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Linking agricultural food production and rural tourism in the Kazbegi district — A qualitative study



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ABSTRACT

As in many transition countries, also in Georgia rural urban migration as well as migration from the agricultural sector takes place. This also applies to the Kazbegi district, a mountainous region in the Greater Caucasus of Georgia. The main activity in the district is subsistence farming, while only a few agricultural producers are commercially active. As the region offers beautiful nature, during the last decade tourism has been on the rise, while a dwindling interest in the agricultural sector can be observed. However, the growth in tourism also provides opportunities for small-scale agricultural producers to increase their income by marketing their surplus production to the local tourism sector and thereby improving their livelihoods. In turn, an increase in local agri-food products offered might have a positive effect on the tourism sector. Thus, establishing linkages of agricultural food production and rural tourism might contribute to the economic development of the district and even counteract migration to the capital and from the agricultural sector. Through a qualitative study, we aim at identifying local agrifood products suitable for being marketed to the tourism sector and efficient marketing options. In order to do so, we analyze local agri-food chains. Exploratory interviews, focus group discussions and expert interviews provide data for a qualitative content analysis. First results show that food products which require little technological equipment for processing and do not underlie strict food safety standards, like for example honey, seem to be adequate to tap marketing potentials with regard to rural tourism. © 2017 Production and hosting by Elsevier B.V. on behalf of Agricultural University of Georgia. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The study area is located in the mountainous Kazbegi district, a part of the administrative region of Mtskheta Mtianeti in the Greater Caucasus of Georgia, which is bordering Russia in the North. Due to its geographic situation, the climate in the district is relatively harsh [1]. Although the Georgian Military Road is passing through the district, the general infrastructure is not well developed, in particular when it comes to reaching smaller villages. According to the General Population Census of Georgia of 2014 [2] there are 3795 people living in the Kazbegi district. However, due to the climatic and road conditions a high percentage of the population leaves the district during the winter season. The main town is Stepantsminda (1700 m a.s.l.), accounting for around one third of the total local population.

The main economic activity in the Kazbegi district is agriculture

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[3] which is characterized by small-scale production and low income generation [4] due to the fact that more than 80% produce mainly for self-consumption [5]. A preceding study showed that in the Kazbegi district, tourism is the second most important sector after agriculture in terms of occupation [6]. With an increase in the number of tourists during the last years in Georgia as a whole [7,8] also the scale of tourism in the Kazbegi district has increased [9]. Among other things, this is shown by renovation and extension of existing guesthouses, opening of new guesthouses and an increase in additional touristic services offered (like guided tours, horse riding etc.). This is in line with the results of a survey in the Kazbegi district, where Heiny [10] found that between 59 and 72% of the households that are already involved in tourism express a positive tendency towards enhancing their activities and even of the inactive households, between 28 and 35% express their tendency to start activities in this sector.

Most of the tourism activities, which in the short run often lead to higher income compared to agriculture, are located in the main town Stepantsminda, while in the surrounding villages subsistence agriculture is prevalent. This core-periphery structure is also reflected by a study on the regional income situation, where the monthly household income in Stepantsminda is almost twice as high as in the villages [10].

Due to low income opportunities in agriculture there is a dwindling interest in this sector and particularly young people leave the region for their studies and jobs in urban areas. However, some of them return during the summer season to work in the tourism sector [9]. Although, by competing for land and labor, tourism might have a detrimental effect on agriculture [11,12], it also provides opportunities for local small-scale farmers to improve their livelihoods. Based on the fact that food expenditures represent approximately two-thirds of daily tourist expenditures [13] and that tourist demand for locally grown products is increasing [11], with a growing tourism sector, also the potential market for surplus agricultural production is growing. The tourism sector thereby not only offers potential for non-agricultural entrepreneurial activities, but also for increasing income-generating activities of local agri-food producers [11]. As in turn, an increase in local food products offered could have a positive effect on the number of visitors, linking both sectors could also lead to a more sustainable regional economic development. Aiming at fostering linkages of both sectors, we also take into account that a mono-sectoral rural development approach might not be sustainable in the long-run (for instance due to dependency on external factors like the political situation), and embed our approach into the multi-sectoral new rural development paradigm of the OCED [14]. This paper describes the qualitative approach of the study and preliminary results.

2. Objective

The objective of this study is to identify linkages of agriculture and tourism in the rural Kazbegi district. In particular, we try to find out how small-scale local agri-food producers can benefit from the increase in tourism by marketing their surplus production to the sector. To this end we take a closer look at the potentials and hurdles for linking actors of both sectors by analyzing agri-food chains in the Kazbegi district. Adopting the idea of Kaplinsky [15] that "the value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production[...], [and] delivery to final consumers, [...].", the main focus of our study is at the stage of delivering the products to final consumers, either directly from the producer or via service providers in the tourism sector, such as local hotels, guesthouses and restaurants. Thus, we aim at identifying local food products suitable for being marketed to tourists in the region and potential ways to market the products. Against this background, the study is based on the following research questions:

- What are the bottlenecks in agri-food chains, in particular at the stage of delivering products to the buyers (focus on tourism service providers and tourists)? What are the opportunities?
- How can linkages between the local agri-food and tourism sector be established?
 - Which requirements do local hotels and guesthouses have with regard to sourcing local agri-food products?
 - Which local agri-food products would be suitable for being marketed to the tourism sector?
 - Which marketing options could be appropriate to tap potentials?

Linkages of agriculture and tourism often also include farm tourism. However, according to the interviewees, in the Kazbegi district agriculture and tourism are usually separated. People who have been active in agriculture and start their own tourism business in order to increase their income (oftentimes a small guesthouse), in most of the cases, after a transition period, concentrate on tourism due to a lack of resources to stay active in both sectors. Therefore, we do not include farm tourism and focus on marketing opportunities for small-scale farmers.

3. Methods

In order to gather in-depth information on the bottlenecks in agri-food chains and to identify potentials for linking agri-food production and tourism in the Kazbegi district a qualitative research approach is applied. The qualitative approach allows to embed research results into the context [16]. For data collection the principle of openness applies [17,18]. The research design, methods and tools evolve within the course of the research project and may be flexibly adjusted [19]. According to Kruse [20] the adjustment of tools during a research process is important for the success of a qualitative research project. The research process of the present study is depicted in Graph 1 below.

The methods encompass exploratory interviews, focus group discussions and expert interviews. The interviews were conducted between July 2014 and March 2016. After a desk research phase, the aim of the exploratory study was to learn more about the socioeconomic situation, the agri-food production and the tourism sector in the Kazbegi district. To this end exploratory face-to-face interviews based on open guiding questions were conducted with small-scale farmers and food-producing households (N = 20), retailers, tourism sector representatives, and village heads (N = 17) in the Kazbegi district as well as with organizations and other value chain actors in Tbilisi (N = 19). The interview partners were selected by a snowball sampling approach. Based on the results of the pre-study the research questions were generated. Furthermore the analysis served as a basis for the development of the interview guidelines for the focus group discussions. The objective of the focus group discussions was to obtain proposals of the local population on products which would be suitable for being produced and marketed locally. To implement this participatory bottom-up approach three focus group discussions with five to six participants respectively, were conducted with commercially oriented small-scale farmers (FGD1), representatives of the local tourism sector (FGD2) and subsistence farmers (FGD3). A purposive sampling was used.

As a third step, systematizing expert interviews were conducted based on the results of the focus group discussions in order to fill information gaps [21] and receive an expert opinion on the proposals of the local population. Again based on a purposive sampling ten semi-structured expert interviews were conducted with representatives of the local hotel and guesthouse sector as well as with several organizations who support small-scale agri-food producers or rural tourism in Georgia. The sampling included representatives of: the Georgian Farmers Association (E1), the Agricultural Cooperatives Development Agency (E2), the Biological Farming Association Elkana (E3), People in Need — Local Action Group Kazbegi (E4), the Food and Agriculture Organization of the United Nations in Georgia (E5), the European Neighbourhood Programme for Agriculture and Rural Development (E6), the organic certification company Caucascert (E7), Rooms Hotel Kazbegi (H1), the Zeta Camp in Juta (GH1) and a supermarket chain (S1).

The experts' knowledge on the production and marketing of local agri-food products as well as on the demand side of the tourism sector allows to get a deeper understanding of agri-food chains and the linkages to the tourism sector in the Kazbegi district. The data is analyzed with a qualitative content analysis approach following Kuckartz [22], Schreier [19,23] and Mayring [24]. The category system as the "core" of the qualitative content analysis [23] is developed concept- and data-driven [19].

Desk reserach Development of guiding questions for the pre-study

Prestudy/Exploratory interviews Implementation and analysis

Generation of the research questions Development of interview guidelines for the focus group discussions

Focus group discussions Implementation and analysis

Development of the interview guidelines for the expert interviews

Expert interviews
Implementation and analysis

Merging results, analysis and interpretation

Graph 1. The research process. Source: Own depiction.

The results we present in the following sections will be based on citations of the interviewees from the expert interviews and the focus groups (*in italics*). As neither the interviewees, nor the interviewers or translator are native speakers of English, linguistic errors may occur as well as the use of different terminologies. To stay close to the original statements, such errors have not been corrected. In addition to this qualitative study a quantitative study focusing on the efficiency of local agricultural production has been conducted by Shavgulidze [25], which is not part of the present paper. However, future triangulation of the qualitative and the quantitative data will contribute to completeness and validity of results.

4. Preliminary results and discussion

4.1. Bottlenecks of agri-food chains and opportunities

During Soviet times gas was provided for free to the residents of the Kazbegi district. As this was conducive for greenhouse production, vegetables were one of the main produces during that time. In addition, sheep breeding was popular. However, today gas provision is not free anymore and most of the greenhouses are demolished. Also the number of sheep has decreased considerably due to the low availability of pastures in bordering regions outside of Georgia. Nowadays agricultural production in the Kazbegi district mainly comprises potato growing and cattle production for meat and dairy products [10]. Although some new products are grown, like for example lettuce and strawberries, the study has revealed that the agri-food sector in the Kazbegi district suffers from several bottlenecks which restrain the sector from further development. The graph below shows the stages and actors of the core chain process.

4.1.1. Input supply

Most of the small-scale farmers lack access to input factors like finance, land resources or manpower and use obsolete technical equipment. Furthermore, an agricultural supply store which could provide inputs for agricultural production is missing in the district: "It is an issue of I don't know, new normal seeds, there is not even a single small shop that sell seeds." (E4).

4.1.2. Production

Due to instable or low access to input factors, neither the quality nor the quantity of production is constant. Furthermore, the production in Kazbegi district is affected negatively by the small size of the land holdings, which in 90% of the cases is below one hectare [5]. Old equipment also impedes efficient production; for example, in potato production some plots are still plowed with donkey carts. Additionally, the prevailing climatic conditions hamper production. So far no certification of organic production does exist in the Kazbegi district.

One of the main concerns of the interviewees was that there would not be enough output to be marketed, as local households' demand needs to be covered first: "In terms of agricultural and value chain; mostly what we observe now and our partner has done agricultural potential assessment and it shows that even the products that are locally produced at this stage cannot even cover the local demand." (E4). However, some local small-scale farmers manage to produce a surplus and to sell it professionally; for example in the case of trout production. These producers might act as incubators and positive example for others. Furthermore, a quantitative study on the technical efficiency of production conducted by Shavgulidze [25], has shown that output can still be increased by improving management practices, for example by 62% in case of cheese production and by 43% in case of potato production.

4.1.3. Processing and packaging

There is a lack of processing facilities and equipment in the district. In particular, in the case of dairy and meat production, the fact that there is neither a slaughterhouse nor a milk collection center is a major constraint. The next slaughterhouse is more than 100 km away, which makes it cost and time intensive for smallscale farmers to bring their cattle there, and some of them slaughter animals themselves. However, in order to comply with food safety standards both facilities would be urgently needed, in particular when it comes to marketing products to the tourism sector: "Uh, yes, food safety, I think that this like laboratory or something is really important for such places, it is really important." (GH1). A veterinary service offering vaccinations and consulting [25] might counteract this problem at least partially. The lack of processing facilities is also a constraint for producing a greater variety of certain products as well as for adequate packaging or preserving of food.

The fact that most products are distributed to family and friends of the producing households influences professional packaging or labelling negatively. Honey for example usually is only put in simple glass jars without any additional information. However, when it comes to selling to other consumers, adequate packages with informative labels would be needed. Also branding is not developed at this stage. When aiming at marketing a product to tourists English labelling should be considered as well: "Do you know what mistake we made while producing sea buckthorn? We

intended to sell it only at the Georgian market and did not think about the tourists. It had the Georgian label and we realized very late that we needed a legend in Russian and English, too. Maybe we'll manage to explain in Russian but not in English. So, the English legend was absolutely necessary." (FGD 2).

4.1.4. Trade

A small proportion of the output is sold to traders who come to the villages to buy from the producers and then resell the products at other markets, mainly in Tbilisi. The traders either pay the producers in cash or in kind. In the second case the producers exchange their products (often potatoes or cheese) against household items or food products which are not available in the district. However, in this case the selling prices are lower than when the producers are reimbursed in cash [25].

The lack of storage facilities is another bottleneck. Products which cannot be stored are sold directly after harvest. As the harvesting for one product is done by all producers at the same time, they also sell it at the same time, and thus influence their selling price negatively: "First, the biggest challenge is that there is no consolidation centers or the storages and the farmers when they are harvesting they are trying to sell it right away and when, because every products has its own harvesting time, and when we have a flow, then the price drops." (E1); "Especially for primary producers and the small farmers because they don't store, they sell it all at the same time and the prices are low and they get less income from that." (E5).

The fact that farmers mostly sell their products individually, also affects their bargaining power negatively. However, some cooperatives which might change this situation have been established during the last years.

4.1.5. Sale to the final consumer

Products which are sold via traders are usually consumed outside of the region, however our focus in this paper is on tourists as final consumers within the region. The product may reach these consumers indirectly via local hotels and guesthouses, restaurants or grocery stores or directly from the producer. As stated above some products are already sourced locally by hotels and guesthouses; however, there are only few and informal linkages to buyers from the tourism sector. Normally, the managers of hotels and guesthouses personally inspect the production sites in order to make sure that they offer safe and high-quality products to their guests: "We go there, when we start the relationship we go there and we check how do they produce it, we check the, how, like in what kind of water they produce this fish or how do they grow this salad leaves, how clean it is and so on." (H1). This procedure also increases costs for the buyers.

The infrastructure for supplying tourists outside of hotels and guesthouses with food is poor. For example, there is only a small number of shops with a low variety of products as well as a lack of restaurants and cafes. Some of them are also difficult to find. Furthermore, only a small selection of dishes is offered. The interviewees also mentioned that some of the tourists even bring their own food to the region. Direct marketing from the producer to the consumer is also rare and not organized professionally. As the major proportion of the products are consumed by the members of the producing households themselves the income generation through selling is relatively low.

All stages of the chain are furthermore affected by the prevailing level of knowledge and advisory services:

"All this links to the educational system, then lack of vocational training opportunities and actually as we were told, there is no official statistic, but for the last 15 years all graduates from the school who actually came to Tbilisi for higher education, only 7%

returned, so even human resources and intellectual resources are quite challenging."

"[...] even the guesthouse owners are saying our tourists are saying 'why don't you sell local teas, I would buy and take back? Why don't you have honey in 100 gram or 200 gram jars?' But the point is when you go to the producers and say 'ok, why don't you do it?', one thing that first jumps up is 'I don't know how to do it'."

"You cannot find any service provider, government or private in Kazbegi who actually offers consultations. There is a small entity that is now under the Ministry of Agriculture, they just started these consultation centers, but even the staff they need to learn a lot at this stage, it is just a starting stage" (all E4).

Furthermore, a lack of entrepreneurship of the local population might be a hindering factor with regard to development: "And, even now, like most of the people, when you ask people why you grow potatoes for example, 'Because my grandpa did this'. So, it is the issue of the lack of entrepreneurship, which I don't think is something that you are born with but you can learn." (E4).

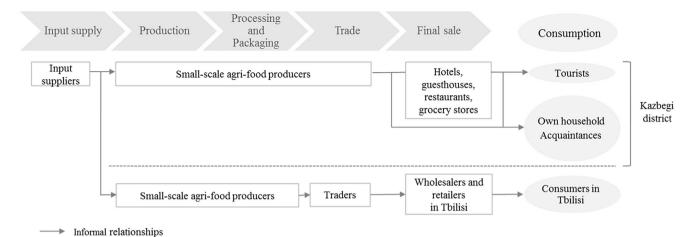
Although the local agri-food sector is characterized by several shortcomings, the quality of agri-food products from the Kazbegi district was considered to be very high by the majority of the interviewees. Furthermore, tourist demand also offers potentials for the future development of local agri-food production: "Everyone understands now that if you want to somehow develop this region you have to produce something, you cannot be dependent on Tbilisi products or like imported products, so, especially during the winter time, right now if you go there the local shops are almost empty. This idea is becoming quite important especially with the development of tourism because there is winter tourism as well and tourist are also hinting 'where is the local cheese, where local product, where is something local?" (E4).

Graph 2 also shows that the number of chain actors or intermediaries until the product reaches the final consumer is very low due to the fact that the producers themselves cover almost all stages of the chain. According to the European Network for Rural Development [26] such a low number of intermediaries is a characteristic of a so called short food supply chain. Another decisive feature of a short food supply chain is that the product reaches the consumer embedded in information on the location of origin of the product [27,28]. In the case of tourists travelling to the region and consuming the product on site this automatically applies. According to Renting et al. [28] such short food supply chains might be conducive for rural development. This should also be taken into account when thinking about the future linkages of the agri-food sector and the tourism sector in the Kazbegi district.

4.2. Requirements of the tourism sector with regard to local agrifood products

First, we take a closer look at the provision of local agri-food products via hotels and guesthouses in the district. According to our data, actors from the tourism sector show a general interest and willingness to cooperate with local small-scale producers. Several products are already bought by guesthouses or hotels, like e.g. potatoes, lettuce, herbal tea, sea buckthorn, honey, cheese, meat and trout. However, not all of the products are offered by all of the hotels and guesthouses. One reason for this are formal requirements that hotels and guesthouses have to adhere to. The following factors are important for the tourism service providers with regard to locally sourcing agri-food products:

Quality



Graph 2. The agri-food chain. Source: Own depiction based on Springer-Heinze 2007.

- Food safety standards
- Quantity
- Price
- Visual appearance
- Status of the producer
- Documentation

This list sums up the factors mentioned by the interviewees; however, it may not be comprehensive. Furthermore, not all factors have the same relevance for all types of tourism service providers. In general, the requirements of family-run guesthouses are less strict than for hotels.

According to the interviewed tourism service providers it is in particular important to have local products of high **quality**. Furthermore, **food safety standards** have to be respected by the producers. In the case of meat this includes the basic requirement that animals have to be slaughtered in a slaughterhouse and that the meat has to be controlled by a veterinary: "Something that we just cannot buy, for example, if you take meat, you cannot buy, because by Georgian law you have to have the slaughterhouse where you actually kill the animal and inspect it and sign, so you can make sure the meat is proper." (H1). Also dairy products should necessarily be tested by laboratories in order to ensure that they are safe.

For some products also the wish for **organic production** was expressed, for example in the case of honey and herbal teas: "But again honey, we want to make sure that the honey is very organic and natural, we buy it only in certain months, for example we buy it in the summer because in the winter it is not the real honey, they add some sugar in it." (H1).

Besides these factors hotels and guesthouses need a certain **quantity** and a constant supply of products. Individual producers often cannot provide the amounts needed: "You can buy cheese from many suppliers in Kazbegi because a lot of them are trying to make cheeses, but it is not constant, for example if we need 20 kilos they cannot supply us as much [...]." (H1). Thus, in order to ensure a constant supply, hotels and guesthouses would have to cooperate with several local producers at the same time which would increase their transaction costs: "But I think it is again a problem of the quantity and the timing of delivery, because the guesthouses and the restaurant prefers to have it when they want to and during the season, the whole year I mean, so it is a bit complicated and difficult for them to deal with 100 farmers which 50 of them will bring you the product on the same day" (E5).

This situation also hampers the development of contract

farming, where hotels or guesthouses prior to production agree with the producers on buying a certain amount of output. However, as put by a representative of the tourism sector: "It's just, does not, yes if you sign a legal contract it means that for example there should be certain liabilities from both sides, if he cannot supply me, what? Should I tell him, should I fine him for that or vice versa? You cannot go into the legal agreement with local physical entity, because again I know he cannot make it, so why would I now make him suffer from this, from this agreement?" (H1).

The **price** of a local product in relation to the price of an imported product is another decisive factor. However, the decision for or against sourcing a product locally is usually also strongly influenced by a product's quality, which is considered to be high in the Kazbegi district. Depending on the type of product, moreover, the visual appearance of a product may influence the decision from where to source the products offered, including adequate packaging or labelling. Furthermore, in order to cooperate with hotels and guesthouses, official registration of the producers as well as proper **documentation** of transactions is required: "But the point for tourism is that at this stage there are a lot of operators are, let's say that they have to operate legally, they need have to have proper the documentation for all the food safety and taxation issues. So that is quite a big barrier for service providers in tourism to actually buy from local farmers." (E4).

In addition to marketing local products via hotels and guest-houses also direct marketing could be an opportunity for local producers. Thereby some formal requirements might be loosened which could be in favor of the local producers. Some potential direct marketing options will be presented in section 4.4.

4.3. Local agri-food products

The following section contains a selection of characteristic statements on local agri-food products which are already locally sourced by one or more hotels or guesthouses. We assume that a product which is already locally sourced will be sold to the sector more likely than a totally new product, also in the future. We will take a closer look at the factors quality, quantity and food safety of the following products but we will not take into consideration prices, visual appearance, status of the producer, documentation or other economic indicators as this goes beyond the scope of this study and requires further systematic data collection. However, in order to receive a comprehensive picture of marketable local food products, these factors also have to be taken into account in future

studies.

According to all interviewees the quality of **potatoes** from the Kazbegi district is quite high: "[...] and when they tasted our potatoes they told us that they had never eaten such tasty potatoes" (FGD1). For this reason, the majority of hotels and guesthouses tries to offer local potatoes, however, the output is quite low and sometimes there is even a supply gap during summer time: "So maybe from August they have not more old potatoes and they have to wait for the new one, but it is end of September or middle October they have new potatoes, and from August I buy it also in Tbilisi" (GH1); "We used to buy, because again it is not, the produce is not during the full year. For example they call 'I have for example 100 kilos of potatoes do you want it or not?' and then we check it because the quality of potatoes is really good in Kazbegi, so we buy it, but we call in the week 'do you have more?', 'no we don't.' So that is why we ship it from Tbilisi." (H1).

The low amount of proper storage facilities is contributing to this situation. Thus, although potatoes are sourced locally, an investment in more efficient production and storage facilities would be required in order to expand the linkages.

Also the quality of lettuce is considered to be very high: "So basically because the land is very pure and very organic in Kazbegi, the salad leaf was so much better than what we were getting from Tbilisi for example, so fresh and so hard and so good" (H1). However, due to the high perishability, storing and transporting lettuce is challenging and adequate refrigerated transporters are missing: "The main problem in selling lettuce for us is the lack of a refrigerating machine" (FGD1). On the one hand, according to some interviewees it was difficult to find buyers for the lettuce. On the other hand, a representative of a hotel said that they would buy more lettuce if larger volumes were produced. This contradictory information indicates that there is a lack of communication between producers and potential buyers. This goes into the direction of Bélisle (1983) who was working on reasons why hotels are discouraged to use more local food products for the Caribbean: He found out that one reason might be that hotels are not aware of which food is available locally, while farmers lack information on needs of the hotels.

Trout is a product which is highly valued by local guesthouses and hotels. It is produced in local rivers and according to the interviewees has a high quality: "Well to be honest if you take the fish, if you take the local fish, it is just incomparable to what you can buy in Tbilisi. It is so much better, so much fresher and so much different." (H1). An increase in production, depending on accessibility and availability of local rivers, might also entail an increase in linkages with the tourism sector. However, also access to input factors has to be taken into account: "You have to cooperate with someone in more lower regions to give you every year new breeds. This needs planning, this needs knowledge, this needs investing in your education." (E4). Food safety could be affected by the means of transportation and storage, however, the interviewees did not mention any concerns in this regard so far.

According to most of the interviewees, **honey** has a high quality and offers opportunities for being marketed: "Ok, honey is not a big deal because first there is a huge demand, there are perfect conditions for beekeeping in Kazbegi. Honey has huge potential." (E4). As it is easy to store and transport, it might also be sold as a souvenir. However, in some cases also antibiotics and pesticides are used which restricts the options for being marketed to the tourism sector. The fact that it is neither branded, nor professionally packaged or labelled further negatively affects linkages to the tourism sector: "It is just people lack knowledge how to make it a business and that is it. It comes with proper, I don't know, care for bee families because people just don't know, it continues with the branding including cooperatives for the branding or production and so on." (E4). Furthermore, in the district, points of sale for tourists are not existent or difficult to find.

Sea buckthorn is offered to the tourists as a type of jam that they can use in their tea: "And we also used it maybe two or three times for tea, like jam you know, or just put in tea, and yes it is good so, the people they like it." (GH1). Sea buckthorn not only seems to be demanded but also to be abundant in the region: "I sold it at my facilities. It is a medicinal plant as well [...]. There are plenty of sea buckthorn here [...]. It's very healthy and there is a great demand for it." (FGD2). However, standards of collection have to be respected with regard to sustainable resource management. Also processing requirements might constrain the supply of sea buckthorn: "We stopped sea buckthorn production this year because we cooked it in our kitchens. We don't have a market for it in Tbilisi. It's more intended for tourists. We stopped this production because the law was changed. We should have a special building and conditions for production. We did not have it and that's why we stopped it" (FGD2).

Local herbal tea is made from local herbs and plants, like e.g. wild thyme and mint, or Caucasian rhododendron. According to several interviewees, it is demanded by tourists and considered to be very tasty: "We also have the normal black and green tea, but nobody wants it when they see herbal tea, the local one on the menu, everybody just wants to drink it." (GH1). However, to date it is only offered at hotels or guesthouses and there is no other point of sale.

Due to the lack of processing facilities like a slaughterhouse or a milk collection center, local **meat** or **dairy products** are difficult to be marketed to hotels, guesthouses or restaurants in the region because of the food safety standards they have to meet. Nevertheless, in general there would be a demand for fresh beef or other meat products from local tourism service providers. The same applies for dairy products which are an essential ingredient for several traditional local dishes. But marketing of dairy products furthermore is affected negatively by a low production output: "And the third one is the low production of the milk that ends up in low amount of, really small amount of the dairy products [...]" (E4).

The list above shows that the potential of being sold to the tourism sector is restricted for certain products. In particular products where strict food safety standards have to be respected might not be appropriate to be sold to the sector at this stage. In case of milk or potatoes also the low output might be a restriction. For wild collection (in our case herbs, wild plants and sea buckthorn) and honey there is only little concern regarding the food safety or available quantities. Also in the case of potatoes or lettuce food safety was not an issue during the interviews.

4.4. Discussion of potential options for direct marketing

Besides identifying products which might be suitable for being marketed via hotels or guesthouses, we also try to find ways of directly marketing local agri-food products from the producers to the tourists. In doing so producers might strengthen their influence on the selling price which might lead to more income and thus contribute positively to improving their livelihoods. The following suggestions build upon and integrate the ideas of the interviewees on such direct marketing options.

4.4.1. Cooperative shop, farmer shop

In the Kazbegi district there is only a very small number of shops which offer a limited selection of products. A cooperative shop, serving as a place where farmers can sell their products jointly, could improve the situation. Such a shop could be owned and managed by several local small-scale farmers. As it should be easy to reach, it might be established in the center of Stepantsminda: "[...], so I think that if local people organize a cooperative and actually do their own market and promote their own food, that will be very interesting and all the tourists walking around the center of Kazbegi they will see all these products." (H1). This idea also came up during

one of the focus group discussions: "I was in a foreign country and saw stores where they sold bio products. Nine to ten farmers established an association and each of them had his/her own unit in the store. They did not hire a sales person but sold their products themselves: one farmer worked during one day, the second worked on the next day and so on. I liked it very much; we can do the same here, why not?" (FGD2). However, also a sufficient quantity and variety of products would be needed in order for the shop to be profitable. Moreover, first a functioning cooperative is needed: "You will need to have a functioning cooperative for that. [...]. Hmm, well if there is a cooperative which produces enough, with also not only the quantity but also in terms of diversity of the product that can be sold in the shop, then it is fairly easy to do, but first you need to organize the supply somehow and have cooperatives who are ready to sell it and have the product." (E4).

Setting up cooperatives is often recommended to overcome constraints which small-scale producers face in accessing markets. However, as Gardner and Lerman [29] state, there might be a "psychological resistance to cooperation" due to the enforcement of cooperation under the Soviet regime. But, according to the majority of interviewees, people do not associate the modern cooperatives with Kolkhozes anymore. However, it was also mentioned that a lack of business skills could be a hindering factor and that more training in this regard would be needed. For a cooperative to be successful in particular trust towards the leader farmer is decisive. This also applies to the leading farmers of cooperative shops.

4.4.2. Establishment of a market place

One example of such a market place for local farmers is the fortress Rabat in Samtskhe-Javakheti. According to one expert the government has renovated it and established a market inside where certain areas can be rented by farmers or other businesses. Thus farmers are provided with infrastructure and can sell their products in a proper way. After the sales period the rent is paid to the owner of the market place. In order to establish such a market place in the Kazbegi district, investment would be needed, either from governmental or from the private side.

Market stands at the road side could be another option for directly marketing agri-food products, in particular during touristic peak seasons. This simple infrastructure could provide farmers with the opportunity to sell their products to the tourists without high investment. In order to tap such potentials the location of the stand would be particularly important. If tourists automatically pass by the stands without search costs, the probability for the producer to boost sales would increase. Furthermore, consumers would still have the advantage to get the information on the product directly from the producer.

4.4.3. Food souvenirs

In addition to food for on-site consumption, also food souvenirs could be sold. This could include agri-food products, which are not perishable and could thus be transported easily to the country/ place of origin of the tourists. Suitable products might be local honey or dried herbal teas. Such products will also be offered as souvenirs at the Rooms hotel. However, the packaging and labelling will be done by the hotel, withdrawing part of the value addition from the farmers. Market stands or a cooperative shop would be adequate locations to sell food souvenirs directly from the producers to the consumers without an intermediary.

4.4.4. Establishment of cafés/kiosks

In the Kazbegi district there is a lack of easy accessible kiosks or cafés outside of Stepantsminda. For example on the road from Sno to Juta (where the Zeta camp is located) there is no place to buy food or beverages. Small-scale agri-food producers located in this

area could seize the opportunity to open a café or kiosk there during the tourism season: "[...] for example, when you are going to Juta, you will pass this long road to Juta and you won't meet any guesthouse or food service, nowhere. People don't know what they can do, for example in the middle of the road there is a village Karkucha, they can offer some fast food to the tourists, but they, I don't know, don't think about that, don't know how to make this, because they have some cattle and produce this cheese, it is very easy for them, for example to make a little café with Khachapuri and some hot drinks like tea and coffee." (E3).

4.4.5. Touristic farm/food map

In this case, a map with tourist attractions would be created, which would also include locations where local agri-food products could be bought. In most of the cases this would be small farms. Such a map could also be interesting for the Kazbegi district as many tourists go there for hiking. The idea was recommended by a representative of a development project in another Georgian region: "To me it depends on the region itself and the infrastructure of the region as for the moment. If we speak of Kazbegi there should be a certain easy access for the tourists to this food. [...]. Kazbegi is quite small so even if you do one common shop in the center where you sell all the local food it might also play the role. I personally like more the approach with the map where you can walk around in the farms and find the food there." (E5).

The advantage for the farmer is that the consumer comes to the farm gate and additional investment from the farmer side is not necessarily needed. According to a focus group participant visiting the production sites of the local products would also be in line with the interests of the tourists: "Tourists don't seek comfort in Georgia and don't go mountaineering to Kazbegi to find comfort there. Peasants should be briefed that if they invite tourists to their houses and make them try their home made honey it will be the best attraction to them. That's what they love most of all." (FGD2).

4.4.6. Participation in agri-food production

For some tourists, in particular from foreign countries, also participation in food production or cooking of traditional dishes could be interesting. This idea was also mentioned by a focus group participant: "I would like to get a low-interest loan in order to develop beekeeping along with tourism. I will show tourists the process of honey making." (FGD3). This could be combined with the touristic farm/food map or with other tourism services offered in the district. For example, Rooms Hotel, during hiking tours, plans to visit local guesthouses where tourists can try and learn more about/participate in the cooking of local traditional dishes: "... a lot of guests just want to try to make this food themselves, so they want to try to make Khinkali or they want to try to make Khachapuri etcetera." (H1).

This list of innovative marketing options could serve as a basis for the establishment of future linkages of agriculture and tourism in the Kazbegi district. However, it still has to be checked in detail, whether and which of the options are feasible from economic and ecologic viewpoints. Some of the direct marketing options presented here, with tourists as the main target group, would also be beneficial with regard to the local population's food provision; among them is the cooperative shop, the market place or road side stands as well as cafes and kiosks.

5. Conclusion — linkages of the local agri-food sector and the tourism sector

According to our study bottlenecks in the agri-food chain constrain linkages between local agri-food producers and tourism service providers. The fact that there is no professional food

processing infrastructure in the Kazbegi district makes it difficult for local small-scale farmers to meet food safety standards, which is one of the main requirements of local hotels and guesthouses. Due to small plots, lack of input factors and the regional climatic conditions production levels are quite low and the supply of a constant quantity of products is restricted. But, as Shavgulidze (2017) found out for potato and cheese production, by improving management practices, output could potentially be increased.

For these and other reasons, up until now linkages of agri-food producers and actors of the tourism sector are not well developed. However, according to the interviewees, tourists demand local agri-food products. In order to enable local small-scale producers to benefit from the increase in tourism some investments in the agriculture sector would be necessary, for example in processing facilities like a slaughterhouse or a milk collection center. For profitability reasons, a certain output is needed for such infrastructure; thus, additional investment in an increase in production efficiency would be required. Furthermore, advisory services and training, not only in agriculture but also in the field of marketing would be needed.

As a starting point for increasing the linkages, we assume that in particular products with low food safety requirements could be taken into consideration for being marketed to the tourism sector, like for example herbal tea or honey. After undertaking investments in the agricultural sector, other products might follow. In the short run, innovative direct marketing options could make it easier for local small-scale farmers to benefit from the increase in tourism as no cooperation with the tourism service providers has to be initiated prior to implementing the measures. Tapping existing marketing potentials could thus contribute to increasing the income and improving the livelihoods of local small-scale producers. Moreover, at a macro level, if more local products were sold in the region, it might also be more attractive for tourists to visit the region which in turn might be conducive for regional economic development.

The objective of this paper was to describe the design of the qualitative study and to provide first insights about the hurdles and potentials of linking local small-scale producers to the growing tourism sector in the Kazbegi district. Although linkages are not yet well established, there might be opportunities to increase them. The findings presented here are based on the statements of the interviewed individuals. Being influenced by their personal backgrounds, their viewpoints might thus be subjective. Taking this into account, the results will still have to be analyzed in detail and with regard to economic profitability (see also Shavgulidze [25]) and ecological sustainability in the future. In addition, the qualitative research approach allows to discuss elaborated results again with the interviewees as well as with additional stakeholders, which will conducive for the development of solid recommendations.

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