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Is Tourism the Beginning or the End? Livelihoods of Georgian Mountain People at Stake

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This study is an attempt to empirically understand the transformation of rooted livelihoods after the arrival of tourism in the Greater Caucasus. A case-specific methodology combining qualitative and geographic

information methods enabled us to identify 4 types of tourism-led livelihood change: (1) expanding nonagricultural activities; (2) reducing agricultural activities; (3) developing agritourism activities; and (4) increasing agricultural activities. Broad spatial coverage ensured that the data collected were representative. The findings indicate that although tourism growth has increased the need for supplementary services, only a few local residents have managed to develop tourism-related nonagricultural activities. We argue that mountain residents see opportunities from tourism mainly in agriculture and hosting tourists. However, relatively few of them actually expanded their agricultural activities in response

to tourism's increased demand for agricultural products, as several barriers (lack of human resources, modern technology, and finances) hindered other residents from taking this opportunity. As our study reveals, households with traditional livelihoods most often replaced their agricultural activities, investing all their resources in developing tourism-related livelihoods instead. Others created added value from their integrated agriculture- and tourism-based livelihoods by providing visitors with locally made products. In addition to these findings on trends in livelihood changes, the study also provides an understanding of households' economic priorities. We hope the new insights surrounding tourism-led livelihood shifts will spark a debate on how people cope with the rapid spread of tourism in the Georgian mountains.

Keywords: livelihood strategies; tourism-led transformation; mountain farming; nonagricultural livelihoods; mountainous Georgia; Greater Caucasus.

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Introduction: trends of post-Soviet transformations in the Georgian Caucasus

Georgia is a mountainous country in the South Caucasus region and, due to its complex topography, agricultural land resources are limited to approximately 3 million hectares, which comprise only 43% of the total area (Urushadze and Ghambashidze 2013). Even during the course of Soviet industrialization, Georgia's economy retained a predominantly agricultural profile. The disintegration of the Soviet Union and the economic transition since the 1990s triggered drastic social and economic changes in almost all post-Soviet republics (Jandieri 2014; Salukvadze 2018). The transition following the formation of an independent Georgian state was accompanied by far-reaching economic reforms and transformations in people's livelihoods. These changes were not limited to urban areas and profoundly affected the Caucasus mountains as well (Schmidt 2017). In the 1990s, in rural areas, the state monopoly of land property was transformed by the privatization of collectively held agricultural land and of agricultural production. Land fragmentation (usually around 1 ha per household) and difficulties with the marketization of local agricultural

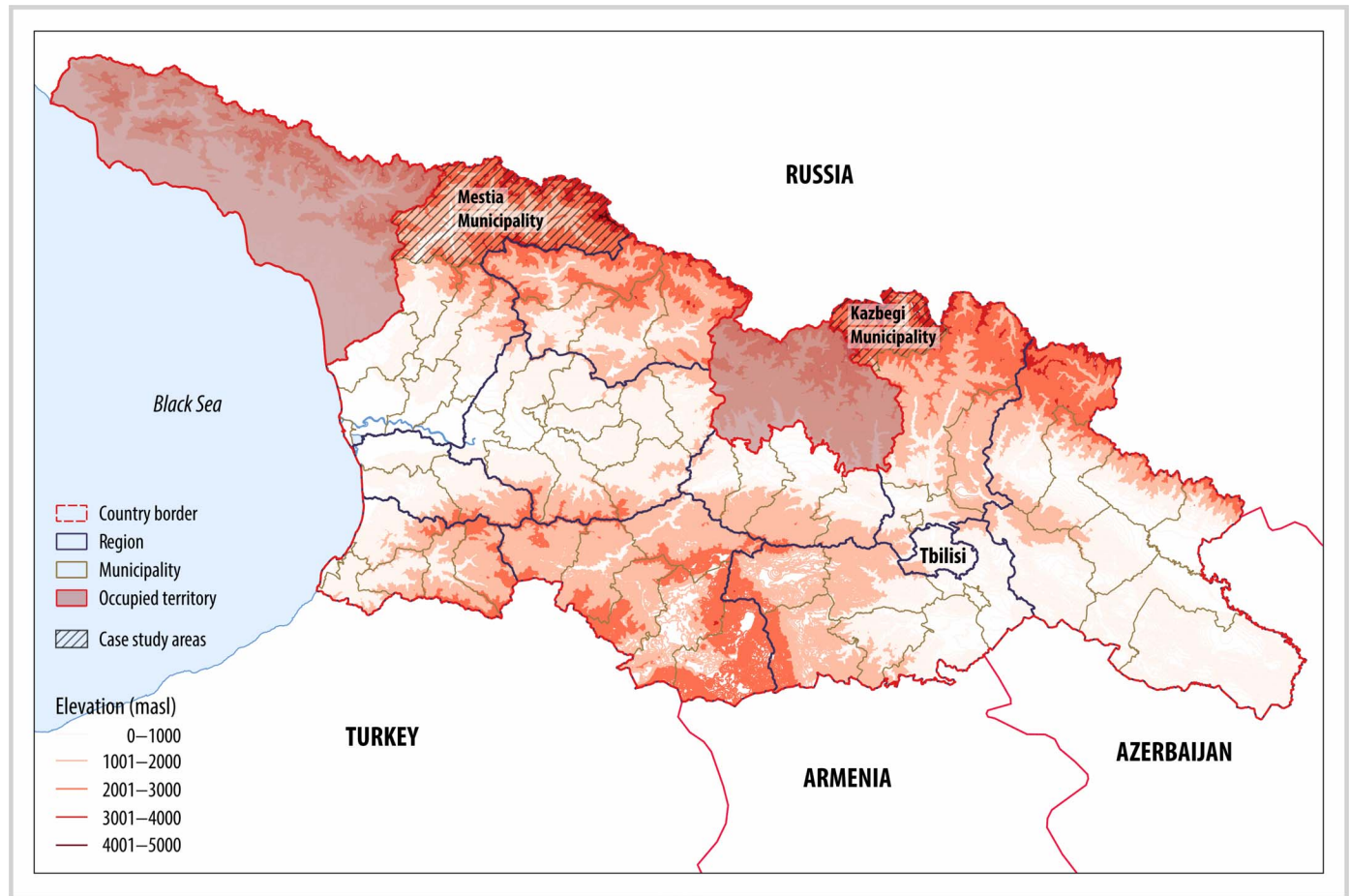
production resulted in the prevalence of a subsistence household economy (Salukvadze 2008).

If the share of agriculture was around 25% of Georgia's gross domestic product before the collapse of the Soviet Union, the first years of independent statehood drastically increased the significance of this sector (Plachter and Hampicke 2010). According to the United Nations Food and Agriculture Organization (FAO 2016), transformations in the Georgian economy took place between 1990 and 2000. While in 1994 the agricultural sector contributed a peak share of 69.6% to the country's gross value added, the services sector contributed only 20.9%. However, the trend changed dramatically in the 2000s, with the agricultural sector's contribution dropping to 9% by 2008. At the same time, the services sector reached its highest level ever at over 60% (National Statistics Office of Georgia 2017).

While tourism in the European Alps and the Carpathian Mountains began in the 19th century, it entered the Caucasus only in the mid-20th century. Tourism, which was strictly planned by the state, was among the most reliable economic sectors during Soviet times (Schmidt 2017); however, it shrank significantly in the transition years.

Georgia's mountain areas had already experienced a significant population decrease in late Soviet times; however,

FIGURE 1 The 2 study sites in the Greater Caucasus. (Source: Gugushvili et al 2019)



the process of depopulation took a dramatic turn after independence. The Kazbegi ($42^{\circ}39'27''\text{N}$, $44^{\circ}38'43''\text{E}$) and Mestia ($43^{\circ}2'44''\text{N}$, $42^{\circ}43'47''\text{E}$) municipalities (Figure 1)—our case study areas—were no exception regarding depopulation (Hakkert 2017), economic hardship, decline in agriculture, collapse of key markets, harsh living conditions, and lack of accessibility and communication.

A positive change in this trend began during the past 10–15 years, after tourism reemerged and became a promising economic sector and an essential part of many people's livelihoods (Heiny 2017; Arghutashvili and Gogochuri 2019; Putkaradze and Abuselidze 2019), including in mountain settlements (Somuncu 2019). Georgia's most prominent sources of tourist traffic are its geographic neighbors—Azerbaijan, the Russian Federation, Armenia, and Turkey—which jointly account for more than 80% of total visitors. However, other tourist markets are also increasing, as more visitors come from Ukraine, Kazakhstan, Iran, Israel, and some European countries, such as Poland and Germany (Ministry of Internal Affairs of Georgia 2019). International visitors' trips are mostly undertaken for holiday, leisure, or recreation purposes. Visitors from the former Soviet Union mostly visit the Black Sea and large cities, while overseas tourists prefer mountain and cultural tourism. The most common expectations among tourists are linked to experiencing a wilderness different from that in other mountain ranges and tasting authentic Georgian cuisine (Gugushvili et al 2017; Khartishvili et al 2019).

Tourism was followed by the development of various services. Infrastructure initiatives as well as international and local programs led the population to return to the mountains. However, so far this has largely taken place only in larger settlements, such as Daba (townlet) Stepantsminda in Kazbegi municipality and Daba Mestia in Mestia municipality; the process has not touched smaller, more remote settlements. To meet the growing demand, Georgian residents progressively increased the number of guesthouses, catering facilities, and transport facilities (National Statistics Office of Georgia 2018). However, both study sites have a rich natural and cultural diversity with partly untapped tourism potential. If managed soundly, it has the potential to improve mountain people's well-being.

The strong transformation trajectory of the post-Soviet countries resulted in a plethora of socioeconomic studies. Several dealt with Georgia as an Eastern European transformation country but hardly investigated the mountain regions (Schmidt 2017). Only a few studies so far have focused on tourism's links with livelihoods in Georgia's highlands; their findings partially reflected the effects of tourism development on other economic activities but without further investigating them (Gugushvili et al 2017; Heiny et al 2017; Hüller et al 2017; Khartishvili et al 2019). With our study, we aimed to help close this research gap by analyzing tourism-led livelihood changes in mountain regions.

Georgia's magnetism for tourism and its threats

Tourism became one of the primary means of livelihood transformation and the most potent rival to agriculture in Georgia's highland regions (Price et al 2006; Debarbieux et al 2014; Elizbarashvili et al 2018). Shen (2009) regards tourism as a panacea for rural economic development, especially in transition countries. Based on the pro-poor tourism concept, tourism is capable of lifting people out of poverty (Chok et al 2007; Guha 2007; Leu 2019). Alternatively, some scholars (Tao and Wall 2009; Ghosh 2012) have assumed that tourism induces either the enhancement or the disruption of established livelihoods (Ashley 2000). More recent evidence from rural China (Ya-juan et al 2016; Luo and Bao 2019) and Botswana (Mbaiwa 2011) revealed that traditional activities were sacrificed to enable tourism development. Einali (2014) and Su et al (2015) concluded that tourism-led transformation has opened pathways mostly for tourism-related activities, triggering deagrarianization, which may raise the vulnerability of local people. However, tourism-induced changes do not end with livelihood transformations. Understanding tourism's further consequences is essential because they largely determine the long-term viability of a community.

Tourism, as a double-edged sword, is questionable as a viable strategy for ensuring sustainable livelihoods (Su, Hammond et al 2016). The risk of the local population becoming fully economically dependent on a single industry is regarded as problematic (Meyer 2007; Garrigós-Simón et al 2015). Mbaiwa and Stronza (2010) revealed that once tourism has altered long-standing forms of livelihood, it is inclined to cause monosectoral dependency, which Lasso and Dahles (2018) have considered to be a long-term risk for local residents. Hence, the question arises whether tourism alone constitutes an opportunity for the host communities or helps to create prospects for other economic fields to develop. This issue is especially critical in Georgia, which faces a geopolitically unstable relationship with its neighboring countries (Papava 2018). This has manifested in the Russian government issuing several bans in the fields of trade and transport communications, the latest of which completely prohibited regular flights to Georgia in 2019 (Roth 2019). The anticipated economic hazard of a forecast negative effect is intensified by the fact that Russia has been one of the primary sources of tourists visiting Georgia.

Conversely, studies of tourism in Georgia's highlands have mainly been associated with hospitality aspects (accommodation units and catering services). Few mountain researchers investigating tourism development beyond the aforementioned services have reported that local people have benefited economically, mostly from their involvement in hospitality-related activities (Gugushvili et al 2017; Hüller et al 2017; Khartishvili et al 2019). However, the effects of tourism development on other livelihood practices have not yet been sufficiently studied, as most previous studies focused on tourism services and products (Hall et al 2005; Devadze et al 2019).

Gugushvili et al (2017) has recently criticized this trend, arguing that if the links between tourism and other economic sectors are not adequately appreciated, an understanding of the economic contribution of tourism is likely to be incomplete (Khokhobaia 2015). Hence, we decided to integrate the multiplier effect theory (Keynes

1936) as a theoretical foundation to investigate economic activities beyond direct engagement in tourism (Raina and Agarwal 2004; Rusu 2011), as little empirical evidence exists thus far on the links between tourism and other economic sectors (Guha 2007).

Research design and methodology

The research is based on ethnographic fieldwork carried out at the foot of the Greater Caucasus—the main range of the Caucasus mountains. It is Europe's highest mountain range, with Mount Elbrus culminating at 5642 m. The empirical data for our study were collected in 2018 in the municipalities of Kazbegi (Mtskheta-Mtsheti region) and Mestia (Samegrelo-Zemo Svaneti region). The mountain areas selected for the study share similarities in terms of their rapid tourism development, transition economies, traditional livelihood systems, distinctive cultural identities, authenticity, and traditions. Since mountain settlements, regardless of their location, have many features in common (eg socioeconomic life, demographic dynamics, cultural and traditional elements) (del Mármol and Vaccaro 2015; Perlik 2019; Wang et al 2019), the study findings should be transferable and can be aggregated across mountain regions with the same characteristics.

The research covers the following tourism-related economic activities, which we selected according to predefined traits and characterize 2 groups of mountain households: (1) activities directly linked to tourism and organized by (a) geographic location and (b) places of employment (eg hotels or catering units); and (2) activities indirectly linked to tourism and organized by (a) geographic location, (b) form of economic activity (eg cooperatives, family farming), and (c) area of economic activity (eg agriculture, construction, wholesale, retail trade) (Eurostat 2008). Purposive sampling was combined with the snowball method (ie respondents named another relevant informants).

The first target group was surveyed through 34 in-depth interviews, which enabled us to acquire multilateral information on the research topics. For the second target group, we conducted 41 focused (semistructured) interviews. For adequate representation and wide geographic distribution of different voices, the ethnographic research encompassed several villages in 5 administrative units in Kazbegi and 14 administrative units in Mestia. In addition, we gathered geographic data through a mobile application, OSMTracker, which guaranteed effective recording of the spatial distribution of livelihoods for further geographic analysis.

The qualitative data collection was carried out through triangulation (Kuckartz 2014) of different interview methods, which resulted in a pool of 75 interviews and 629 coded segments. In addition, we gathered geographic information. Using the seven-step thematic analysis method (Silver and Lewins 2014), we aimed at a detailed description of the qualitative data, which we analyzed using qualitative data analysis software (MAXQDA2020, VERBI Software, Berlin, Germany; Kuckartz and Rädiker 2019). We then combined this with the concept of qualitative geographic information systems (Verd and Porcel 2012; Pavlovskaya 2018). The data analysis enabled us to create a typology of tourism-led livelihood changes. In addition, we determined

TABLE 1 The number of respondent households in Kazbegi municipality, disaggregated by administrative unit and type of livelihood change.

Administrative units	Types of livelihood change				
	Expanding nonagricultural activities	Reducing agricultural activities	Developing agritourism activities	Increasing agricultural activities	Total ^{a)}
Goristsikhe	3	2	0	2	7
Sno	2	2	3	4	11
Kobi	0	0	0	3	3
Sioni	1	1	0	3	5
Stepantsminda	2	4	0	2	8
Total	8	9	3	14	34

^{a)} The totals exceed the number of interviews conducted because some households had more than 1 type of livelihood change.

the level of transformation in each respondent's livelihood changes. We visualized this at the level of administrative units using choropleth maps, with “hot” (red) shading representing high transformation levels and “cold” (blue) shading representing low transformation levels. Finally, we used a Sankey diagram—created with the R software's networkD3 package (Gandrud et al 2017)—to visualize the interconnections between the primary dimensions involved in the livelihood transformations.

Results

Livelihood changes

The analysis of a large number of narratives leaves no doubt that tourism development is followed by a whole series of

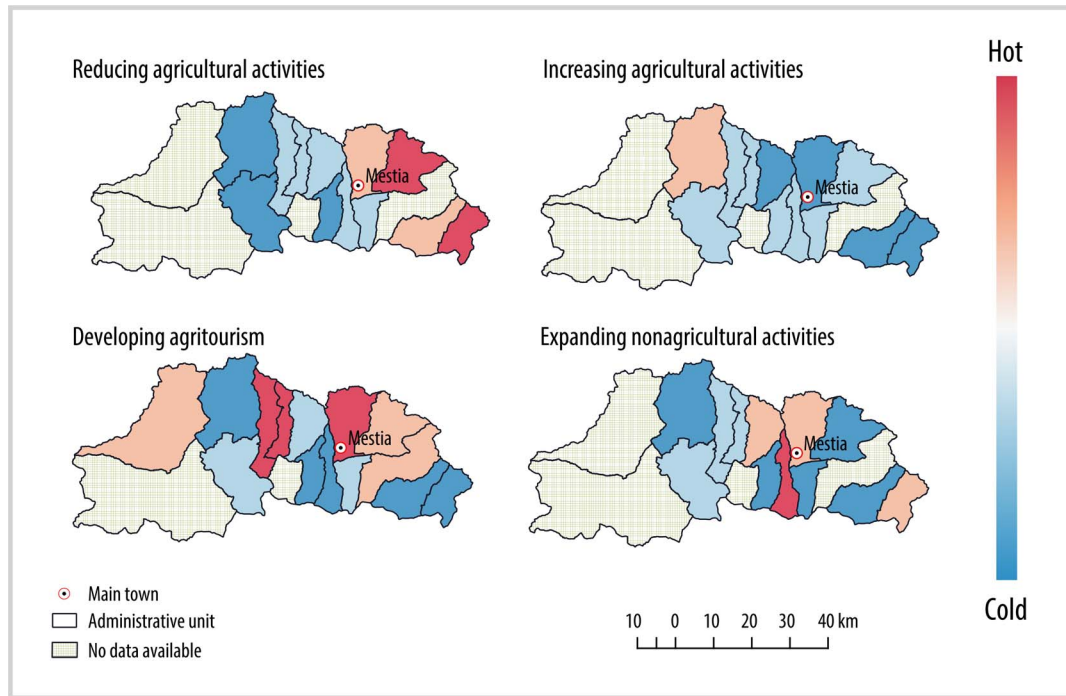
changes in local economic activities. To enable an explicit characterization of past, current, and expected changes in the study areas, after completing all stages of thematic analysis we carefully revised the categories formed during the coding process. As a result, we determined 4 major types of tourism-led livelihood changes with distinct characteristics (Tables 1, 2; Figures 2, 3).

Expanding nonagricultural activities: The study areas' continuous influx of tourists has considerably increased the demand for various economic activities, including those indirectly related to tourism (eg manufacturing, retail, and construction). Several households transformed their homes into guesthouses. A number of others started to manufacture windows; wood workshops, confectioneries, and other

TABLE 2 The number of respondent households in Mestia municipality, disaggregated by administrative unit and type of livelihood change.

Administrative units	Types of Livelihood change				
	Expanding nonagricultural activities	Reducing agricultural activities	Developing agritourism activities	Increasing agricultural activities	Total ^{a)}
Mulakhi	0	3	2	1	6
Fari	1	1	4	1	7
Kala	0	2	0	0	2
Tsvirmi	0	1	1	1	3
Daba Mestia	2	2	4	0	8
Ushguli	2	3	0	0	5
Becho	2	1	1	0	4
Lenjeri	3	1	0	1	5
Nakra	0	0	0	2	2
Latali	0	0	0	1	1
Etseri	1	1	3	1	6
Lakhamula	1	0	1	1	3
Chuberi	0	0	2	0	2
Ifari	0	0	2	0	2
Total	12	15	20	9	56

^{a)} The totals exceed the number of interviews conducted because some households had more than 1 type of livelihood change.

FIGURE 2 Tourism-led livelihood transformation in Mestia municipality (2010–2018). (Map by Gvantsa Salukvadze)

businesses expanded their volumes of production as demand increased. Furthermore, service providers expanded their businesses: “Every second family builds a hotel and [our stones] are in demand, of course” (man, age 55, stone workshop, Tsvirmi, Mestia).

Tourism also prompted the development of hitherto unavailable services, including laundry, handicrafts, linen workshops, outdoor equipment and horse rentals, stone and

block workshops, car washes, ice cream producers, and bakeries, in both municipalities. For instance, there is 1 newly established, women-run, small, and local enterprise producing quality linen in Mestia, whereas no similar business has yet been set up in Kazbegi.

Conversely, another local women’s pioneering initiative of establishing a laundry service in Kazbegi has not been realized thus far in Mestia: “When we opened, 2 hotels

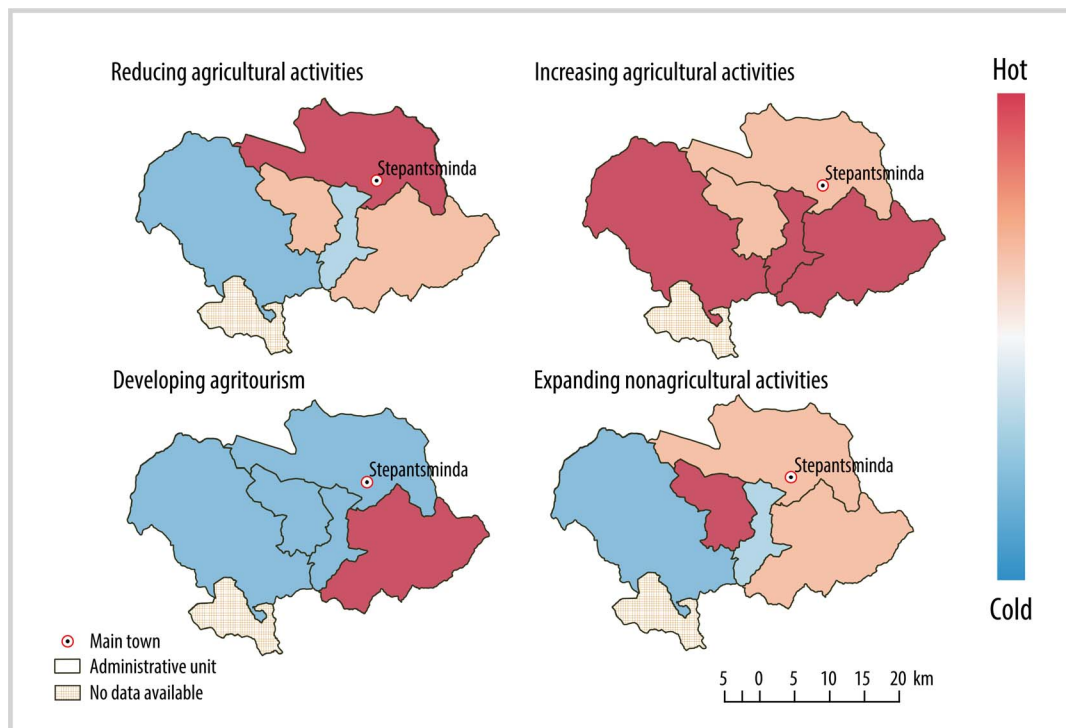
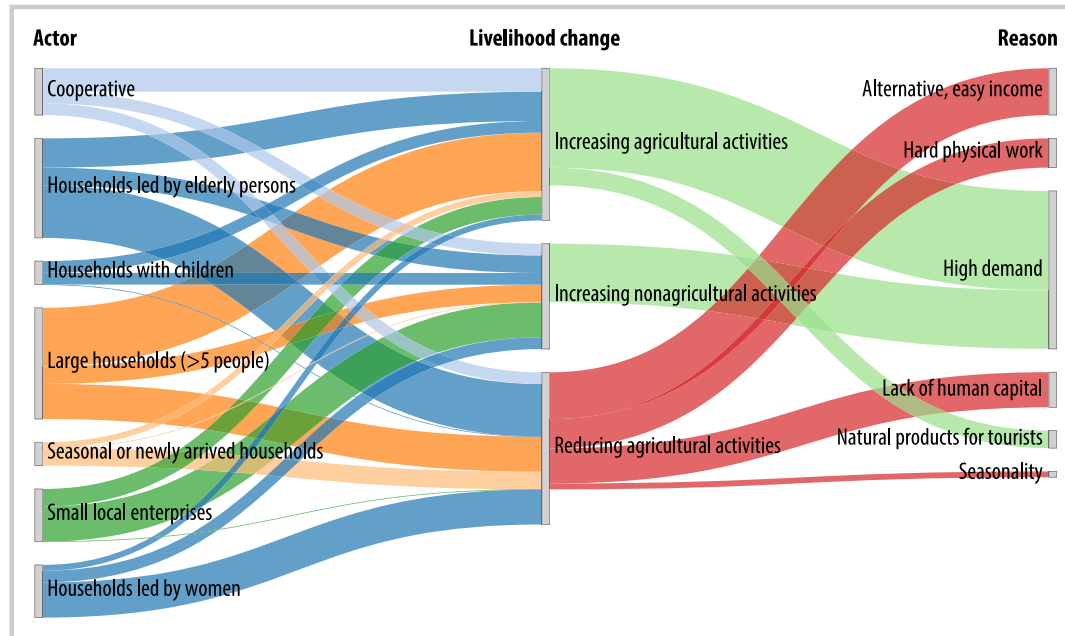
FIGURE 3 Tourism-led livelihood transformation in Kazbegi municipality (2010–2018). (Map by Gvantsa Salukvadze)

FIGURE 4 Interconnections between types of livelihood-changing actor, livelihood changes, and reasons for these changes.



immediately contacted us ... and then it became so prevalent that now when they [the hotels] call us, sometimes we have to refuse” (woman, age 26, laundry service, Sioni, Kazbegi).

Despite this, such auxiliary services are still deficient, if they exist at all, in the research areas. Almost all of the entrepreneurs outlined the lack of finances and modern technology as the main obstacles to expansion (Figure 4).

Reducing agricultural activities: This category mainly occurred in the central settlements, which have an older population—as economically active individuals, predominantly men, migrated to the cities—and many female-headed and multi-child households (ie households in which no male representative is involved in economic activities and whose ability to pursue different livelihoods is limited by the presence of 4 or more children). Many of these households reported that after they had begun to engage in tourism, they had limited their involvement in agriculture to subsistence farming. The most common reason cited was the lack of human resources to handle such physically laborious work. In some cases, the respondents noted that farming is difficult without a male workforce in the household: “We are a mother and daughter alone. We cannot go further. It is not physically possible” (woman, age 35, guesthouse, Becho, Mestia). The shortage of human resources in agricultural activities is often exacerbated by the lack of access to modern technology (Figure 4).

The interviewed households that massively reduced or entirely abandoned agriculture put their main livelihood at risk on account of tourism. A portion of these households produces only the quantity necessary for consumption by the families and their visitors. The income raised from tourism is usually reinvested in tourism.

The respondents noted that such a radical shift from the traditional to the novel economic sector generates more income in less time and at lower physical costs. Other factors that do not favor agriculture are the remoteness and small

size (usually less than 1 ha) of agricultural plots due to massive land fragmentation.

However, a small number of people had returned to the countryside because of tourism growth:

My father-in-law had a cow shelter here; we destroyed it. We are an ordinary example [of tourism-led transformation]. He was a shepherd and lived on the income from it ... I am not involved [in agriculture] because I had not lived here for a while. I returned after tourism started.”

(woman, age 54, guesthouse, Sioni, Kazbegi)

Along with individual households giving up farming, a few locally driven cooperatives producing various products, including potatoes and honey, were also abandoned due to the lack of access to modern equipment. Moreover, the owner of the only functioning slaughterhouse in Mestia stated that it is not profitable, and that he intends to link its future activities with tourism: “We opened it [the slaughterhouse] last August [2018] ... but I am going to close it ... I will turn it into a hotel” (man, age 56, slaughterhouse, Daba Mestia, Mestia).

Developing agritourism: In both municipalities, we identified households engaging in both agriculture and tourism. The analysis reveals that respondents named either tourism or agriculture as their essential source of income, but not both. Most mentioned tourism as their primary source of income, even though some of them were established marketers who had been involved in the commercialization of their agricultural products for years. Those who said agriculture was their primary source of income pointed out that they had just integrated it into tourism, eager to generate additional financial benefits: “tourism should be with agriculture... you should not have to buy everything [products]” (man, age 46, agritourism, Tsvirmi, Mestia).

Another respondent said the following: “They [tourism and agriculture] have to be mixed. Not separated. I can’t

imagine them separately so far” (woman, age 47, agritourism, Ifari, Mestia).

Respondents raised the issue that due to the nonexistence of catering facilities in peripheral villages, tourists need catering at guesthouses. This is one of the reasons, among others (eg the seasonality of tourism), why local residents living outside the tourist centers try to integrate agriculture and tourism. The use of local products in tourism adds value to guesthouse owners’ profit and attracts additional tourists.

A portion of the respondents highlighted that they maintained their agricultural activities due to the seasonality of tourism. It also turns out that some local residents practicing agritourism actively observe the rapidly growing demand for agricultural products (Figure 4). Based on their narratives, tourism has created the explicit potential to revive poorly or even undeveloped agricultural activities, such as livestock farming, including trout and poultry. Respondents who were motivated to expand the variety of their farm products mentioned demand for products currently unavailable in their municipality (eg herbs, wheat, wild plants, bean, garlic).

Increasing agricultural activities: Our data indicate that markedly increasing demand from tourism has led local people in both municipalities to expand existing agricultural activities and pioneer new products. The main consumers are tourism service actors (hotels, guesthouses, catering services): “If there were no tourists, who would buy? Who would need lettuce?” (man, age 47, farmer, Sno, Kazbegi).

This process was mainly reflected in the advancement of certain agricultural activities, such as greenhouse farming, beekeeping, livestock farming, and horticulture, as well as the production of Svanetian salt (a traditional seasoning in Mestia), wine, and *chacha* (a pomace brandy). In addition, tourism introduced new agricultural products and activities, such as lettuce and trout farming, dairies, cooperatives, small businesses (eg berry farms and specialized dairies), and incubators (eg for chicken eggs). Some respondents also highlighted that tourists value the quality of their products, which increases their motivation to produce natural family-made products.

Geographically, such increase in agricultural activities is mainly observed in the more peripheral settlements outside Daba Stepantsminda and Daba Mestia. Furthermore, the households involved mostly comprised several economically active members, providing them with sufficient human resources to handle hard physical work (Figure 4).

Attitudes and possible transitions

The interviewees’ attitudes toward tourism varied according to their position in this transformation process.

Respondents who switched to tourism at the expense of traditional occupations pointed out that it generated income, made people return to their home municipalities, and so on. Those who expanded agricultural activities complained that locals demolished stables to set up cottages and became dependent on tourism. A majority of residents who engaged in both tourism and agriculture mentioned that other local people became lazy earning easy income from tourism, and therefore recklessly abandoned agriculture:

If something changes, still the livestock will feed you ... Livestock farming is hope ... May God save us, but if something like what happened in August 10 years ago [08/08/08–12/08/08, the war between Georgia and Russia] happens again, then the cattle keep you alive.”

(man, age 55, agriculture and stone workshop, Tsvirmi, Mestia).

People residing mostly in peripheral areas and currently engaged in traditional activities (mainly agriculture) expressed strong interest in becoming involved in tourism if it develops in their villages. Some stated that they categorically ruled out abandoning agriculture if they were to become involved in tourism, whereas others intended to reduce their agricultural production to subsistence levels. An intention to completely abandon agriculture was the exception, but it existed: “If there will be an influx of visitors to the village, then why would I work on the land? I will cultivate only a little bit” (man, age 46, guesthouse and agriculture, Tsvirmi, Mestia).

The respondents frequently outlined how tourism strengthened local markets in both municipalities. Instead of transporting products to markets at larger centers far away, they now sell locally. These markets created competition between different agricultural activities, and some respondents switched from horticulture to livestock breeding, as (in the current mode of tourism in Georgia) meat is still more valuable than potatoes.

Tourism is not the only reason for changes in agriculture. As tourism began to grow in the study areas, the majority of people were already older, and the young generation was less interested in engaging in agriculture. Presumably, the reduction and replacement of traditional agricultural activities would have happened anyway, although it may have been accelerated by tourism: “I represent the old generation ... I still follow the old style, and my children are quarrelling about giving up these cows ... What are you chasing these cattle for?” (man, age 60, guesthouse and agriculture, Lakhamuli, Mestia).

Discussion

Steiner, in his foreword to the World Tourism Organization’s (UNWTO and UNDP 2017: 8) report on tourism’s possible contribution to progress on the Sustainable Development Goals, noted that “if well managed, the sector can generate quality jobs for durable growth and reduce poverty.” Hence, to achieve sound management of the tourism sector, this phenomenon should first be comprehensively understood by interested actors, especially host communities. The outcomes of our study mirror findings by Shen (2009) and Ghosh (2012), who argue that the introduction of tourism in new destinations triggers fundamental transformations in local livelihoods. In line with the writings of Tao and Wall (2009) on the dominant nature of tourism, the results clearly demonstrate that tourism has generated fierce competition in established economic sectors. In contrast to the findings of del Mármol and Vaccaro (2015), who reported that the development of tourism and agriculture is more or less well balanced in the Catalan Pyrenees, in our study areas we found that their equilibrium is not only diminishing, but there is also a risk that tourism will replace agriculture entirely in the coming years.

Our findings appear to be well supported by Liu (2008), who found that agriculture shows different responses to tourism development, depending on, among other things, location. Overall, tourism development near larger villages and towns caused a rapid agricultural decline, whereas its influence in remoter areas was limited to the optimization of agriculture (Figures 2, 3). According to Harrison and Maharaj (2017) and Leu (2019), tourism triggers a shift in people's focus, but they also perceive it as a risky venture, which is why it is often combined with existing agricultural practices. Hence, tourism becomes either an additional or a substitute livelihood. Importantly, tourism remains a supplementary activity mostly because of its seasonality and the lack of visitors in more peripheral areas. Depending on the households' situations, they integrate tourism into their livelihoods in different ways; its impact thus includes more than just potential economic gain. The view that livelihood changes toward tourism have purely economic consequences must be criticized (Lasso and Dahles 2018; Tao and Wall (2009). Our findings—similar to the findings of Su and Wall et al (2016) and Ashley (2000)—showed that people's attitudes are highly dependent on their involvement and the context, and thus, cannot be generalized.

Conclusion

Our findings show the following types of livelihood transformation: (1) expanding nonagricultural activities, (2) reducing agricultural activities, (3) developing agritourism activities, and (4) increasing agricultural activities. The geographic distribution of these phenomena shows clearly defined spatial patterns in Mestia and Kazbegi municipalities.

The study has revealed that tourism in mountain regions has excellent potential to directly or indirectly create or revive related economic activities. Considerable growth of tourist flows, mainly in the peripheral settlements of both mountain regions, emphasized the significant need for developing or expanding several supplementary services and agricultural activities. In contrast, the study also revealed the reduction and, in some cases, abandonment of certain traditional activities due to people's reorientation toward tourism. The reductions were mostly found in the central settlements and mainly affected the agricultural sector, primarily due to a lack of human resources.

Based on the statements of respondents in the agritourism category, we assume that part of their motivation to retain agricultural activities is linked to tourism, especially in noncentral settlements, where residents keep farming to make additional profit by providing products to visitors. It will be interesting to see how households' intentions will change if year-round tourism develops.

Thus far, only a few local residents have managed to match supplementary activities with tourism. Taking advantage of such opportunities is still uncommon in the study areas. In this regard, we think one of the most pressing obstacles is a narrow view of the opportunities that tourism offers: local residents mostly associate tourism with agriculture, neglecting alternative, nonagricultural activities.

The study revealed several factors, such as the lack of human resources, finances, and modern technology, that

hinder households from investing in new livelihood options or expanding existing ones. This creates an environment where people are encouraged to depend on tourism. Nonetheless, the later phases of tourism development with increased visitor numbers and increased demand supposedly require strengthened supportive economic sectors. Ensuring the formation of sound linkages between tourism and other economic sectors by softening existing barriers will prevent local residents from relying on tourism as a sole source of income and thus becoming vulnerable to potential declines in tourism. In the absence of such measures, there is a considerable risk that a possible future decline in tourism will leave local residents with an underused tourist infrastructure developed mainly at the expense of agricultural land—and hence rootless and without resources and prospects for the future. We hope the new insights surrounding tourism-led livelihood shifts will spark a debate on how people cope with the rapid spread of tourism in the Georgian mountains.

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REFERENCES

- Arghutashvili V, Gogochuri M.** 2019. Characteristics of the long-term regional tourism development in Georgia. *International Scholarly and Scientific Research & Innovation* 13(5):646–650.
- Ashley C.** 2000. *The Impacts of Tourism on Rural Livelihoods: Namibia's Experience*. London, United Kingdom: Overseas Development Institute.
- Chok S, Macbeth J, Warren C.** 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.
- Debarbieux B, Varacca MO, Rudaz G, Maselli D, Kohler T, editors.** 2014. *Tourism in Mountain Regions: Hopes, Fears and Realities*. Geneva, Switzerland: Department of Geography and Environment, University of Geneva; Centre for Development and Environment, University of Bern; and United Nations Environment Programme.
- Del Mármol C, Vaccaro I.** 2015. Changing ruralities: Between abandonment and redefinition in the Catalan Pyrenees. *Anthropological Forum* 25(1):21–41.
- Devadze A, Kordzaia I, Chichulina K.** 2019. Problems of the international tourism market improvement in Georgia. *Economics and Region* 1(72):17–27.
- Einalli J.** 2014. The assessment of the role of second homes tourism in rural economic diversification (Case Study: Hesar-e-Valiasr Dehestan of Avaj County). *Research and Rural Planning* 3(5):97–107.
- Elizbarashvili N, Meessen H, Khoetsyan A, Meladze G, Kohler T.** 2018. Sustainable development of mountain regions and resource management. In: Salukvadze J, editor. *Peculiarities of Mountainous Areas and Problems of Sustainable Development*. Tbilisi, Georgia: Dani, pp 33–34.
- Eurostat.** 2008. RAMON—Reference And Management Of Nomenclatures. Metadata. Statistical Classification of Economic Activities in the European Community, Rev. 2 (2008). Luxembourg City, Luxembourg: Eurostat. https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NACE_REV2&StrLanguageCode=EN; accessed on 26 November 2019.
- FAO [Food and Agriculture Organization].** 2016. *The Second Report on the State of the World's Animal Genetic Resources for Food and Agriculture*. Rome, Italy: FAO.
- Gandrud C, Allaire J, Russell K, Yetman C.** 2017. D3 JavaScript Network Graphs from R. <https://christophergandrud.github.io/networkD3/>; accessed on 26 November 2019.
- Garrigós-Simón FJ, Galdón-Salvador JL, Gil-Pechuán I.** 2015. The economic sustainability of tourism growth through leakage calculation. *Tourism Economics* 21(4):721–739.
- Ghosh T.** 2012. Sustainable coastal tourism: Problems and management options. *Journal of Geography and Geology* 4(1):163–169.
- Gugushvili T, Salukvadze G, Salukvadze J.** 2017. Fragmented development: Tourism-driven economic changes in Kazbegi, Georgia. *Annals of Agrarian Science* 15(1):49–54.
- Gugushvili T, Salukvadze G, Salukvadze J.** 2019. Has traditional Georgian hospitality been sustained under tourism development? Evidence from the high-

mountain regions of Georgia. *Mountain Research and Development* 39(4):R20–R26.

- Guha I.** 2007. *Does Tourism Contribute to Local Livelihoods? A Case Study of Tourism, Poverty and Conservation in the Indian Sundarbans*. Kathmandu, Nepal: South Asian Network for Development and Environmental Economics (SANDEE).
- Hakkert R.** 2017. *Population Dynamics in Georgia: An Overview Based on the 2014 General Population Census Data*. Tbilisi, Georgia: VESTA Ltd.
- Hall DR, Kirkpatrick I, Mitchell M.** 2005. *Rural Tourism and Sustainable Business*. Bristol, United Kingdom: Channel View Publications.
- Harrison P, Maharaj B.** 2017. Tourism impacts on subsistence agriculture: A case study of the Okavango Delta, Botswana. *Journal of Human Ecology* 43(1):29–39.
- Heiny J.** 2017. *Socio-economic Conditions of rural Georgian Households and their Behavioral Intentions Regarding Tourism Development: An Empirical Analysis* [PhD dissertation]. Giessen, Germany: Justus-Liebig-Universität Giessen.
- Heiny J, Mamniashvili G, Leonhaeuser I-U.** 2017. The socioeconomic situation of private households in the Kazbegi region: First insights based on quantitative data. *Annals of Agrarian Science* 15(1):31–39.
- Hüller S, Heiny J, Leonhäuser I-U.** 2017. Linking agricultural food production and rural tourism in the Kazbegi district: A qualitative study. *Annals of Agrarian Science* 15(1):40–48.
- Jandieri G.** 2014. *A Brief Economic History of Georgia. A Lesson Has to Be Remembered*. Expert Opinion 22. Tbilisi, Georgia: Georgian Foundation for Strategic and International Studies.
- Keynes JM.** 1936. *The General Theory of Employment, Interest, and Money*. New York, NY: Macmillan Cambridge University Press.
- Khartishvili L, Muhar A, Dax T, Khelashvili I.** 2019. Rural tourism in Georgia in transition: Challenges for regional sustainability. *Sustainability* 11(2):410.
- Khokhobaia M.** 2015. Tourism policy challenges in post-Soviet Georgia. *International Journal of Economics and Management Engineering* 9(3):986–989.
- Kuckartz U.** 2014. *Qualitative Text Analysis: A Guide to Methods, Practice and Using Software*. London, United Kingdom: Sage.
- Kuckartz U, Rädiker S.** 2019. *Analyzing Qualitative Data with MAXQDA: Text, Audio, and Video*. New York, NY: Springer.
- Lasso A, Dahles H.** 2018. Are tourism livelihoods sustainable? Tourism development and economic transformation on Komodo Island, Indonesia. *Asia Pacific Journal of Tourism Research* 23(5):473–485.
- Leu TC.** 2019. Tourism as a livelihood diversification strategy among Sámi indigenous people in northern Sweden. *Acta Borealia* 36(1):75–92.
- Liu G, Liu Z, Hu H, Wu G, Dai L.** 2008. The impact of tourism on agriculture in Lugu Lake region. *International Journal of Sustainable Development and World Ecology* 15(1):3–9.
- Luo X, Bao J.** 2019. Exploring the impacts of tourism on the livelihoods of local poor: The role of local government and major investors. *Journal of Sustainable Tourism* 27(3):344–359.
- Mbaiwa JE.** 2011. Changes on traditional livelihood activities and lifestyles caused by tourism development in the Okavango Delta, Botswana. *Tourism Management* 32(5):1050–1060.
- Mbaiwa JE, Stronza AL.** 2010. The effects of tourism development on rural livelihoods in the Okavango Delta, Botswana. *Journal of Sustainable Tourism* 18(5):635–656.
- Meyer D.** 2007. Pro-poor tourism: From leakages to linkages. A conceptual framework for creating linkages between the accommodation sector and ‘poor’ neighbouring communities. *Current Issues in Tourism* 10(6):558–583.
- Ministry of Internal Affairs of Georgia.** 2019. *International Traveler Trips*. Tbilisi, Georgia: Ministry of Internal Affairs of Georgia.
- National Statistics Office of Georgia.** 2017. *Agricultural and Service Statistics*. Tbilisi, Georgia: National Statistics Office of Georgia.
- National Statistics Office of Georgia.** 2018. *Tourism Statistics*. Tbilisi, Georgia: National Statistics Office of Georgia.
- Papava V.** 2018. *Georgia's Economy in a “Tourist Trap.”* Tbilisi, Georgia: Georgian Foundation For Strategic and International Studies.
- Pavlovskaya M.** 2018. Critical GIS as a tool for social transformation. *The Canadian Geographer/Le Géographe canadien* 62(1):40–54.

- Perlik M.** 2019. *The Spatial and Economic Transformation of Mountain Regions: Landscapes as Commodities*. Abingdon, United Kingdom: Routledge.
- Plachter H, Hampicke U.** 2010. Nature conservation accounting for large-scale livestock grazing. In: Plachter H, Hampicke U, editors. *Large-Scale Livestock Grazing: A Management Tool for Nature Conservation*. Berlin, Germany: Springer, pp 441–461.
- Price M, Jansky L, Iastenia A.** 2006. Key issues for mountain areas. *Mountain Research and Development* 26(3):298–300.
- Putkaradze M, Abuselidze G.** 2019. The impact of tourism on business development in mountain regions: A case study. *International Journal of Economics and Business Administration* 7(3):70–83.
- Raina AK, Agarwal DSK.** 2004. *The Essence of Tourism Development: Dynamics, Philosophy, and Strategies*. Delhi, India: Sarup.
- Roth A.** 2019. Putin bans Russian airlines from flying to Georgia [World news]. *The Guardian*. 22 June 2019. <https://www.theguardian.com/world/2019/jun/22/putin-bans-russian-airlines-from-flying-to-georgia>; accessed on 27 October 2019.
- Rusu S.** 2011. Tourism multiplier effect. *Journal of Economics and Business Research* 17(1):70–76.
- Salukvadze J.** 2008. *Good Governance and Natural Resources Tenure in Eastern Europe and CIS Region*. Tbilisi, Georgia: Food and Agriculture Organization of the United Nations.
- Salukvadze J.** 2018. Urbanization trends and development of cities in Georgia. In: Gogishvili D, Coppola A, editors. *Cities of the South Caucasus: A View From Georgia*. Rome, Italy: Roma Tre University, pp 19–32.
- Schmidt M.** 2017. Human geography of post-socialist mountain regions. *Journal of Alpine Research | Revue de géographie alpine* 105(1):1–7.
- Shen F.** 2009. *Tourism and the Sustainable Livelihoods Approach: Application Within the Chinese Context* [PhD dissertation]. Lincoln, New Zealand: Lincoln University.
- Silver C, Lewins A.** 2014. *Using Software in Qualitative Research: A Step-by-Step Guide*. London, United Kingdom: Sage.
- Somuncu M.** 2019. *The Caucasus Regional Research Agenda 2020–2030*. Tbilisi, Georgia: Scientific Network for the Caucasus Mountain Region.
- Su Y, Hammond J, Villamor GB, Grumbine RE, Xu J, Hyde K, Pagella T, Sujakhu NM, Ma X.** 2016. Tourism leads to wealth but increased vulnerability: A double-edged sword in Lijiang, South-West China. *Water International* 41(5):682–697.
- Su MM, Wall G, Xu K.** 2015. Heritage tourism and livelihood sustainability of a resettled rural community: Mount Sanqingshan World Heritage Site, China. *Journal of Sustainable Tourism* 24(5):735–757.
- Su MM, Wall G, Xu K.** 2016. Tourism-induced livelihood changes at Mount Sanqingshan World Heritage Site, China. *Environmental Management* 57(5):1024–1040.
- Tao TCH, Wall G.** 2009. Tourism as a sustainable livelihood strategy. *Tourism Management* 30(1):90–98.
- UNWTO [World Tourism Organization], UNDP [United Nations Development Programme].** 2017. *Tourism and the Sustainable Development Goals: Journey to 2030, Highlights*. Madrid, Spain: World Tourism Organization.
- Urushadze T, Ghambashidze G.** 2013. Soils of Georgia. In: Yigini Y, Panagos P, Montanarella L, editors. *Soil Resources of Mediterranean and Caucasus Countries*. Luxembourg City, Luxembourg: Publications Office of the European Union, pp 78–96.
- Verd JM, Porcel S.** 2012. An application of qualitative geographic information systems (GIS) in the field of urban sociology using ATLAS.ti: Uses and reflections. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 13(2):14.
- Wang Y, Wu N, Kunze C, Long R, Perlik M.** 2019. Drivers of change to mountain sustainability in the Hindu Kush Himalaya. In: Wester P, Mukherji A, Mishra A, Shrestha AB. *The Hindu Kush Himalaya Assessment*. Berlin, Germany: Springer, pp 17–56.
- Ya-juan L, Yu H, Chen T, Hu J, Cui H.** 2016. Livelihood changes and evolution of upland ethnic communities driven by tourism: A case study in Guizhou Province, southwest China. *Journal of Mountain Science* 13(7):1313–1332.