaffiliated with the organization.

Among respondents surveyed in the overall sample, most (71%) were men, while the remaining 29% were women. CBT members and staff surveyed included 6 women (27%) and 16 men (73%). As the sample included nearly all CBT member-homestay owners in the Arslanbob valley, it can be claimed with reasonable certainty that it is representative of the sex ratio in CBT. Binomial tests revealed that, while the sex ratio of CBT-affiliated respondents did not significantly differ from the overall sample for this study, women are significantly

underrepresented in CBT membership relative to their share of the population in both the district containing Arslanbob and in Kyrgyzstan at large (Chislennost', 2010).

Monthly household incomes were distributed relatively evenly between 0 and 28,000 Kyrgyz soms (\$400), with a plurality (42%) earning around the national average for Kyrgyzstan of 15,670 soms (\$215) (Srednemesyachnaya, 2017). However, a two-sample t-test revealed that monthly household incomes reported by CBT-affiliated respondents averaged 12,500 Kyrgyz soms (\$179), significantly lower than the mean for both the overall sample for this study and the national average for Kyrgyzstan of 15,670 soms.

Ages of respondents were relatively evenly distributed between 18 to 90 years, with a plurality (33%) of respondents aged between 46-60. A majority of respondents identified as Uzbeks (62%) followed by Kyrgyz (27%). Most (63%) respondents lived further than one kilometer away from the CBT office in the center of Arslanbob village. A plurality of respondents (40%) had 5-10 people in their households. Nearly all (94%) respondents had received secondary education, many having also received post-secondary vocational (20%) or university (35%) education. Most respondents (56%) worked seasonally in tourism or tourism-adjacent activities. Of respondents working in tourism, a plurality (38%) reported that tourism work accounted for between a quarter and half of all household income. Respondents reflected a variety of professions including grocers, shepherds, farmers, tour guides, local government officials, clerics, teachers, and scientists in the Dashman State Forestry Reserve.

Qualitative study results

Overall perception of CBT and conservation

Most interviewees questioned on the state of the environment expressed concern about at least one problem affecting nearby natural areas. From respondents' perceptions of CBT emerged four salient themes: its success as a business, its monopoly on foreign tourism in the area, its exclusivity within the community, and limited intuitive association of CBT with its stated ecotourism mission.

Arslanbob Valley facing varied environmental threats, tourism largely unblamed

An overwhelming majority (87%) of respondents expressed concern for the health of natural areas in the Arslanbob Valley, the Dashman walnut forest, and nearby mountain

pasturelands. A binomial test revealed that this concern for the state of the environment was shared among both CBT members (64%) and staff and other Arslanbob residents (40%) without statistically significant differences between the two groups. Results show that 25% of respondents went even further to declare that the state of the environment was the most important problem facing their community, as exemplified by this resident:

There's no place like Arslanbob in all the world. This forest is completely unique. We have a duty to preserve this place, at all costs, for the sake all mankind. (Respondent 21, CBT Guesthouse Host)

Among specific problems mentioned by interviewees, deforestation (mentioned by 46% of respondents) often as a result of illegal felling of trees for building materials and firewood, was by far the most commonly raised issue. Results show that 25% of respondents expressed concern of an increasing threat of natural disasters such as flooding, avalanches, landslides, and forest fires to agriculture and sites of touristic value. Results show that 17% of respondents mentioned declining or extinct wild animal populations which had been more plentiful during the Soviet period. Results show that 13% of respondents reported seeing unfamiliar plants and animals or identified specific invasive species, most often insects, observed in the Dashman walnut forest. Results show that 13% of respondents mentioned declining air and water quality. Results show that 10% mentioned overgrazing, livestock overpopulation, or decline of mountain pastureland. The following quote from an Arslanbob resident illustrates local anxiety surrounding many of these issues:

The Koran says that for every tree you cut, you should plant ten in its place. During Soviet times, people took care of the forest, and many were employed by the state specifically to do so. In the 1990s, all of those institutions collapsed, and the people's mindset shrunk to mere matters of today, here and now. Animals used to be plentiful in the hills. But people were hungry, so they killed nearly all of them. Why buy coal when there is free firewood all around? So, people cut down all the nearby trees. It takes so long to replace those trees, birds and animals lose their precious habitats. The bare land is now much more vulnerable to floods and landslides. People have become so small-minded that they don't even realize that they are destroying their future. (Respondent 10, retired forest ranger)

When ascribing blame for the aforementioned threats to natural areas in the Arslanbob valley, respondents pointed to insufficient ecological management by the Dashman State Forestry Reserve (33%), weak laws, legal penalties, or underfunded state institutions (19%), use of coal for heating instead of cleaner energy sources (10%), and inadequate education on the environment in schools (8%). No respondents directly blamed tourist activity for threats to the environment. Moreover, half (50%) of respondents claimed that tourism in no way harms natural areas. A binomial test revealed that this sentiment was shared among both CBT-affiliated

respondents (59%) and unaffiliated respondents (43%), without statistically significant differences between the two groups. However, in later sections, some respondents complained of littering and poor fire safety by certain visitors and it is concerning to note that 27% of respondents expressed resignation or doubt that they could do anything to conserve the environment, as evidenced here:

How can we help the wild animals? Let God watch over them. We can only take care of our gardens and what's close at hand, our homes... I haven't heard about CBT offering information about protecting the environment, but I wouldn't really be interested even if they did. I have enough tasks to do already. Life is hard, after all. (Respondent 3, taxi driver)

CBT admired as dynamic and successful local business

A majority (56%) of respondents regarded CBT positively. A binomial test revealed this outlook as varying significantly between respondents affiliated with CBT and those who were not, with 91% of CBT-affiliated respondents expressing positive views of the organization compared to only 50% of remaining respondents holding similar views. Half (50%) of CBT members and staff reported having been intuitively motivated to join by the prospect of financial gain, as exemplified by the following quote:

I had the idea to sign up for CBT, host some tourists, make some extra money. It was just an idea. But, after a few years of hosting tourists, we are doing alright. We're building a new bathhouse with a shower, remodeling our house, making everything pretty. We're glad for this. God willing. (Respondent 32, CBT Homestay owner)

Most (73%) CBT members and staff described having been motivated to join the group out of desire for new professional skills. 27% of all respondents intuitively associated CBT with achieving profit and financial success.

CBT as monopoly on foreign tourism and necessary professional expertise

A majority of all respondents (52%) intuitively associated CBT with the presence of foreign tourists in the valley. Most (73%) CBT members and staff were motivated to join due to previous experience working in tourism, nature-related activities, or knowledge of foreign languages. A sizeable minority (41%) of CBT members and staff were motivated to join out of an interest in interacting with foreign tourists. One resident speaks to the influx of foreigners and the necessity of speaking English:

Now there are many more foreigners walking around the town. My kids all can speak some English and German. Even us older folks are learning how to speak with foreigners! I can't communicate with foreign tourists as much as my daughter can, but I can still say 'Welcome,' 'time to eat,' and 'would you like some tea?' (Resident #1, CBT Homestay owner)

CBT is the only organization in this area catering to foreign tourists, as the older Soviet-era Tour Base is staffed largely by seasonal non-English speaking workers and caters to domestic tourists from other regions of Kyrgyzstan. Some (21%) respondents referenced CBT's unique relationships with foreign donors and links to the outside world, as evidenced here:

CBT was trained by [Swiss organization] Helvetas so it won't make just one person rich, but rather do many good things for the community. CBT gives me some extra income, for example. (Respondent #22, CBT tour guide, English teacher).

In one case, reference was made to the exclusivity of CBT (among local organizations) maintaining an English-language web presence detailing its services to the outside world.

CBT as a small and exclusive group within community

Out of a population of 13,000 in the Arslanbob valley, only 21 families operate guest houses as members of CBT. CBT employs fewer than 10 guides and seasonally hires fewer than a dozen porters, cooks, and animal handlers. A large majority (86%) of CBT members and staff were motivated to join the organization through personal relationships or family ties with current members and staff, as demonstrated by the quote below:

I guess you could say that I inherited [my job with CBT] from my father, but I enjoy it very much. (Respondent #21, CBT tour guide)

More than half (53%) of respondents unaffiliated with CBT reported never having interacted with the organization and 23% of all respondents were unfamiliar with CBT by name and needed clarification (usually by mentioning the CBT coordinator's name) before further questioning. Some (35%) respondents claimed that benefits from foreign tourism are unequally shared; whether geographically in the center of town, among people with certain skills, among CBT members, or among certain CBT members preferentially. In addition, 31% of respondents believed that foreign tourism benefited only a small share of the population. One respondent complained that not only was he gaining nothing from foreign tourism but that organizations involved with foreign tourism were not doing enough to benefit the community as a whole:

I'm certainly not benefitting [from foreign tourism in Arslanbob]. Tour operators should set aside some of their profits to give to the poor, sick, elderly. If they have the money, it's their duty according to Islam to do this. (Respondent #24, cleric).

CBT not widely recognized for pro-environmental and altruistic focus

While CBT staff members detailed numerous activities undertaken by the organization to protect the natural environment or benefit the community, there was little recognition by respondents of these activities or the ecotourism mission underpinning them.

A small number (13%) of respondents intuitively associated CBT with altruistic activities to benefit the village's poor. Most (92%) respondents did not intuitively associate CBT with conservation activities although 46% reported receiving some form of information or training about protecting the environment from CBT. A binomial test revealed that CBT-affiliated respondents were significantly more likely (72%) to have received information or training about conservation when compared to unaffiliated respondents. In fact, one CBT member stated that, while sustainable tourism practices were important, she had received no information or training on how to implement them:

We don't get any information about protecting nature from the [CBT] office or anywhere else. (Respondent 9, CBT Homestay owner).

The survey results show that 21% of respondents acknowledged a moral or philosophical difference between CBT's ecotourism mission with the profit motive of other tour operators in the area. A binomial test revealed that this sentiment did not significantly differ between respondents affiliated with CBT (31%) and unaffiliated respondents (22%). Most (86%) CBT members and staff did not mention interest in conservation issues or protecting the environment as a motivation for joining. However, a few respondents (12%) praised projects organized by CBT to this end, as evidenced here:

At the end of the last seminar [hosted by CBT] they planned an eco-tour trash clean-up event for the schoolkids here in town. This is very important, because it's instilling good ideas about protecting nature in the next generation. (Respondent 35 retired official).

Changes experienced and notable trends since CBT's establishment

Respondents noted that the establishment of CBT in 2001 and subsequent expansion of foreign tourism to the Arslanbob valley impacted daily life among the local population in myriad ways. Themes that stood out from the shared experience of local residents included an increase in wealth and infrastructure, positive interactions with foreign visitors, a growth in civic pride and feeling of responsibility, and a growing concern for the state of the environment.

CBT's growth correlated with an accelerating local economy

A plurality (46%) of respondents attested to having benefited financially from increased tourism brought by CBT. A binomial test revealed that respondents affiliated with CBT were significantly more likely (73%) to report financially benefiting when compared to unaffiliated respondents (27%). A sizeable minority (38%) of all respondents noted a marked increase of visible wealth throughout the village. Some (29%) referenced new buildings and improved infrastructure accompanying the uptick in foreign visitors. Some (25%) pointed to increased employment opportunities for local youths during the tourist season. Some (25%) credited the expansion of foreign tourism with transferring useful new knowledge and professional skills to local people, as exemplified here:

More people are working now. Fewer guys are sitting around and drinking the days away. New shops and restaurants are being built. Summers are a lot more fun than they used to be. There are games, swimming pools, and discos open every night. (Respondent 26, taxi driver)

CBT increasing residents' exposure to outside world

A large majority (79%) of respondents expressed a positive opinion of foreigners visiting Arslanbob as tourists, lauding their politeness, cleanliness, and willingness to buy goods and services in the valley. However, a binomial test revealed that such positive sentiments toward foreign tourists were expressed significantly more frequently among CBT members and staff (82%) when compared to non-CBT respondents (37%). Some (36%) respondents credited the growth in foreign tourism with their first ever opportunity to interact with people from countries outside of the former Soviet Union. Some (25%) mentioned positive cultural changes resulting from foreign tourism. According to 38% of respondents, foreign tourism has allowed a meaningful exchange of ideas and opinions or resulted in the acquisition of useful knowledge by the respondent, while 29% of respondents stated that their opinions of foreigners had improved after interaction with tourists in their midst, as explained by this resident:

Before the tourists started coming here, we didn't really know anything about the outside world besides Russia. It's great that the next generation is growing up surrounded by visitors who can help them to learn to speak other languages and learn new things. (Respondent 1, CBT homestay owner)

Respondents' positive outlook on foreign tourists was not unequivocal; 27% of respondents mentioned concerns over clothing considered excessively revealing by local standards. Other concerns mentioned included alcohol consumption (by 13% of respondents) and religious proselytizing (12%). However, 25% of respondents referenced CBT policy of

informing or educating visitors on appropriate conduct according to local culture, as exemplified below:

I guess it's acceptable to wear shorts outside in many places around the world. However, when [foreign visitors] walk around Arslanbob dressed in this way, it makes us uncomfortable. CBT posts some rules about how to dress more modestly in their office and in the guesthouses. Apart from that, our guests behave well. They clean up after themselves when hiking in the forests or mountains, and act respectfully near mosques and shrines. (Respondent 23, CBT homestay owner)

CBT pro-environmental activities taking place despite limited recognition

Modest numbers of respondents described activities undertaken by CBT, both in the course of and in addition to hosting foreign tourists, designed to improve or minimize harm to natural areas in the nearby Dashman forest and Ferghana mountains. Some (18%) respondents mentioned pro-conservation activities (educating schoolchildren on local flora and fauna, trash clean-ups, recycling drives, protecting water sources from livestock fouling, etc.) organized by CBT outside of its tourism business. A larger number (42%) credited practices of CBT's "leave no trace" policy in place for tourist hiking and trekking with minimizing harm to natural areas. Additionally, 21% of respondents favorably contrasted the behavior of foreign visitors, who almost exclusively are hosted by CBT, with that of Kyrgyzstani visitors to the Arslanbob valley. Complaints made against the latter included noise, littering, public drunkenness, improper or illegal building of campfires, and not keeping to designated roads and trails during outdoor excursions. One resident contrasted the two groups thusly:

Local tourists and foreign tourists act very differently in the forest. From what I've seen, the foreigners generally carry all their trash out. Local tourists leave rubbish, bottles, and food waste all along the main routes. (Respondent 18, pensioner)

The CBT coordinator and several other staff members expressed a desire to maintain a slow and manageable rate of growth in tourism. In this way, they hope to avoid negative cultural shifts in the community as cautioned here:

We don't want to develop too fast. We don't want our people to be spoiled and forget their hospitality. They will be hungry for money. We don't want Arslanbob to turn into a hotel reception, just counting money, counting money, that's it. No time to sit and relax. So, developing slowly lets our people sit and relax, lets them talk with the tourists, keep our sense of hospitality. (Respondent 50, CBT staff member)

Local priorities and recommendations to improve ecotourism

The final item on the qualitative portion of the questionnaire solicited Arslanbob valley residents' ideas on how ecotourism should better serve their community in the coming years. Respondents provided suggestions for improving the quality of CBT's current services and

proposed entirely new ideas for expanding its tourism business, as well as environmentally and socially-concerned activities. Major themes emerging from Arslanbob Valley residents' recommendations are detailed below.

Economic, infrastructure development widely favored

Interviewees' recommendations largely concerned expansion and improvement of the CBT's primary commercial activity: providing hospitality and tourism services to foreign visitors. Nearly half (42%) of respondents identified business as usual or continuation of the current pace of growth as favorable for the community's future, as exemplified by the following quote:

In the future, I hope CBT will get a bigger office. We should offer more homestays, more horses, more guides for hire. (Respondent 22, CBT guide)

A binomial test revealed that a desire for the current state of affairs to continue was shared among both CBT-affiliated respondents (50%) and unaffiliated respondents (37%), without statistically significant differences between the groups.

Some (23%) respondents suggested that CBT use its revenue or connections to improve roads and other infrastructure. The most common suggestion was the completion of a project first proposed during the heyday of Soviet-era spa tourism: a cable car or gondola lift to carry visitors across the steep valley and provide scenic views of the famous waterfalls. One resident explained this project thusly:

I think we need to build a funicular from the Tour Base going up to the waterfall. If there is an organization, domestic or foreign, who could help us with finances or consulting for its construction, it would be great. We could charge 50 soms per person to ride the lift. This 50 soms could benefit the whole town, not just one businessman who owns it. (Respondent 32, farmer)

Increase and wider distribution of tourism revenue across community

Some (19%) respondents called for CBT to promote patronage of local businesses, outside of their network of homestays, by their foreign clientele during their stay in the Arslanbob valley. Additionally, 15% of respondents suggested establishing new taxes or fees, or increasing existing ones, on foreign tourists entering certain sites or enjoying local hospitality, as exemplified here:

There should be an entry fee especially for foreigners paid upon entering the town. The local government should use this money to pay higher pensions and pave all streets with asphalt. (Respondent 49, shopkeeper)

Finally, 17% of respondents encouraged increased employment of young people into the tourism industry to boost revenue for local families and instill professional skills in the youth.

Creating a richer and more varied experience for foreign visitors

According to 36% of respondents, the tourism services offered by CBT at the time were too limited by season or scope. To remedy this, 15% of respondents proposed that CBT develop winter tourism: hosting tourists year-round or leading skiing and snowboarding excursions in the Arslanbob valley. Alternatively, 17% of respondents suggested that CBT or its member homestays organize interactive displays of traditional Uzbek culture, such as musical performances, national games, horsemanship, or cooking classes. This idea was summarized by one respondent below:

At the moment, tourists arrive, sleep, eat, walk around, and leave. That's pretty much it. It would be nice for CBT to help us set up a theater, put on performances for adults and organize traditional games for kids. We could cook new types of food and organize cooking classes for Uzbek cuisine. (Respondent 9, CBT homestay owner)

Exploiting CBT's unique position in community, linkages to outside world

Interviewees pointed out numerous ways in which CBT might further use its unique perspective, gained through its guides' daily movement through the Arslanbob valley, and connections to the outside world to better identify and address problems in the community. Some (23%) respondents hoped for an increased focus on conservation through new and existing projects to mitigate harm to natural areas, as proposed here:

Ecotourism has the potential to help out the [Dashman State] Forestry Reserve's important work. To that end, we hope to cooperate with CBT to establish hiking trails and tourist amenities inside the Forestry Reserve, and to set up a fixed entry price for local people and tourists. The money we raise from ecotourism will go directly into our conservation and research budget... We need to control access, mark places for walking and camping and provide information in foreign languages. CBT can help us with this. (Respondent 44, Forestry Reserve ecologist)

The potential of CBT to secure funding for community development or conservation efforts, through its links to foreign donor organizations and personal relationships formed between CBT staff and visitors from the global scientific and philanthropic communities, was highlighted by 21% of respondents.. Some (17%) respondents requested more outreach by CBT for education and sharing of the professional skills which its hosts and guides have accumulated over 16 years of experience. A few (10%) respondents asked for a greater focus on developing extracurricular activities for youth to build upon the success and popularity of the sport

competitions and trash cleanup field trips which CBT staff organize for children in village schools. A few (10%) respondents called for CBT to organize or sponsor renewable energy projects to provide cheap and clean heating for Arslanbob valley residents, as proposed here:

We have plentiful hay, vegetables, and manure... why not find a sponsor to get some biogas generators to heat people's houses? CBT could help promote this idea and get people to pitch in for it. (Respondent 21, CBT tour guide)

Finally, two respondents (4%) expressed hope that CBT could devote more effort to promote the Arslanbob valley as a tourist destination for Kyrgyzstani citizens, rather than focusing all their attention on serving a foreign clientele.

Limitations

This study represents merely a preliminary foray into the impact of ecotourism in the Arslanbob valley. Nearly half (42%) of the sample recruited to participate was composed of staff, members, or residents otherwise affiliated with CBT. Their disproportionate representation in the sample relative to the population likely skewed results regarding knowledge of or disposition toward CBT. However, this same presence in the sample allowed a more detailed account of CBT activities over the years, as CBT members and staff of different generations shared stories from their perspectives within the group. The findings of this study are also constrained by problems of temporality. It could not include baseline data or pre- or post-measurements to evaluate the success of CBT activities. As a cross-sectional study, perspectives of respondents regarding CBT were given equal weight regardless of how long or to what degree they had known of or belonged to the organization. Future work in the Arslanbob valley would be well served by recruiting more residents who live further away from the village center or practice vertical pastoralism (seasonally herding livestock to and from mountain pastures). This study also likely failed to recruit enough women into the sample to adequately reflect the gender makeup of the town. As the researcher was male and a foreigner, cultural norms likely led to many female residents declining to participate in this study.

Discussion and recommendations

Ecotourism must consciously establish itself in contrast to other forms of tourism taking place in a given area in its choice of activities, rules and policies, or fundamental mission (Ross & Wall, 1999; Fennell, 2001). In the case of Arslanbob, the cultural distinction between

ecotourism and conventional tourism is most starkly seen in clientele. CBT almost exclusively serves non-Russian speaking foreign visitors, while private tour operators unaffiliated with ecotourism cater to citizens of Kyrgyzstan or other former Soviet states. Across this study, CBT members and staff praised the foreign tourists with the familiarity that only years of profitably hosting them in their homes can explain. By contrast, respondents not affiliated with CBT were far more ambivalent in their sentiments, favoring foreigners' conduct to the noise and litter caused by tourists from ex-Soviet states while remaining wary of perceived alien cultural mores and the language barrier.

Consumptive recreational activities, such as hunting and fishing, are strictly prohibited in the area and not offered by either CBT or conventional tour operators. Therefore, CBT distinguishes itself from its conventional tourism counterparts not in its offering of activities, but rather in its conscious elevation of a "guardianship" principle of the environment and community over profit motive (Fennell, 2001). Such a focus is attested to in reports of the number and variety of altruistic conservation and social projects undertaken by CBT. The CBT coordinator's remarks concerning controlled growth echo Krüger's (2005) concern for physical and cultural carrying capacity of ecotourism destinations. However, residents of the valley, including CBT's own membership, largely prize its superior commercial success and prestigious foreign clientele above any philosophical advantage over competitors.

Ecotourism has been touted as a development strategy that benefits local residents who might otherwise be excluded from agency in and profit from use of their natural environment and cultural heritage (Brandon, 1996). KCBTA enshrines this principle in its code of conduct even as the local CBT coordinator described providing opportunities for poor and disadvantaged residents of Arslanbob as integral to his group's business model (About us, 2016). Indeed, the fact that CBT-affiliated participants in this study reported average monthly household incomes significantly lower than both the overall sample mean and the national Kyrgyzstani average suggests that CBT has been effective at recruiting residents from the lower socio-economic strata of the community into a steadily growing industry. One might alternatively infer from this income disparity that employment in CBT has yielded little meaningful increase in the wealth of its members, whether through opportunity cost of devoting time to hosting tourists or ongoing expenses required to comply with CBT's hospitality standards, as observed by Stronza & Gordillo (2008). However, a contrary image is presented by broad reports of increased financial

stability among CBT-affiliated respondents and their expressed desire for the current state of affairs to continue in the future.

A deeper integration of CBT's pro-environmental and altruistic mission into the business aspect, through widening of available tourism activities to include volunteer tourism, agritourism, and cultural tourism, could help internalize awareness and ownership of ecotourism values for its members and the wider community. Stronza & Gordillo (2008) warn of a lost sense of reciprocity and trust within communities where ecotourism has contributed to inequality that can impair even the sincerest efforts to promote conservation. Indeed, the perception of CBT among Arslanbob residents as being simultaneously a successful business and an exclusive club might well explain why positive sentiment toward the group was expressed significantly more by CBT-affiliated respondents. Incorporating some of the very ideas proposed by members and other residents in this study could address a perception of CBT as being an exclusive clique rather than the inclusive endeavor described in KCBTA's code of conduct. In the same vein, a CBT membership more reflective of the village's demographic makeup could only bolster the group's influence in the community. Women in particular were significantly underrepresented in CBT when compared to their shares in both the local and national populations. According to Scheyvens (2000), the presence and active participation of women during creative and decision-making processes allows for more complete understanding of the effects of a prospective policy throughout the community than one accessible to a predominantly male group. Some Arslanbob residents interviewed for this study referenced conservative cultural mores that discourage women, particularly younger or unmarried, from independent entrepreneurship or interacting with foreign tourists. However, women already play an important role in the lively civil society of Kyrgyzstan, including positions of leadership in prominent NGOs, demonstrating that traditional patriarchal conventions neither apply uniformly nor necessarily excuse limited representation (Plakhotnikova & Kurbanova, 2008).

The gap between Arslanbob valley residents' perception of CBT as a profitable business and the organization's altruistic vision for itself begs the question of how this disparity may have affected receptivity to efforts by CBT to promote conservation behaviors in the community. Reports of "eco-tour" events organized for students in local schools speak to CBT seeking to foster an appreciation for the Arslanbob valley's natural beauty in its youth, who they hope will one day take up the mantle of proud "advocates for protection" of this heritage (Ross & Wall,

1999). Participants in this study clearly expressed concern about threats to their natural surroundings. Few, however, reported making use of information released by the group regarding trash burning and recycling, grazing practices, keeping to established paths, and other actions to mitigate damage to the environment. The fact that residents unaffiliated with CBT were significantly less likely to even be aware that the group offered information or training speak to an insular focus restraining the group from reaching a broader section of the community. Pegas et al. (2013) credit outreach from ecotourism providers with community support for conservation. CBT will better serve the educational role set out in its mission statement by engaging more adult residents outside of its membership to match its engagement with youth (About us, 2016).

CBT differs from many other ecotourism initiatives in its lack of affiliation with a protected area, represented in this case by the Dashman State Forestry Reserve. According to interviews with CBT coordinator and a senior Forestry Reserve ecologist as part of this study, the two entities are discussing a partnership that would allow tourists to enter the currently-restricted interior of the Dashman walnut forest in exchange for shared revenue and assistance in building trails. Such a relationship offers many advantages, as CBT could add to its offering of excursions while the Forestry Reserve could receive a sorely-needed boost to its research budget. Moreover, linkages between ecotourism and protected area regimes lead to increased institutional capacity for both as they share ideas and expertise and confront mutual problems over time (Pretty & Ward, 2001; Stronza & Gordillo, 2008). As tourism continues to grow in Arslanbob and Kyrgyzstan at large, pressures on the natural and social fabric of the valley will no doubt deepen (Schmidt, 2005; Sultanov, 2016). Addressing current and future challenges will require “synergistic relationships between natural areas, local populations and tourism,” and “committed institutions and individuals empowered by effective protected area policies and management strategies” (Ross & Wall, 1999). To this end, the emerging relationship between CBT and the Dashman State Forestry Reserve merits close observation in the future, as do its implications for the environment and people of the Arslanbob valley.

Conclusion

This case study intends to convey the perspectives of the people of the Arslanbob valley on the state of the environment, ecotourism as practiced by CBT, and the changes they have felt

through many years of growth in this sector. Arslanbob valley residents expressed concern for the state of their natural resources, while CBT members and staff detailed varied activities undertaken to mitigate harm to the environment. However, awareness of these efforts and potential resulting adoption of conservation behaviors remain limited even as CBT and its foreign clientele are regarded positively by local residents. Increased educational outreach to the community and partnership with the local protected area are recommended to better realize ecotourism potential, as articulated by CBT mission statement and previous literature on this topic.

Disclosure Statement

No potential conflict of interest was reported by the author.

Funding

This research was funded by grants from the University of Michigan International Institute and the Weiser Center for Europe & Eurasia.

References

- About us (2016) *Kyrgyz Community-Based Tourism Association*. Retrieved from <http://cbtkyrgyzstan.kg/about-menu/about/>
- Best in Travel 2019: Top Countries (2018). *Lonely Planet*. Retrieved from <https://www.lonelyplanet.com/terms/lonely-planets-best-in-travel-2019-competition>
- Brandon, K. (1996). *Ecotourism and conservation: A review of key issues*. The World Bank.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2): 93.
- Boyatzis, R.E. (1998) Transforming qualitative information: Thematic analysis and code development. Thousand Oaks: *SAGE Publications*, 30-41.
- Chandel, A., & Mishra, S. (2016). Ecotourism revisited: Last twenty-five years. *Czech Journal of Tourism*, 5(2), 135-154.
- Chislennost' i plotnost' naselenia Kirgizii v 2006-2010 gg. (2010). *National'nyy statisticheskiy komitet Kyrgyzskoi respubliky*.
- Ehinger, L. (2015) Kyrgyzstan's Emerging Community Based Tourism Industry: A Model Method for Achieving Sustainable Development and Environmental Conservation? *CGS Student Awards 2015*. 4.
- Fennell, D. A. (2001). A content analysis of ecotourism definitions. *Current issues in tourism*, 4(5), 403-421.
- Frels, R. K., & Onwuegbuzie, A. J. (2013). Administering quantitative instruments with qualitative interviews: A mixed research approach. *Journal of Counseling & Development*, 91(2), 184-194.
- Hill, R. (1998). What sample size is "enough" in internet survey research. *Interpersonal Computing and Technology: An electronic journal for the 21st century*, 6(3-4), 1-10.
- Hogenson, S. (Ed.). (2017). *The Case for Responsible Travel: Trends & Statistics 2017* (5th ed., Rep.). Center for Responsible Travel.
- Huskey, E. (2003). National identity from scratch: Defining Kyrgyzstan's role in world affairs. *Journal of communist studies and transition politics*, 19(3), 111-138.
- Jacobson, S. K., & Robles, R. (1992). Ecotourism, sustainable development, and conservation education: Development of a tour guide training program in Tortuguero, Costa Rica. *Environmental Management*, 16(6), 701-713.
- Jones, S. (2005). Community-based ecotourism: The significance of social capital. *Annals of tourism research*, 32(2), 303-324.
- King, D. A., & Stewart, W. P. (1996). Ecotourism and commodification: protecting people and places. *Biodiversity & Conservation*, 5(3), 293-305.
- Kiss, A. (2004). Is community-based ecotourism a good use of biodiversity conservation funds? *Trends in ecology & evolution*, 19(5), 232-237.
- Marzouki, M., Froger, G., & Ballet, J. (2012). Ecotourism versus mass tourism. A comparison of environmental impacts based on ecological footprint analysis. *Sustainability*, 4(1), 123-140.
- Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In *Forum qualitative Sozialforschung/Forum: qualitative social research* (Vol. 11, No. 3).

- Murzakulov, S., Ismailova, Z., & Baatyrov, M. (2017). Prirodookhrannaya politika i rol' ekologicheskikh NPO v reshenii sokhraneniya bioraznoobraziya v Kyrgyzstane. *Izvestia OshTU*, 2017 №1, 116.
- Nepal, S. K. (2002). Mountain ecotourism and sustainable development. *Mountain Research and Development*, 22(2), 104-110.
- Osmonaliev, A., Baidzhumanov, D., Kasymbekov, B., Tekeeva, L. Toktobekov, T., Biryukova, B., Orosbaev, A., & Turdubaeva, C. (2016). Sotsial'no-ekonomicheskoe polozhenie Kyrgyzskoi respubliky. *Natsional'nyy statisticheskiy komitet Kyrgyzskoi respubliky*.
- Pegas, F. D. V., Coghlan, A., Stronza, A., & Rocha, V. (2013). For love or for money? Investigating the impact of an ecotourism programme on local residents' assigned values towards sea turtles. *Journal of Ecotourism*, 12(2), 90-106.
- Plakhotnikova, G. & Kurbanova, A. (2008). Portret lidera NPO. *Kyrgyzstan na sovremennom etape razvitiya*, 28-31.
- Pretty, J., & Ward, H. (2001). Social capital and the environment. *World development*, 29(2), 209-227.
- Raymond, C. M., Fazey, I., Reed, M. S., Stringer, L. C., Robinson, G. M., & Evely, A. C. (2010). Integrating local and scientific knowledge for environmental management. *Journal of environmental management*, 91(8), 1766-1777.
- Romero-Brito, T. P., Buckley, R. C., & Byrne, J. (2016). NGO partnerships in using ecotourism for conservation: Systematic review and meta-analysis. *PloS one*, 11(11), e0166919.
- Sacide, Y. (2016). Predprinimatel'stvo ekoturizma kak strategicheskoe sredstvo v yuzhnom regione Kyrgyzstana. *Simvol nauki*, (12-1).
- Schmidt, M. (2005). Utilisation and management changes in South Kyrgyzstan's mountain forests. *Journal of Mountain Science*, 2(2), 91-104.
- Shamshiev, B & Perneev, A. (2017). Sokhraneniye bioraznoobraziya rastitel'nosti na okhranyaemykh prirodnykh territoriyakh yugo-zapadnogo mikrosklona ferganskogo khrebt. *Izvestia OshTU*, 2017 №1, 91-95.
- Shamshiev, B., Perneev, A., Ibraev, E., & Ismailova, Z. (2015). Ekologo-geograficheskie osobennosti lesnoi ratitel'nosti Dashmanskogo gosudarstvennogo zapovednika. *Izvestia VUZov Kyrgyzstana*, №6. 147-149.
- Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism management*, 20(2), 245-249.
- Scheyvens, R. (2000). Promoting women's empowerment through involvement in ecotourism: Experiences from the Third World. *Journal of sustainable tourism*, 8(3), 232-249.
- Scheyvens, R. (2007). Ecotourism and gender issues. *Critical issues in ecotourism*, 185-213.
- Shokirov, Q., Abdykadyrova, A., Dear, C., & Nowrojee, S. (2014). Mountain Tourism and Sustainability in Kyrgyzstan and Tajikistan: A Research Review. *University of Central Asia, Mountain Societies Research Institute*, background paper No. 3.
- Srednemesyachnaya zarabotnaya plata. (2017). *Natsional'nyy statisticheskiy komitet Kyrgyzskoi respubliky*.
- Stronza, A. (2007). The Economic Promise of Ecotourism for Conservation. *Journal of Ecotourism*, 6:3, 210-230

- Sultanov, A. (2016) Turizm v Kyrgyzstane: statisticheskiy sbornik. *National'nyy statisticheskiy komitet Kyrgyzskoi respubliki*.
- Tönisson, E. A., & Yassin, Y. (2015). Community Based Tourism in Arslanbob and Sary-Moghul, Kyrgyzstan: An Alternative to Labour-Migration? *Lund University Publications Student Papers*.
- Turner, R. & Freiermuth, E. (2017). Travel & Tourism Economic Impact 2017: Kyrgyzstan. *World Travel & Tourism Council*.
- Waylen, K. A., McGowan, P. J., Milner-Gulland, E. J., & Pawi Study Group. (2009). Ecotourism positively affects awareness and attitudes but not conservation behaviours: a case study at Grande Riviere, Trinidad. *Oryx*, 43(3), 343-351.
- Watanabe, T., Anarbaev, M., Ochiai, Y., Izumiyama, S., & Gaunavinaka (2009) Tourism in the Pamir-Alai Mountains, Southern Kyrgyz Republic. *Geographical Studies*, No84.
- Wight, P. (1996). North American Ecotourism Markets: Motivations, Preferences and Destinations. *Journal of Travel Research*. 35(1): 3-10.
- Wood, M. (2002). Ecotourism: Principles, practices and policies for sustainability. *UNEP*.
- The World Bank in the Kyrgyz Republic: Country Snapshot, (2018). *The World Bank*. Retrieved from <https://www.lonelyplanet.com/terms/lonely-planets-best-in-travel-2019-competition>
- Yamaguchi, A. & Danilenko, A. (2007). Water and Sewerage Utilities in the Kyrgyz Republic: Performance Indicators. *Environmental Action Programme task force publications*. OECD.