



Georgia

Report on Socio-economic survey Tusheti PA Complex

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1 Background

The medium-sized project: “Catalyzing Financial Sustainability of Georgia’s protected Area System” is implemented by UNDP/GEF and the Government of Georgia. One of the components of this project is “Testing site-level revenue generation mechanisms in Tusheti PA’s” which aims at the reclassification of Tusheti protected areas complex. The reclassification process needs to consider not only biodiversity and sustainable tourism development issues but also the vital social and economic needs of the local population. The socio-economic survey in Tusheti was conducted to meet this requirement.

2 Objectives

The main objective of the survey was to study and describe the current socio-economic situation in Tusheti in terms of:

- § The demographic profile of the population;
- § The exploitation of the natural resources;
- § The strategies of the local population with regards to creation of income/subsistence source and economic activities.

3 Methodology

The research employed both quantitative and qualitative methods.

The first stage was a desk research – collection and analysis of the available information on the socio-economic status of the region, as well as the results of the following previous studies:

- § The GORBI report: „Research on Condition of Georgian Protected Areas“
- § Consultant Helen Anthem’s „Report of November 2009 field visit to the villages of Qvemo Alvani, Zemo Alvani and Laliskhuri, Kakheti region, Georgia“.

Based on the findings of the desk research, a questionnaire and guides for the focused group discussions were developed.

The development of the Questionnaire and the Guides was also based on the consultations with the Agency of Protected Areas, the Administration of Tusheti Protected Areas and consultant Ms. Helen Anthem. The final versions of the Questionnaire and Guides (see Annex 1) were agreed with the Project Executive Team and the main beneficiary (Agency of Protected Areas). The second stage involved a quantitative survey of the permanent and seasonally resident regional population and the focused group discussions with certain local social groups.

3.1 Quantitative Survey

The survey involved all the permanent or seasonal households (96 households) except for those arriving for festivals or inhabitants of the inaccessible villages. (Seasonal households were defined as those staying in Tusheti from late June till autumn).

The field work of 3-11 July 2010 involved the following villages:

	Frequency	Percent
Dartlo	12	12.5
Bochorna	2	2.1
Shenako	5	5.2
Zemo Omalo	5	5.2
Diklo	10	10.4
Kvemo Omalo	28	29.2
Tsesho	4	4.2
Chigo	3	3.1
Omalo	2	2.1
Shtrolta	3	3.1
Chiglaurta	1	1.0
Dochu	2	2.1
Dano	5	5.2
Kumelaurta	3	3.1
Chala	2	2.1
Khiso	2	2.1
Kvavlo	2	2.1
Begela	4	4.2
Girevi	1	1.0
Total:	96	100.0

“The most informed members” of the households were surveyed using the special Questionnaire which was prepared in structural form.

The resulting information was SPSS (statistical software) processed.

3.2 Focus Group Discussions

The focus group discussions staged according to the prepared guides involved the following groups of population:

- § Shepherds (1 group, 9 persons);
- § Rangers (1 group, 8 persons);

§ Owners of the family hotels (1 group, 10 persons).

Since the shepherds were very busy and unable to come down to Omalo for participating in FGDs, the study personnel went to their places, and apart from the group discussions, 2 in-depth interviews were conducted with two shepherds in the remote pastures.

The focus group discussions and in-depth interviews took place on 9-11 July 2010.

The group discussion and in-depth interviews were audio taped and filmed. Subsequently, the transcripts were analyzed.

This Report is based on the analyzed results of the quantitative survey of the population, focus group discussions and the in-depth interviews.

3.3 *Limitations of the Study*

According to Helen Anthem's report, it is estimated that there are 40 permanent residents and up to 4500 people who spend some time in Tusheti in the summer months, including those visiting for short holidays. Therefore, any kind of sampling would not have been representative, so in planning the methodology it was decided to survey all the households which have permanent or seasonal residents. Seasonal households were defined as those staying in Tusheti from late June till autumn, so the households arriving in Tusheti only for festivals (July) were not surveyed.

Besides, the locals reported about several villages of very few (1-3) permanent households with no motor way leading to them. So it was decided that sending interviewers there on horseback or on foot was not reasonable (the village Chigo was visited on foot).

As mentioned above, the field works were preformed in early July 2010. Due to the climatic conditions, it was only at the time that the roads opened. Also, the rising fuel prices made transportation more costly. As a result, compared to the previous years, much fewer households arrived in Tusheti in summer 2010.

Consequently, the survey was limited to 96 households (399 people) intending to stay in the 19 Tushetian villages accessible by car, which planned to stay in Tusheti even after the festivities.

The respondents of the surveyed households often make mistakes about the crop, the revenue they got etc. Meanwhile, an interviewer is unable and has no right to doubt what they say or not to record their answers. In the analysis of the data, the blatantly inadequate answers have to be rejected with sufficient grounds. For instance, in the given survey there were several respondents who claimed to have grown grapes or corn in Tusheti, which is impossible due to the climatic conditions. Consequently, the answers were excluded from the results.

Also, there have been cases when the Agency of Protected Areas or/and the Administration of Tusheti Protected Areas believe that the locals' information or the facts they pointed out are inaccurate (e.g. the sale price of the sheep, the scale of the tree felling etc.). However, unless information is absurd (grape cultivation in Tusheti), we have no right to doubt the answers and not to record them.

The surveyed households do not register the natural resources exploited on the protected territories, so they were unable to say how many kg of mushrooms or berries they usually gather. As to the wood cutting, they provide only the legally acceptable figures. Therefore, it was decided to enter the assessments, such as 'a small amount' or 'average amount' or 'big amount'. Similarly, subjective evaluations were applied to the frequency of exploitation of the natural resources: 'routinely', 'sometimes', and 'rarely'.

Since the locals in Tusheti exploit the natural resources of the protected territories in very small quantities, mostly for personal consumption, such subjective assessments should be enough to outline a general picture.

4 Results

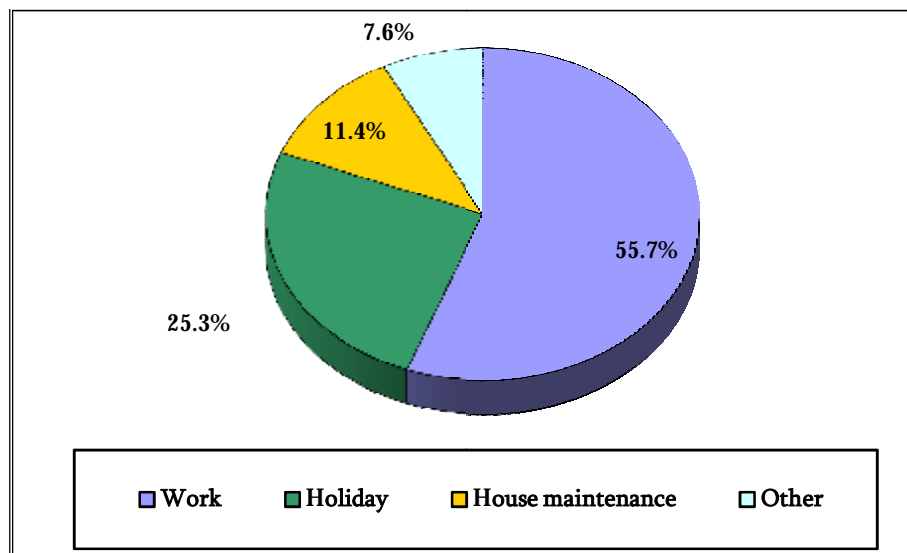
4.1 Socio-Demography Profile

Most of the surveyed households (80.2%) are the permanent residents of the other villages in Kakheti, mainly, Kvemo (Lower) and Zemo (Upper) Alvani and Laliskuri; several of them live in the town of Telavi.

Two of the surveyed households are permanent capital (Tbilisi) dwellers.

17 households (17.7%) stated that most of the time they live in Tusheti (Permanent residents). Of the households spending time in Tusheti in the summer months, 55.7% come for work related reasons and 25.3% for recreation.

What is the main reason for your and your family members' arrival here in summer?



Most of the surveyed (87%) said that their households had been living in Tusheti for a century or even longer.

On average, there are 4-member households but there are also single or 10-member ones, too.

The total number of the members of the surveyed 96 households was 399.

58.4% of the household members were in Tusheti at the time of the survey. Incidentally, there was no statistically significant difference between the households mainly residing in Tusheti (55.6%) and those arriving there only in summer (58.9%).

On average 0.31 family members of the surveyed households work or study in the capital Tbilisi or other towns in Georgia and are away from their families. At the same time, 0.43 family members study or work abroad.

50.1% of the members of the households are men and 49.9% - women.

The average age of the household members is 34.5. Meanwhile, the average age of those living in Tusheti permanently is 43, which makes a statistically significant difference compared to the average age (33) of the "seasonal household" members (living elsewhere).

69.0% of the adult population are married, 25.0% unmarried, 5.7% widowed and only one person is divorced.

The education level of the members of seasonal households is significantly higher (see table).

Education	Household lives		
	in Tusheti	Otherwhere	Total
Less than Elementary	0.0%	0.4%	0.3%
Incomplete Secondary	16.7%	3.5%	5.8%
Complete Secondary	35.2%	40.5%	39.6%
Special Technical (PTU, SPTU)	31.5%	23.9%	25.2%
Incomplete higher (discontinued)	0.0%	2.3%	1.9%
Student of higher institution	3.7%	1.5%	1.9%
Higher	13.0%	27.8%	25.2%
Total:	100.0%	100.0%	100.0%

In terms of the occupation, 16.8% of the adult population is farmers/peasants (including the sheep owners) and 20.1% - housewives, 10.4% are highly qualified employees (specialists), 8.4% - skilled workers and 9.7% - pensioners. Curiously enough, 18.8% referred to themselves as unemployed, although as said above, nearly all the surveyed households live in the rural area and have private land lots (see below).

47.3% of the employed population owns farms and 6.8% have their own businesses. 17.1% are State employees and 8.2% work with private organizations.

4.2 Household Economy

The average monthly income of the surveyed households (families) amounts to 826.71 GEL (232.81 GEL per capita).

In terms of the average monthly income, there is no statistically significant difference between the permanent residents of Tusheti and the seasonal residents.

The income structure is presented in the table below:

	Household		Total
	Permanent	Seasonal	
Salary/wages/income activities	101.18	306.08	269.79
Age/veteran/disability pensions/student benefits	98.53	50.37	58.90
Alimony	0.00	0.00	0.00
Child benefits	0.00	0.00	0.00
Dividends/shares/percentages	0.00	37.97	31.25
Income from rental property	20.59	123.29	105.10
Sales of agricultural products HH produced	658.82	90.89	191.46
Value of in-kind payments for services	0.00	3.85	3.16
Remittances from relatives within Georgia	0.00	66.46	54.69
Remittances from relatives outside Georgia	2.35	85.44	70.73
Other	0.00	1333.33	571.43
Total:	881.47	814.92	826.71

The average monthly expenses of the surveyed households is 500.28 GEL. From this 204.11 GEL is the average monthly expenses of a family during their stay in Tusheti.

The difference is made by a significant cut in the long-term expenses, such as clothing, footwear, furniture, beddings, towels, books, paper and the other stationary, education fees, car maintenance (save petrol), weddings, dowry, other special events, funeral costs, house renovation, agricultural costs and the utilities (power, gas and water supply, kerosene, wood, telephone etc.).

	Anywhere	in Tusheti
HH Everyday expenses (GEL)	338.44	167.61
HH Long-term expenses (GEL)	265.92	70.45
HH Utilities bills (GEL)	118.79	29.89
Total HH monthly Expenses:	500.28	204.11

Similarly to the incomes, in terms of the average monthly expenses, there is no statistically significant difference between the permanent and seasonal households.

The valuables possessed by a household are an indicator of its welfare.

On average, the surveyed households have 2.4 mobile phones, 0.9 color TV-sets, 0.4 DVD/Video players/recorders, 0.6 satellite antennas, 0.2 digital cameras, 0.15 tractors, 0.3 cars, minibuses or trucks and 0.4 electricity generators.

The table below reflects the average and maximum numbers of the aforesaid means possessed by a household in Tusheti:

	Mean	Max.
Mobile Phone	1.26	6
Color TV set	0.12	1
DVD / Video player/recorder	0.02	1
Satellite antenna	0.15	2
Digital camera	0.06	1
Tractor	0.07	1
Car, minibus (van), truck	0.11	1
Electricity generator	0.20	2

The self-evaluation of own welfare by a household is another important indicator.

Most of the surveyed households (71.0%) refer to themselves as middle income, 26.8% - needy or extremely needy and 2.2% - slightly above the average. None of the households described themselves as "rich" (high income).

The welfare self-assessment of the seasonal households is statistically significant higher than that of the permanent residents.

Compared to other families of Tusheti, which group best describes your family?

	Household		
	Permanent	Seasonal	Total
Very poor	18.8%	0.0%	3.2%
Poor	37.5%	20.8%	23.7%
Medium income	43.8%	76.6%	71.0%
More than medium	0.0%	2.6%	2.2%
High income (Rich)	0.0%	0.0%	0.0%
Total:	100.0%	100.0%	100.0%

Nearly half of the surveyed households (46.9%) are engaged in some economic activities in Tusheti. Most of the activities (82.8%) have to do with tourism, 13.8% are shepherds.

These households pointed out that on average 43.09% of their incomes are derived from the economic activities in Tusheti.

Only 28.1% of the surveyed households receive banking service, mostly credits (44.4%) or personal accounts (40.7%).

	Household		
	Permanent	Seasonal	Total
Personal account(s)	100.0%	36.0%	40.7%
Money order	.0%	32.0%	29.6%
Commercial transfers	.0%	32.0%	29.6%

Credit	.0%	48.0%	44.4%
Other	.0%	20.0%	18.5%

4.3 Property

In all, the surveyed households own 649 288.00 m² land (the average of 6907.32 m² per household). In Tusheti, the surveyed households own the total of 193 983 m² (the average of 1 991.95 m²).

Curiously enough, the permanent and seasonal residents of Tusheti own approximately the same area of the land within Tusheti (the average for a permanent residents is 1 847.35 m², with the average for a seasonal being 2 139.18 m²). Meanwhile, outside the region the households arriving in Tusheti on a seasonal basis own twice as much land as permanent residents (the average of 2 579.59 m² for a permanently residing household and 5 343.53 m² for a seasonal one).

The surveyed Tushetian households mostly own two-storey houses, 87.49 m² on average.

The houses are mainly stone-walled (86.2%), tin-roofed (74.7%), with merely 24.0% having the traditional Tushetian roofing.

Not infrequently the walls (46.8%) and doors and windows (44.7%) of the houses are in bad shape. The roofs (36.2%) and floors (30.9%) are in slightly better shape.

Apart from residential houses, 21.9% of the surveyed households own other facilities in Tusheti. The statistically reliable percentage of the permanent households possessing facilities in Tusheti is higher (47.1%) than that of the seasonal residents (16.5%).

47.6% of those having facilities in Tusheti have a barn (formerly a house); 33.3% - a cattle shed; 19.0% - a shepherd's cottage and 19.0% - a family hotel.

4.4 Agriculture

Last year, the surveyed households produced/harvested the agricultural products in the average amounts shown in the table below:

	in All Areas (including Tusheti)	in Tusheti only
Potatoes	732.34 kg.	875.31 kg.
Haricot	8.55 kg.	0.63 kg.
Maize/maize flour	290.43 kg.	0.00 kg.
Wheat/wheat flour	299.47 kg.	0.00 kg.
Vegetables	133.44 kg.	35.63 kg.
Beef	59.67 kg.	11.58 kg.
Pork	1.05 kg.	0.00 kg.
Mutton	17.29 kg.	12.95 kg.

Bird meat	7.61 kg.	1.97 kg.
Fish	0.69 kg.	0.05 kg.
Sunflower beans	0.03 kg.	0.00 kg.
Eggs	291.36 piece	57.56 piece
Milk	788.45 l.	758.62 l.
Cheese/butter	161.47 kg.	150.50 kg.
Grape	101.70 kg.	0.00 kg.
Honey	1.86 kg.	0.00 kg.
Fruit	84.11 kg.	21.67 kg.
Other	125.00 kg.	0.00 kg.

Understandingly, the households permanently residing in Tusheti produced a statistically significantly larger amount of potatoes, poultry and milk than the seasonal ones.

	Household	
	Permanent	Seasonal
Potatoes in Tusheti	1647.06	709.24
Poultry in Tusheti	4.29	1.47
Milk in Tusheti	1951.25	489.86

The average number¹ of the cattle and poultry owned by the surveyed households is given in the table below:

Total livestock	Mean
Cattle (Total)	6.05
Milk cow	3.76
Pig	0.10
Horse	1.35
Bull	0.14
Donkey/mule	0.08
Sheep	18.96
Goat	0.67
Poultry	16.91
Bee hive	0.45

¹ The cattle and poultry both in Tusheti and elsewhere are implied.

53.4% of the surveyed households own livestock (cow/bull) that nearly all of them (92.6%; i.e. 52.6% of all the households) send to the village pastures owned by the village administration. Besides, the permanent residents of Tusheti have their cattle grazing in the woods (41.7%) or close to the houses or hay-fed (50.0%).

9.4% (9 households) of the surveyed cultivate 1.5-6 ht of the local administration lands.

Whether they cultivate the public lands or have their cattle grazing there, most of the households (87.1%) did not conclude the relevant land tenure contracts. Only seven of them have long- or short-term lease agreements.

4.5 Sheep Breeding

The shepherds say that 60-70% of households in Tusheti are engaged in sheep breeding, with the flocks of 300-400 sheep on average per household and some even have 2000 sheep.

The so-called "Tushetian sheep" adapted to the mountainous area and freezing temperatures is most widespread.

„It's a good migratory sheep. Other breeds will not do here in this rugged area. Meanwhile, the Tushetian sheep is well adapted to it and our severe climate, too..."

The shepherds' focus group.

The shepherds think that the "Tushetian Sheep" is on the brink of extinction.

„There used to be 100 000 sheep here of which fewer than 25 000 are still available because of the shrinking pastures..."

The shepherds focus group.

The sheep is not infected with anthrax, foot-and-mouth disease, smallpox, or rabies owing to the vaccination. However, the vaccines are reportedly very expensive.

„You need plenty of money to buy the vaccine."

The shepherds' focus group.

The shepherds sell lamb and cheese but not wool, which is not profitable.

„The shepherds throw the wool away for it is merely 80 tetri a kilo. [...] Meanwhile, shaving and transportation costs 1.20 GEL, so one gains no profit".

The shepherds' focus group.

A lamb is 70-100 GEL. Last year some Arabs bought lambs for 150 USD each.

One kg. of cheese costs 3 – 4 GEL but it has to be taken down to Alvani.

„Who will come up here? We have to take cheese down to Alvani where it is sold at the local market for 3 GEL a kg".

The shepherds focus group.

The rising fuel prices have made cheese trade unprofitable.

„The fuel prices have gone up, so fewer products are taken for sale".

The shepherds' focus group.

The shepherds confirm the information that instead of Tusheti the sheep has been taken to a nearby Khevsureti region recently.

„They'd rather go there. Quite a few Tushetians prefer Khevsureti because of the heavy snowfalls even in spring and mountainous passes to Tusheti“.
The shepherds' focus group.

The main reason is expenses: due to the transportation costs and unavailability of appropriate roads taking the sheep to Khevsureti is more profitable.

„People try to avoid high costs“.
The shepherds' focus group.

Meanwhile, the shepherds believe that there are better pastures in Tusheti.

„There are fewer cattle, so the pastures are better...“
The shepherds' focus group.

The inappropriate roads in Tusheti, which make it unprofitable to take sheep up there, may result in elimination of the sheep breeding.

„The expenses are higher than the profit, so you have to sell everything and leave the place.“
The shepherds' focus group.

4.6 Use of Natural Resources

All the permanent households in Tusheti (100%) gather wood in the forest, with the relevant number for the seasonal residents being 53.2%. The difference is statistically significant.

Only a “small amount” of wood is gathered by 67.8% of the households, while 28.8% of them say they gather a “moderate amount” thereof and some do it only “occasionally” (49.2%) or “rarely” (45.8%). Nearly all the households (98.3%) cut trees exclusively for personal use.

Only 15.6% of the surveyed households fell trees for timber. 66.7% say they do so in “small amounts”, 26.7% - in a “moderate amount”, 40.0% - “occasionally” or 53.3% - “rarely”. All the households (100%) cut trees for timber for personal use only.

37.5% of the surveyed households gather mushrooms, herbs and berries in the woods in mainly “small” (72.2%) or “average amounts” (25.0%). Some of them do so “occasionally” (50.0%) or “rarely” (41.7%). Nearly all the households gather mushrooms, herbs and berries for personal use only.

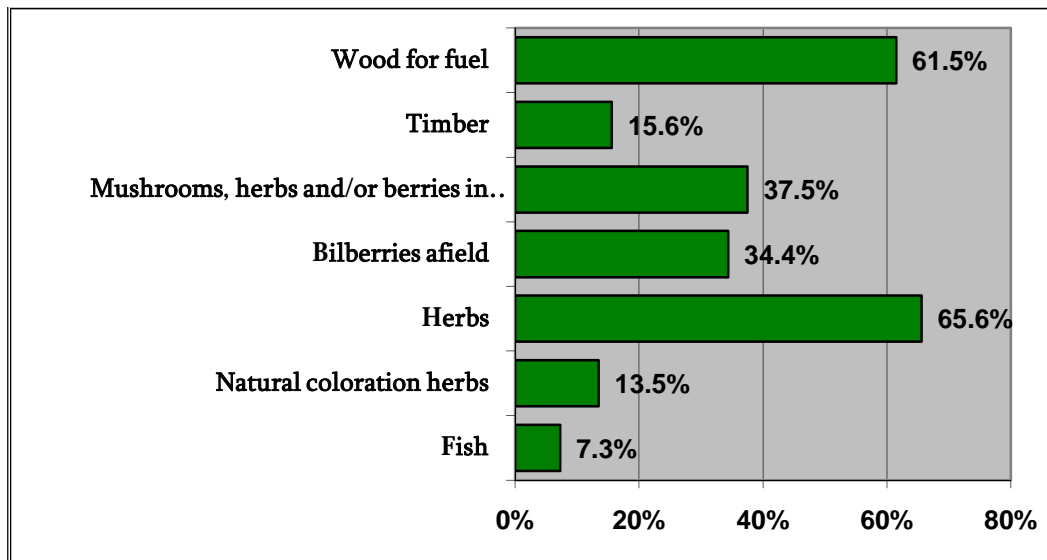
34.4% of the surveyed households gather berries (bilberry) afield. The berries are gathered in “small” or “moderate amounts” (72.7% and 27.3% respectively), while 48.5% of the households only “occasionally” or “rarely” do so. All the households pick berries for personal use only.

65.6% of the households gather herbs in “small” (63.5%) or “average amounts” (30.2%); some say they do so only “occasionally” (55.6%) or “rarely” (31.7%). Nearly all the households (92.1%) gather them for personal use only.

Only (13.5%) of the surveyed households gather the natural coloration herbs. Most of them do so in “small” (76.9) or “moderate amounts” (23.1%); some of them “occasionally” (69.2%) or “rarely” (30.8%). The natural coloration herbs are gathered for personal consumption solely (100%).

Only 7.3% of the surveyed households go fishing in a nearby river or a stream.

Use of Natural Resources



In view of the surveyed households, the aforesaid resources (fish, wood, building materials, berries, mushrooms, medicinal/coloration herbs etc.) make up 8.36% on average of their incomes.

During the focus group discussion, the rangers mentioned that the Tusheti population, whose main activities are cattle and sheep breeding, use the forest resources (the wood, mushrooms, berries etc.) of the protected territories in small quantities.

„The locals are not focused on it. They are mainly cattle and sheep breeders, so that's why they need wood and pastures. No other natural resources are exploited in the Tusheti protected areas.“

The rangers' focus group

The pasture utilization fee goes into the local budget, while the rangers believe that since the pastures are within the protected area, it should be used for the maintenance of the National Park.

4.7 Use of Natural Resources by Village

As it is mentioned above, the survey was limited to 96 households (399 persons), which were presented in 19 villages of Tusheti for the moment of survey. There were 1-4 households in the most part of these villages.

In the following, is discussed the exploitation of the natural resources by only rather big (5 households and more) villages.

- Omalo

Kvemo Omalo - 28 households; Zemo Omalo - 5 households; Omalo - 2 households

In Omalo only 3 households cultivate the public lands.

24 households have their cattle grazing on the village pastures or state land and 3 households – in the wood.

26 households gather wood in the forest (one of them – “big amount”, “routinely” and “for sale”); timber – 8 households (one of them – “big amount” and “routinely”).

15 households gather mushrooms, herbs and berries in the woods; 9 households gather berries (bilberry) afield.

18 households gather herbs (one of them – “big amount”, “routinely” and “for sale” and another – “routinely”); 5 households gather the natural coloration herbs.

4 households go fishing.

6 households facing the problems with the Administration of the protected areas in terms of the exploitation of these natural resources.

- Dartlo

12 households

In Dartlo only 1 household cultivate the public lands.

4 households have their cattle grazing on the village pastures or state land and nobody – in the wood.

4 households gather wood in the forest (one of them – “big amount” and “routinely” and another - “routinely”); timber – 1 households.

3 households gather mushrooms, herbs and berries in the woods; 3 households gather berries (bilberry) afield (one of them – “routinely”).

8 households gather herbs (one of them – “big amount” and “for sale”); 1 household gather the natural coloration herbs.

No households go fishing.

5 households facing the problems with the Administration of the protected areas in terms of the exploitation of these natural resources.

- Diklo

10 households

In Diklo only 1 households cultivate the public lands.

All 10 households have their cattle grazing on the village pastures or state land and 1 – also in the wood.

6 households gather wood in the forest; timber – 2 households.

5 households gather mushrooms, herbs and berries in the woods (one of them – “routinely”); 6 households gather berries (bilberry) afield.

9 households gather herbs; 2 households gather the natural coloration herbs.

No households go fishing.

5 households facing the problems with the Administration of the protected areas in terms of the exploitation of these natural resources.

- Dano

5 households

In Dano only 1 household cultivate the public lands.

All 5 households have their cattle grazing on the village pastures or state land and nobody – in the wood.

2 households gather wood in the forest; timber – no households.

1 household gather mushrooms, herbs and berries in the woods; 4 households gather berries (bilberry) afield.

4 households gather herbs (one of them – “big amount” and “routinely” and another - “routinely”); 2 households gather the natural coloration herbs.

One household go fishing.

2 households facing the problems with the Administration of the protected areas in terms of the exploitation of these natural resources.

- Shenako

5 households

In Shenako no household cultivate the public lands.

4 households have their cattle grazing on the village pastures or state land and 1 – in the wood.

All 5 households gather wood in the forest; timber – 2 households (one of them – “big amount” and “routinely”).

3 households gather mushrooms, herbs and berries in the woods (one of them – “routinely”); 3 households gather berries (bilberry) afield.

4 households gather herbs; 1 household gather the natural coloration herbs.

No households go fishing.

One households facing the problems with the Administration of the protected areas in terms of the exploitation of these natural resources.

Use of Natural Resources

	HH	Wood	Timber	Mushroom, herbs and berries in the woods	Berries (bilberry) afield	Herbs	Natural coloration herbs	Fishing
Total:	96	59	15	36	33	63	13	7
Kvemo Omalo	28	22	7	13	8	15	5	4
Zemo Omalo	5	3	1	2	1	3	0	0
Omalo	2	1	0	0	0	0	0	0
Dartlo	12	4	1	3	3	8	1	0
Diklo	10	6	2	5	6	9	2	0
Dano	5	2	0	1	4	4	2	1
Shenako	5	5	2	3	3	4	1	0

4.8 Hunting

Most of the surveyed say that after the ban, hunting has been at a standstill in Tusheti. Only 19 respondents pointed out at various category hunters who, in their view, still go hunting. The

majority of them (73.7%) pointed out at the visitors (city dwellers), while merely 5.3% referred to foreigners arriving in Tusheti on hunting tours. Interestingly enough, none of the respondents mentioned hunting by the locals.

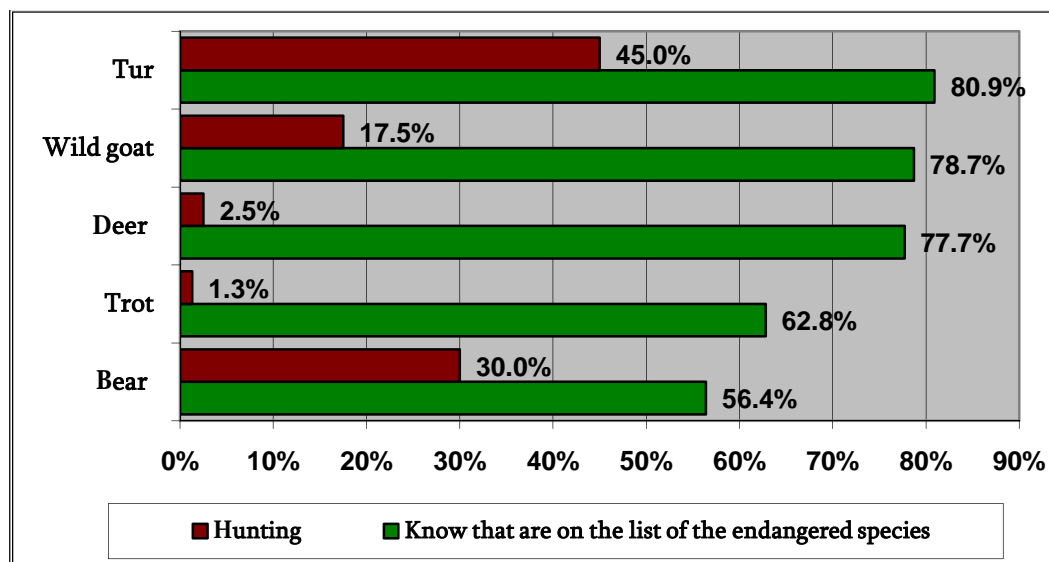
67.7% found it hard to answer the question which the best hunting season was in Tusheti, however, 13.5% referred to autumn.

According to the respondents, the tur (45.0%) was the most hunted animal in Tusheti, followed by the bear (30.0%), hare (22.5%) and wild goat (17.5%).

The surveyed say that the Tushetians mostly hunt for meat (53.7%) and for entertainment (29.6%). 9.3% mentioned the tradition as the reason behind hunting and only one of them said that the locals go hunting for trophies (skin, horns).

Most of the surveyed are aware that the tur, wild goat, deer, Lynx and bear are on the list of the endangered species. However, as said above, some of them claim that those are still hunted in Tusheti. (See the figure).

*Which are the most hunted animals in Tusheti? * Do you know that the following animals are on the list of the endangered species?*



Nearly all the surveyed (96.9%) know about the ban on hunting in Tusheti.

The majority (64.0%) believe that the ban on hunting is necessary or else, the unique local species will be extinct. At the same time, 28.0% think that hunting should be outlawed only for visitors (city dwellers) for hunting is a tradition in Tusheti so, it should be allowed for the locals. Several respondents think that hunting predators (wolf) should be licensed because of the harm they do to the sheep.

During the focus group discussion, the rangers said that in the past some high officials used to hunt from helicopters and they were unable to do anything about it.

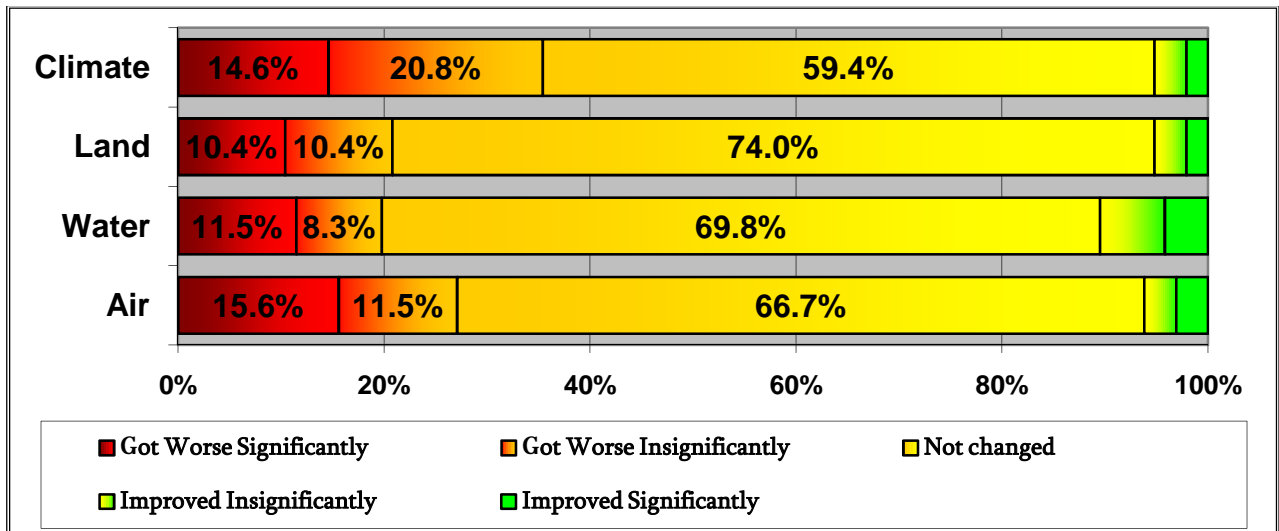
They think that the locals don't hunt for subsistence or profit.

They also think that Tusheti would receive much more visitors if the ban on hunting was lifted. They suggested licensed hunting in specially designated certain areas.

4.9 Ecological Awareness

The surveyed think that the environment (ecology), namely, the climate and the air have by and large remained unchanged or worsened in the last 5 years. (See figure.)

In your opinion, how has the environment (ecology) changed over the last 5 years?



The environment awareness of the surveyed population is fairly high: to half of them (50.0%) the “environment” is the “entire Georgia”, to 22.5% “the earth and its biosphere and only 2.5% regards “environment” as their “village and its surroundings”.

Merely a small percentage of the respondents (24.2%) place the responsibility for the maintenance/preservation of the local natural resources on the State, while the others believe that “individuals” (33.7%) and “the entire community” (33.7%) should take care of them.

The surveyed intend to contribute to the environment protection: 53.1% claim that “they will not pollute the environment” and 42.7% are going “to put work/time and energy into it”. Merely 4.2% limited themselves to a “moral support”.

During the focus group discussions it was mentioned that protected areas (the so-called “sacred woods”) were traditional to Tusheti, so the locals took a good care of the natural resources.

„The population have always exploited and protected the resources”.
The ranger’s focus group

„The lifestyle of the people who have lived here for centuries has been harmless to the environment: no deforestation, few landslides or avalanches. The long-standing traditions should be taken into account”.
The hotel owners focus group

„It was the community that protected them. The community was strong, so it disposed of and controlled everything in Tusheti”.

The ranger’s focus group

From the ancient times until the imposition of the Communist rule, with its collective farms and other management bodies, it was the elected elders that had determined the extent of the

exploitation of the common natural resources. Also, there had been the so-called “consecrated sites”, where the locals used to gather for a joint worship, sacrifice sheep etc. There still are such places all over Tusheti. Certain land lots are assigned to each “consecrated place”: it may be a lawn, wood, mountain etc.

„The locals used to know where to cut trees. The entire territory, even the pastures used to be clearly zoned. We need specialists to harmonize the zones with the requirements of the locals”.

The hotel owners focus group

The consecrated places have been determined by deeply rooted traditions and these traditions are worthy of ethnographic studies.

Such places are off-limits for women. Any activities in these places, such as wood cutting or gathering, grazing sheep, mowing, gathering berries or hunting are against the traditions some of which have preserved to this day.

„According to an ancient tradition, if anyone killed a bear, he was barred from hunting”.

The ranger’s focus group

There used to be quantitative restrictions on hunting:

„If a hunter killed one hundred beasts, he would burry his gun and never use it again”.

The ranger’s focus group

The environment awareness is still high among the Tushetians.

„A protected territory is not the one where everything is banned. It’s not only about themselves but their children, the future generations, tourists and the country that the locals think about”.

The ranger’s focus group

4.10 Protected Areas

94.8% of the surveyed know that Tusheti has been proclaimed a protected area.

The majority (57.8%) believes that since the opening of the National Park in 2005, the natural resources have been much less accessible.

The third of the surveyed (33.0%) had problems with the Administration of the protected areas in terms of the exploitation of the natural resources. The locals say that obtainment of wood for fuel is problematic. They believe that “wood cutting should be permitted to the locals”.

The table below represents the number of households in each village, facing the problems with the Administration of the protected areas in terms of the exploitation of the natural resources.

	Households	Have problems with Administration of PA
Total:	96	30
Kvemo Omalo	28	5
Zemo Omalo	5	1
Omalo	2	0
Dartlo	12	5
Diklo	10	5
Dano	5	2
Shenako	5	1
Tchesho	4	2
Begela	4	3
Chigo	3	2
Shtrolta	3	0
Kumelaurta	3	0
Bochorna	2	1
Dochu	2	1
Chala	2	1
Khiso	2	0
Kvavilo	2	1
Chiglaurta	1	0
Girevi	1	0

The designation of Tusheti protected areas has resulted in the restriction of access to timber which has affected guesthouse owners that needed timber for construction or repair.

„The old or rotten trees, which fall in public woods are inappropriate for timber“.

The hotel owners focus group

„You can build nothing in our village. For instance I'd like to set up a café in my yard but it's impossible“.

The hotel owners focus group

The shepherds' biggest problem related to the protected areas is wood for fuel.

„We have to bring wood from Omalo. There is a ban on tree cutting here ...“

The shepherds' focus group

„There is a lot of trouble with wood. A shepherd has to go to Omalo, take out a certain receipt and some drawing, then find a truck. It's too much trouble for local who has 30 cows to tend to“.

The shepherds' focus group

The shepherds also complaint that 2 m³ timber allocated per household is not enough to repair a house.

„It's not enough even for a room“.

The shepherds' focus group

The shepherds say that it takes 5-10m³ timber to repair a house.

The rangers said that the local population was not affecting negatively the National Park resources. On the contrary, the woods were being renewed. Trees started growing in the sub-alpine zone were the pastures used to be. The rangers think that the change of the vertical zoning has to do with the climate change.

„Affected by the global climate change, the zones are moving upwards “.

The ranger's focus group

Some of them complain about the zoning.

„They don't let us into the pastures, saying it's theirs...”

The shepherds' focus group

„The rangers ask to dismantle the houses that our grandparents used to live in.

Where should I take the sheep?!”

The shepherds' focus group

The rangers pointed out that the zoning of the Tusheti protected areas was and still is incorrect – the reserves were delineated close to the villages, which is unacceptable to the villagers.

„Since there are no other pastures, the cattle grazes in the reserve.”

The ranger's focus group

„The reserve is in places where there are no animals, while where they are, they are unprotected!”

The shepherds' focus group

Last year the Agency of the Protected Territories conducted a research as a result of which the zoning should have changed but it has not as yet.

Talking about the problems facing the protected areas, the rangers pointed out at the off the route helicopter flights scaring the wild life as the biggest threat.

„The route should be clear-cut, which is not the case in the protected areas. It makes protection difficult. The helicopters intrude into let's say the tur or Caucasian goat reproduction areas and scared them off. There should be certain helicopter entry regulations”.

The ranger's focus group

The rangers also complained about the unavailability of their official status. They don't have certificates of employment and they are not armed.

„Intruders don't care what we say or do. They ask who we are and we are unable to provide any formal document. This guy here is wearing the ranger uniform but it does not matter much [...]. There are civilians who wear military uniforms, too.

Why not wear that of a ranger?”

The ranger's focus group

They finally said the trails had to be arranged too.

The rangers regularly take stock of the protected area animals and the data are entered into the database.

The rangers reported that according to last year's data, the population of wild goat and tur had increased.

The rangers say they have been supported by "Nakresi" NGO.

„last year they places photo traps in the areas frequented by the animals. A number of animals and wild birds were recorded that testifying of a positive effect of the protected area. They are still here and are going to stay for some time longer to monitor the wild life“.

The ranger's focus group

Interestingly enough, it is not the institutions (the Agency of Protected Areas, the Ministry of Environment Protection and Natural Resources, etc.) but the individuals that the population believe administer the said areas. Answering the question: "Do you know the Management of the protected area?", most of them pointed out at Mr. Anzor Gogotidze, the local Administration Head.

16.7% of the surveyed had heard about the twin-national park. Answering the question: "which is the national park twinned with that of Tusheti?", the respondents mainly mentioned those of Vashlovani and Lagodekhi.

4.11 Development Projects

Most of the respondents (68.5%) believe that the support to the traditional agriculture is urgent in order to improve the socio-economic conditions of the Tushetians. 30.3% named tourism as a higher priority.

As to the power supply schemes, 51.1% of the surveyed prefer the alternative sources of power (micro power plants, helio systems). At the same time 35.6% think that a centralized power supply is a good option.

In case of a project regarding Tusheti, most of the locals (44.8%) say that they'd rather receive the project-related information (the goals, plans, the results etc.) through the representatives of the organization(s) implementing it. In terms of priorities, the distribution of the information supply is shown in the table below:

If there is a project regarding Tusheti, which do you think is (are) the best way to spread the relevant information (the objectives, plans, research results, etc) among the locals?

Mass Media (Press/TV)	19.8%
Through the most authoritative persons in the village (informal leaders of the village)	5.2%
Representatives of Local government (District)	9.4%
Representatives of Local government (Sakrebulo)	11.5%
Representatives of organization(s) implementing the project	44.8%
Representatives of Georgian NGOs	1.0%
Representatives of international organizations	0.0%
Special Newsletters distributed in the Village	8.3%
Total:	100.0%

4.12 Tourism

A bigger part of the surveyed (79.1%) believes tourism is very important to the prospects of Tusheti. 17.6% thinks tourism just brings profit to those engaged in the business. Two of the respondents said that tourism is not beneficial to Tusheti, while only one defined it as environmentally and/or culturally harmful.

The majority of the respondents (85.4%) think that local scenery is the biggest attraction to visitors, while 12.5% pointed out at the cultural traditions.

The respondents think that the scenery – the mountains, valleys, rivers (95.8%) are most attractive to visitors followed by the flora (65.6%) and fauna (67.7%).

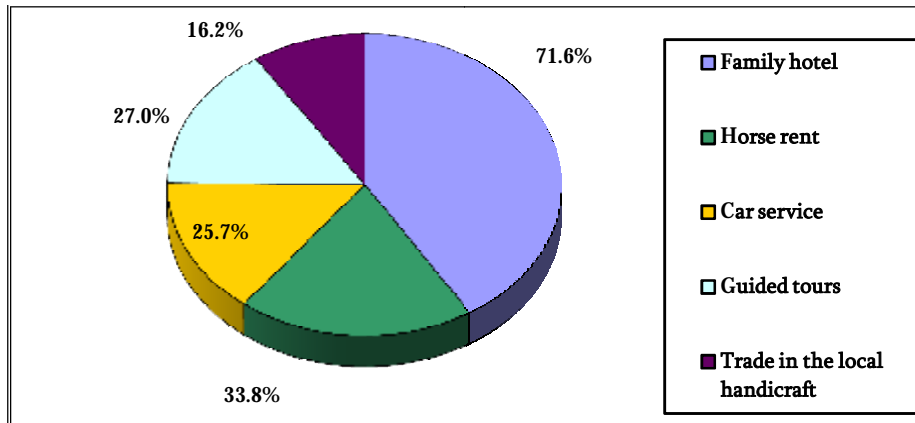
In terms of the wild life, the order of the priorities was as follows: first – the tur (73.7%), second – wild goat (69.5%) and the third – “predator birds” – the eagle, vulture etc. (74.7%).

27.2% of the surveyed households are engaged in tourism-related activities, while 51.0% are not but would like to and 21.9% have no wish to have to do with tourism at all.

It should be said that no statistically significant difference between the responses of the permanent households and the seasonal ones was detected.

As to the tourism services that the surveyed households can offer, the family hotels prevail (71.6%). The other services are specified in the figure below:

What kind of service can you offer to tourists?



According to the family hotel owners in Tusheti, there are about 30 of them there, predominantly in Omalo, the regional center.

*„There are much fewer family hotels elsewhere in Tusheti”.
The hotel owners focus group*

Apart from overnight stays, the hotels accommodate tourists with horse-riding, tours in Tusheti and Khevsureti and, also, the so-called “Tushetian games”.

„We have not got a clearly drawn up plan as yet, but the games were included into the last year's festival and both the tourists and locals enjoyed them”.
The hotel owners focus group

The rangers point out at tourists as the main polluters and intruders into the off-limits areas. The locals support the rangers in controlling the tourists.

„They keep an eye on both foreigners and Georgians and report to us case-by-case. They try to assist us in controlling the area”.
The ranger's focus group

The hotel owners suggest providing camping areas for a small fee.

Some of the hotel owners say that most of the tourists are foreigners, with group bookings being frequent enough.

Tourists are usually accompanied by an Agency guide who merely show them around with no story to tell.

„Meanwhile, there is a lot to say”.
The hotel owners focus group

The hotel owners suggest training the local guides, mostly in English.

„No command of the English language is the biggest problem. Otherwise, we know what to tell them”.
The hotel owners focus group

An English course was run last year but it was in spring when the locals are very busy. The hotel owners say the best time for an English course is December-January.

A bookkeeping course is also necessary. There was a 5-day one last year but it was too short.

Unavailability of the appropriate roads is another obstacle to tourism.

„This June I turned down about ten bookings because of the roads. Late May and early June is the best holiday time. For it is then that pines are in bloom, which is very good for children. People know about it and they want to come but roads are in bad shape. If the roads are put in, tourists will start arriving from may”.
The hotel owners focus group

„But for the roads, the hotels would be fully booked in May and June”.
The hotel owners focus group

Power supply is another hindrance to tourism. The solar batteries cannot power refrigerators and regular product supply from the lowland is too expensive due to transportation costs. Doing the laundry is also a hard task – the locals hand wash and press by coal irons. Ruptured water pipes hinder a regular water supply in Omalo.

The hotel owners believe that if the two problems (the roads and power supply) are solved, tourism to Tusheti will be cheap enough that resulting in the influx of foreign tourists and local holiday makers.

5 Conclusions and Recommendations

5.1 Conclusions

- § 17 households (17.7%) stated that most of the time they live in Tusheti. Most of the Tushetian households (80.2%) are the permanent residents of the other villages in Kakheti, mainly, Kvemo (Lower) and Zemo (Upper) Alvani and Laliskuri.
- § Of the households spending time in Tusheti in the summer months, 55.7% come for work related reasons.
- § The average monthly income of the surveyed households (families) amounts to 826.71 GEL. The big part of this income (658.82 GEL) comes from "Sales of agricultural products HH produced".
- § On average, the monthly expenses of the surveyed households amount to 500.28 GEL reducing to 204.11 GEL during household stay in Tusheti.
- § Most of the surveyed households (71.0%) refer to themselves as middle income.
- § Nearly half of the surveyed households (46.9%) are engaged in some economic activities in Tusheti. Most of the activities (82.8%) have to do with tourism, 13.8% are shepherds.
- § In Tusheti, the surveyed households own the total of 193 983 m² (the average of 1 991.95 m²). Meanwhile, the permanent residents of Tusheti own only half as much land outside the region compared with the households arriving there on a seasonal basis.
- § Understandingly, the households permanently residing in Tusheti produced a statistically significantly larger amount of potatoes, poultry and milk than the seasonal ones.
- § 53.4% of the surveyed households own livestock (cow/bull) that nearly all of them (92.6%; i.e. 52.6% of all the households) send to the village pastures owned by the village administration. Besides, the permanent residents of Tusheti have their cattle grazing in the woods (41.7%) or close to the houses or hay-fed (50.0%).
- § There is discrepancy between the information provided by the shepherds and survey data: the shepherds say that 60-70% of households in Tusheti are engaged in sheep breeding, with the flocks of 300-400 sheep on average per household and some even have 2000 sheep. At the same time, survey shows that only 10% of surveyed households reported they own sheep.
- § The inappropriate roads in Tusheti make it unprofitable to take sheep up there. Locals think it may result in elimination of the sheep breeding in Tusheti; recently the sheep has been taken to a nearby Khevsureti region instead of Tusheti. The main reasons are risks and expenses: due to the unavailability of appropriate roads, sheep lost on Tusheti way is big, so taking the sheep to Khevsureti is more profitable.
- § Tusheti population uses the forest natural resources (the wood, timber, mushrooms, berries, herbs, fish etc.) of the protected territories in very small quantities and only for self-consumption. This natural resources make up 8.36% on average of their incomes.
- § Most of the surveyed say that after the ban (in 2005), hunting has been at a standstill in Tusheti. The majority (64.0%) believe that the ban on hunting is necessary or else, the unique local species will be extinct.

- § The environment awareness of the surveyed population is fairly high. Population thinks that protected areas (the so-called “sacred woods”) were traditional to Tusheti, so the locals took a good care and sustainable use of the natural resources.
- § The majority (57.8%) believes that since the opening of the National Park in 2005, the natural resources have been much less accessible. The third of the surveyed (33.0%) had problems with the Administration of the protected areas in terms of the exploitation of the natural resources. The main problems are related with fuel wood cutting.
 - ü The main cause of the conflict is the ban of use of so called “fallen trees”.
- § Population thinks that zoning of protected areas in Tusheti was made incorrectly from the beginning – the reserves were delineated close to the villages, which is unacceptable to the villagers.
- § The rangers complained about the unavailability of their official status - they don't have certificates of employment and they are not armed.
- § As to the power supply schemes, 51.1% of the surveyed prefer the alternative sources of power (micro power plants, helio systems). At the same time 35.6% think that a centralized power supply is a good option.
- § A bigger part of the surveyed (79.1%) believes tourism is very important to the prospects of Tusheti.
- § 27.2% of the surveyed households are engaged in tourism-related activities, while 51.0% are not but would like to and 21.9% have no wish to have to do with tourism at all.
- § The hotel owners suggest training the local guides, mostly in English. An English course was run last year but it was in spring when the locals are very busy. The hotel owners say the best time for an English course is December-January. A bookkeeping course is also necessary.
- § The hotel owners believe that if the two problems (the roads and power supply) are solved, tourism to Tusheti will be cheap enough that resulting in the influx of foreign tourists and local holiday makers.
- § The issues related with land tenure were not claimed by any surveyed respondent, nor during the focus group discussions. Thus, this issue is not perceived by locals (including shepherds) as a problem.

5.2 Recommendations

The information obtained during the study gives an opportunity to provide the following recommendations in order to improve the social-economical condition of Tusheti:

- § The rehabilitation of the access road is one of the main priorities – this will support development of the tourism, as well as, the traditional sheep breeding.
- § It is necessary to develop the the alternative sources of power (micro power plants, helio systems).
- § It is essential to revise zoning of protected areas, in order to find the compromise between environmental protection and primary needs of local population.

- ü The collecting information about traditional protected areas and use of this information for rezoning of the protected areas would facilitate the adaptation of local communities to the margins and restrictions of the protected areas as it would be based on already existed restrictions.
 - ü It is desirable to give to local population the right to use the “fallen trees” with some observance of regulations.
- § The development and providing of training programs in English and bookkeeping for the locals involved in tourism businesses (hotel owners, guides, etc.).
- ü These training courses should be conducted in December-January, when the locals are not too busy.

Annex 1

Annex 1.1: Survey Questionnaire

Interviewer Instruction:

The research concerns the households. Household is a group of people who live together and have at least partially common family budget or property (income, expense, dinner, household economy).

The questionnaire is designed to be administered to the Most Informed Member of the Household.

The sections written in *italic* are for the interviewers' use only and should not be read out loudly during the actual interview.

While recording the answers, please indicate plot size in square meters (1 hectare = 10 000 sq. m.). All questions should be answered; incomplete questionnaires will not be accepted. Multiple answers are only allowed for the questions specially specified as: "You can give more than one answer."

Interviewer: Read the following to the respondent:

Hello, my name is _____ and I represent the Institute of Social Researches.

We are conducting a survey. The aim of research is to describe the social and economical condition of the families living in your region. Your answers will be very helpful for the successful implementation of this project.

The data obtained as a result of the interview will be processed together with information from other respondents and used for the general application solely.

Thank you for your cooperation!

R1. Date of interview: " _____ " _____ 2010

R2. Name of the settlement: _____

R3. For how many years has your family lived here? (*Write down*) _____

R4. Do you and your family members live mostly here or in another village/town?

1. In this village *Go to section H*
2. In other village of Kakheti (Zemo or Kvemo Alvani, Laliskure) (*Underline*)
3. In Tbilisi
4. Other (*indicate*) _____

R5. What is the main reason for your and your family members' arrival herein summer?

1. Work
2. Holiday
3. House maintenance
4. Other (*indicate*) _____

Section "H" - Household

To interviewer: The questions of this section concern an entire household even when the other family members have not come to the protected area in Tusheti.

H1. How many people currently live in your Household? _____

H2 – H9: Personal data of household members

To interviewer: In the second row of the given table, first – enter the name of respondent, next – names of adults (18 years-old and older) and then – names of children (17 years-old and younger)

	Name of HH member	Adults (18 and older) older <---> younger						Children (17 and younger) older <---> younger				
		1	2	3	4	5	6	7	8	9	10	11
	Number of HH member											
H2.	Is He/She currently here (in Tusheti)? 1 = Yes, 2 = No											
H3.	Relation of family members to the head of household (see codes)											
H4.	Age (IF UNDER 1 YEAR = 0)											
H5.	Gender 1 = female, 2 = male											
H6.	Level of education (see codes)											
H7.	Marital status (see codes)											
H8.	Primary occupation of each adult family member at this time. (see codes)											
H9.	Sector of primary occupation at this time (see codes)											

Codes:

H3. Relation of family members to the head of the household

1. Householder/ Head of HH
2. Wife/Husband of Head of HH
3. Son/daughter, daughter-in-law/ son-in-law of householder/his wife
4. Parents, grandparents of householder/his wife
5. Brother/sister of householder/his wife
6. Grandchild of householder/his wife
7. Uncle, aunt, niece, nephew of householder/his wife
8. Other relative of householder/his
9. Non relative

H6. Level of education

1. Less than Elementary
2. Incomplete Secondary
3. Complete Secondary
4. Special Technical (PTU, SPTU)
5. Incomplete higher (discontinued)
6. Student of higher institution
7. Higher

H7. Marital status

1. Married
2. Single (never married),
3. Divorced/separated
4. Widow/Widower

H8. Primary current occupation of each adult family member

1. Administrator/supervisor/ manager
2. Highly skilled white collar (specialist)
3. Less skilled white collar
4. Skilled worker
5. Unskilled worker
6. Business/entrepreneur person
7. Small scale farmer
8. Pensioner/disabled person (not employed)
9. Housewife
10. Student
11. Unemployed

H9. Sector of current primary occupation

1. Own business
2. Wage earner in private organization, company or enterprise
3. Foreign or international organization, company , enterprise or joint venture
4. Nongovernmental organization
5. State organization, company or enterprise
6. Government body
7. Private (own) farm
8. Other

H10. Do you and/or your family own any of the following?

Indicate Number of Items; No – 0

		A. HH Total	B. In Tushety
H10.1	Mobile Phone		
H10.2	Color TV set		
H10.3	DVD / Video player/recorder		
H10.4	Satellite antenna		
H10.5	Digital camera		
H10.6	Tractor		
H10.7	Car, minibus (van), truck		
H10.8	Electricity generator		

H11. How many members of your household live under the same roof and regularly share expenses and income? Please include those who currently are away for work and/or study remitting money. You can give more than one answer?

		No. of family member(s)
H11.1	Family members currently living at home and working in Tusheti	
H11.2	Family members currently living at home and working in other village of Kakheti	
H11.3	Family members currently away for temporary work and/or study in Tbilisi or other city of Georgia	
H11.4	Family members currently away for temporary work and/or study abroad	
H11.t	Total Number of Family Members	

Section "E" – Household Economy

E1. Please, remember your average monthly costs excluding the utilities.

To interviewer: The current costs imply daily expenses for food products, soap, detergents, toilet paper, shampoo, cigarettes, matches, candles, bulbs, dish washing liquids, petrol, bus and mini-bus fare, the press, etc.

	A. HH Total	B. In Tushety
Everyday expenses (GEL)		

No such expense within the past month – 0; I do not know -

999

E2. Please, remember your household's other average monthly long-term costs.

To interviewer: The long-term costs imply the expenses for clothing, footwear, furniture, bedding, towels, books, the stationary, education fees, vehicle maintenance (save the petrol), weddings, dowry, festivities, funerals, house decoration, repairs, agricultural expenses etc.

	A. HH Total	B. In Tushety
Long-term expenses (GEL)		

No such expense within the past month – 0; I do not know -

999

E3. Please, remember your household's average monthly utilities bills.

To interviewer: The utilities bills imply the monthly payments for power, gas and water supply, kerosine, wood, telephone etc.

	A. HH Total	B. In Tusheti
Utilities bills (GEL)		

No such expense within the past month – 0; I do not

know - 999

E4. Please tell me the amount of total cash income (in GEL) for all adult family members for the last month from each of the following sources:

To interviewer: READ OUT; IF NONE - 0

		Amount in GEL
E4.1	Salary/wages/income activities	
E4.3	Age/veteran/disability pensions/student benefits	
E4.4	Alimony	
E4.5	Child benefits	
E4.6	Dividends/shares/percentages	
E4.7	Income from rental property	
E4.8	Sales of agricultural products you produced	
E4.9	Value of in-kind payments for services	
E4.10	Remittances from relatives within Georgia	
E4.11	Remittances from relatives outside Georgia	
E4.12	Other	

E5. Are you and/or your family members engaged in any economic activities in the protected area in Tusheti?

1. Yes *continue*
2. No *skip to E8*

E6. What kind of activities?

To interviewer: You can get several answers

1. Activities related with Tourism
2. Sheep breeding
3. Other (*indicate*) _____

E7. What part of your income comes from these activities?

To interviewer: what percent of an overall family income comes from these activities

_____ % *indicate percentage*

E8. Compared to other families of Tusheti, which group best describes your family?

To interviewer: READ OUT; ONLY ONE ANSWER

1. Very poor
2. Poor
3. Medium income
4. More than medium
5. High income (Rich)
99. Difficult to answer (*DO NOT READ OUT*)

E9. Do you and/or family use service of any bank?

1. Yes *continue*
2. No *skip to P1*
3. I do not Know *skip to P1*

E10. What kind of banking service do you/your family use?

Banking Service		Yes	No
E10.1	Personal account(s)	1	2
E10.2	Money order	1	2
E10.3	Commercial transfers	1	2
E10.4	Credit	1	2
E10.5	Other (<i>indicate</i>) _____	1	2

Section "P" - Property

P1. What is the total size of plot area owned by your household (in all locations)?

_____ sq.m.

P2. Please, indicate the type, location of your plot and its size:

	Irrigated Lands	A. Elsewhere	B. In Tusheti
P2.1	Irrigated cultivation	sq.m.	sq.m.
P2.2	Orchard (including hazel nut/walnut trees)	sq.m.	sq.m.
P2.3	Vegetable garden	sq.m.	sq.m.
P2.4	Household area	sq.m.	sq.m.
P2.5	Other (<i>specify</i>)	sq.m.	sq.m.
	Non-irrigated Lands		
P2.6	Non-irrigated cultivation	sq.m.	sq.m.
P2.7	Pasture	sq.m.	sq.m.
P2.8	Non-fruit trees	sq.m.	sq.m.
P2.9	Fallow land	sq.m.	sq.m.
P2.10	Other (<i>specify</i>)	sq.m.	sq.m.
P2.t	Total area	sq.m.	sq.m.

I do not know – 999

Attention: compare the total plot area (P2.t) with the first answer (P1) above

P3. How many storeys are there in your house: _____

P4. Area of the house: _____ sq.m.

P5.1 Wall material:

1. Stone
2. Brick
3. Wood

P5.2 Roof material:

1. Traditional Tusheti Roof
2. Tile
3. Tin
4. Other (*indicate*) _____

P6. When was the house built? _____ century

P7. Condition of the house:

		condition			
		Good condition	Needs to be repaired slightly	Needs to be repaired seriously	It's destroyed and can't be repaired
P7.1	Walls	1	2	3	4
P7.2	Doors and windows	1	2	3	4
P7.3	Roof	1	2	3	4
P7.4	Floor	1	2	3	4

P8. Do you or your family own any other structures (save the residential house) in the protected area of Tusheti?

To interviewer: Any structure, in which the owner's time and/or money have been invested, should be considered

- 1. Yes *continue*
- 2. No *skip to P10*

P9. Describe the type of these building(s) or structure(s)

To interviewer: You can get several answers

P9.1	Hotel (Guest house)
P9.2	Shepherd's cabin
P9.3	Cattle-shed
P9.4	Cow-house
P9.x	Other (<i>indicate the type of a structure</i>) _____
P9.x	Other (<i>indicate the type of a structure</i>) _____
P9.x	Other (<i>indicate the type of a structure</i>) _____

P10. Do you cultivate any Sakrebulo (State) owned lands?

- 1. Yes Please indicate an approximate size of a cultivated land in hectares _____
hectares
- 2. No

P11. Do you graze your livestock at the Sakrebulo (State) owned land?

- 1. Yes
- 2. No

P12. What kind of agreement do you have for using Sakrebulo (State) owned lands?

- 1. Long-term lease Indicate for how many years _____
- 2. Short-term lease Indicate for how many years _____
- 3. No formal agreement
- 4. Other (*indicate*) _____

P13. Who do you pay for using Sakrebulo (State) owned lands?

1. Sakrebulo administration
2. Rayon administration
3. Nobody (skip to Section A)
4. Other (indicate) _____

P14. What payment method do you practice?

1. Cash
2. Part of produced goods
3. Other (indicate) _____

P15. How much does the average annual rent make (cash or equivalent) for using Sakrebulo (State) owned lands?

To interviewer: If the respondent pays in cash, indicate the annual amount of money. If the respondent makes in-kind payments, indicate the monetary value of product

P15.a Cultivation Land _____ GEL/per year

P15.b Grazing Land _____ GEL/per year

Section "A" - Agriculture

A1. Please indicate how much of the food products listed below (in kg) has your household produced during the last year?

To interviewer: Read out. If the respondent could not remember the amount – mark 999

		A. Total	B. In Tushety
A1.1	Potatoes	Kg.	Kg.
A1.2	Haricot	Kg.	Kg.
A1.3	Maize/maize flour	Kg.	Kg.
A1.4	Wheat/wheat flour	Kg.	Kg.
A1.5	Vegetables	Kg.	Kg.
A1.6	Beef	Kg.	Kg.
A1.7	Pork	Kg.	Kg.
A1.8	Mutton	Kg.	Kg.
A1.9	Bird meat	Kg.	Kg.
A1.10	Fish	Kg.	Kg.
A1.11	Sunflower beans	Kg.	Kg.
A1.12	Egg	piece	piece
A1.13	Milk	Lt.	Lt.
A1.14	Cheese/butter	Kg.	Kg.
A1.15	Grape	Kg.	Kg.
A1.16	Honey	Kg.	Kg.
A1.17	Fruit	Kg.	Kg.
A1.18	Other (indicate) _____	Kg.	Kg.

A2. How much livestock do you own?

To interviewer: Fill in each section ; No livestock – 0; I do not know - 999

	Number
A2.1	Cattle (Total)
A2.2	Milk cow

A2.3	Pig	
A2.4	Horse	
A2.5	Bull	
A2.6	Donkey/mule	
A2.7	Sheep	
A2.8	Goat	
A2.9	Poultry	
A2.10	Bee hive	

A3. Do you have any livestock in Tusheti?

1. I do not have any livestock *skip to Section N*
2. Yes, we have livestock *continue*

A4. Where do you feed/graze your livestock for much of the year?

To interviewer: You can get several answers

		Yes	No
A4.1	In the stalls or near the house	1	2
A4.2	At the village (Sakrebulo) pasture (pastures owned by the village administration)	1	2
A4.3	At the pasture of my own	1	2
A4.4	At the state land	1	2
A4.5	In the deep forest	1	2

Section "N" – Use of Natural Resources and Hunting

N1.1 Do you cut wood for fuel?

1. Yes *continue*
2. No *skip to N4.1*

N1.2 How many?

1. Small amount
2. Average amount
3. Big amount

N1.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N1.4 For what purpose?

1. For self-consumption
2. For sale
3. Partially for self-consumption, partially for sale

N2.1 Do you cut wood for timber?

1. Yes *continue*

2. No *skip to N3.1*

N2.2 How many?

1. Small amount
2. Average amount
3. Big amount

N2.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N2.4 For what purpose?

1. For self-consumption
2. For sale
3. Partially for self-consumption, partially for sale

N3.1 Do you pick mushrooms, herbs and/or berries in the woods?

1. Yes *continue*
2. No *skip to N4.1*

N3.2 How many?

1. Small amount
2. Average amount
3. Big amount

N3.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N3.4 For what purpose?

1. For self-consumption
2. For sale
3. Partially for self-consumption, partially for sale

N4.1 Do you pick bilberries afield?

1. Yes *continue*
2. No *skip to N5.1*

N4.2 How many?

1. Small amount
2. Average amount
3. Big amount

N4.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N4.4 For what purpose?

1. For self-consumption
2. For sale
3. Partially for self-consumption, partially for sale

N5.1 Do you collect herbs?

1. Yes *continue*
2. No *skip to N6.1*

N5.2 How many?

1. Small amount
2. Average amount
3. Big amount

N5.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N5.4 For what purpose?

1. For self-consumption
2. For sale
3. Partially for self-consumption, partially for sale

N6.1 Do you collect the natural coloration herbs?

1. Yes *continue*
2. No *skip to N7*

N6.2 How many?

1. Small amount
2. Average amount
3. Big amount

N6.3 How often?

1. Routinely
2. Sometimes
3. Rarely

N6.4 For what purpose?

1. For self-consumption

2. For sale
3. Partially for self-consumption, partially for sale

N7. Do you catch any fish to sell in the river, stream, and/or lake around here?

1. Yes *continue*
2. No *skip to N8*

N7.a How much do you earn a year out of this activity?

_____ GEL

N8. Please, indicate the percentage of the family income that the following resources account for: hay, fish, wood, building materials, berries, mushrooms, medicinal and coloration herbs etc.

_____ %

N9. Do you think the National Park established in 2005 has affected the accessibility of the said resources?

1. much less accessible
 2. somewhat less accessible
 3. unchanged
 4. somewhat more accessible
 5. much more accessible
99. Difficult to answer (*DO NOT READ OUT*)

N10. Do you get any problems with the protected area Administration in terms of obtainment of the said resources?

1. Yes *continue*
2. No *skip to N11*

N10.a What kind of problems?

(*indicate*)

N10.b What do you think is the way out?

(*indicate*)

N11. Who do you think are the people that most often go hunting in Tusheti?

To interviewer: SINGLE ANSWER

1. locals
2. city dwellers
3. foreigners
4. Other (*indicate*) _____

99. Difficult to answer (*DO NOT READ OUT*)

N12. When do they hunt most often?

To interviewer: *SINGLE ANSWER*

1. Winter
2. Spring
3. Summer
4. Autumn
99. Difficult to answer (*DO NOT READ OUT*)

N12.1 Please, indicate if there are specific hunting seasons: _____

N13. Which are the most hunted animals and birds in Tusheti?

To interviewer: *List out*

		Yes	No
N13.1	Tur	1	2
N13.2	Wild goat	1	2
N13.3	Deer	1	2
N13.4	Bear	1	2
N13.5	Lynx	1	2
N13.6	Jackel	1	2
N13.7	Hare	1	2
N13.8	Wolf	1	2
N13.9	Black Grouse / Caucasian Snowcock	1	2

N14. Why do you think most of the Tushetians go hunting ?

To interviewer: *DO NOT READ OUT, Match to the relevant option. SINGLE ANSWER*

1. Entertainment
2. Tradition
3. Trophies (skin, horns)
4. Meat
5. The sale of trophies/meat
6. Other (*indicate*) _____

N15. Do you know that the following animals are on the list of the endangered species

		I know	I do not Know
N15.1	Tur	1	2
N15.2	Wild goat	1	2
N15.3	Deer	1	2

N15.4	Bear	1	2
N15.5	Lynx	1	2

N16. Do you know that hunting has been banned in Tusheti?

1. Yes
2. No

N17. In relation to the ban on hunting, which statement do you most agree with?

To interviewer: READ OUT, SINGLE ANSWER

1. A ban on hunting is necessary or else the unique local species will become extinct
 2. Only the outsiders (city dwellers and foreigners) should be kept from hunting ; As to the Tushetians, hunting is their traditional sport and it should be allowed to continue
 3. Only hunting for trophies (skin, horns) for a large sum should be permitted
 4. All hunting should be permitted
 5. Other (*indicate*)_____
99. Difficult to answer (*DO NOT READ OUT*)

Section "I" – Information and Awareness

i1. In your opinion, how has the environment (ecology) changed over the last 5 years?

		Got Worse Significantly	Got Worse Insignificantly	Not changed	Improved Insignificantly	Improved Significantly	Dif. to answ.
i1.1	Air	1	2	3	4	5	99
i1.2	Water	1	2	3	4	5	99
i1.3	Land	1	2	3	4	5	99
i1.4	Climate	1	2	3	4	5	99

i2. Which of the following best describes what "The Environment" means to you

To interviewer: READ OUT, SINGLE ANSWER

1. Surroundings of your town/village
 2. Your district
 3. Georgia
 4. Transcaucasia
 5. The continent (Eurasia)
 6. The Earth and its Biosphere
99. Difficult to answer (*DO NOT READ OUT*)

i3. In your opinion, who should be responsible for taking care/ preserving natural resources nearby your town/village?

To interviewer: READ OUT, SINGLE ANSWER

1. Individuals
 2. Families
 3. Young generation
 4. Entire Community
 5. The State
99. Difficult to answer (*DO NOT READ OUT*)

i4. How would you personally contribute to the Protection of Environment?

To interviewer: READ OUT, SINGLE ANSWER

1. Countenance (moral support)
2. Will not pollute nature myself
3. Donate money
4. Working; Spend time/energy
5. Nothing (DO NOT READ OUT)
6. Other (DO NOT READ OUT) _____
99. Difficult to answer (DO NOT READ OUT)

i5. Have you heard that Tusheti has been proclaimed a protected area ?

1. Yes *continue*
2. No *skip to i8*

i6. Do you know the Management of the protected area ?

Write down what the respondent is stating:

i7. Did you hear something about twin national parks?

1. Yes *continue*
2. No *skip to i8*

i7.1 Do you know, which national park is twin of Tusheti National Park?
(indicate)

i8. What do you think is the most urgent for the improvement of the Tushetians socio –economic environment?

1. Support to the traditional agriculture
2. Support to tourism
3. Other (indicate) _____

i9. You have probably heard of the alternative sources of power (small power plants , heliosystems, biogas installations etc.) Which do you think the most efficient power supply scheme could be for Tusheti?

1. Centralized power supply like it was in the 80's.
2. The diesel /petrol generators
3. Alternative sources of power (indicate): _____
4. Other (indicate) _____

i10. If there is a project regarding Tusheti, which do you think is (are) the best way to spread the relevant information (the objectives, plans, research results, etc) among the locals

To interviewer: MULTIPLE ANSWER

1. Mass Media (Press/TV)

2. Through the most authoritative persons in the village (informal leaders of the village)
3. Representatives of Local government (District)
4. Representatives of Local government (Sakrebulo)
5. Representatives of organization(s) implementing the project
6. Representatives of Georgian NGOs
7. Representatives of international organizations
8. Special Newsletters distributed in the Village
9. Other (*indicate*) _____

Section T – Tourizm

T1. Do you think tourism is important for the prospects of Tusheti?

To interviewer: READ OUT, SINGLE ANSWER

1. Very important
2. Tourism brings profit to those engaged in the business
3. Tourism is unimportant for Tusheti
4. Tourism is harmful to the nature and/or cultural traditions of Tusheti
99. Difficult to answer (*DO NOT READ OUT*)

T2. What do you think is the main tourist attraction in Tusheti ?

To interviewer: DO NOT READ OUT, Match to the relevant option. SINGLE ANSWER

1. Traditional culture
2. Art
3. Architecture
4. Nature
5. Cuisine
6. Other (*indicate*) _____

T3. In the terms of nature, what do you think is of the biggest interest to tourists? Firstly, secondly ...

To interviewer: indicate the order

		Rank
T3.1	Scenery (mountains, valleys, rivers)	
T3.2	Flora (plants)	
T3.3	Fauna (animals, birds)	

T4. Which animals do you think are of the biggest interest to tourists? Firstly, secondly ...

To interviewer: indicate the order

		Rank
T4.1	Tur	
T4.2	Wild goat	
T4.3	„Large birds “ – eagles, neophron etc.	

T5. Are you and/or you familiy members engaged in a tourism –related activity

1. Yes *continue*
2. No, but we'd like to *continue*
3. No, we do not wish to *end of interview*

T6. What kind of service can you offer to tourists ?

To interviewer: MULTIPLE ANSWER

1. Family hotel
2. Horse rent
3. Car service
4. Guided tours
5. Trade in the local handicraft
6. Other (*indicate*) _____

By the end of the interview fill the schedule below and tell the respondent that the representative of your organization will contact several respondents to be convinced that the research passed well.

Respondent's name and surname	
Respondent's address	
Respondent's phone number	

Thank you very much for your assistance!

Annex 1.2: Guide for Focus-Group Discussions with Shepherds living/working at Protected Territories of Tusheti

- § For how many families (within Tusheti) the sheep breeding is the main source of income?
- § How many sheep on average does each family hold?
- § Types of sheep species
- § Privileges of sheep traditional species
- § Is recruitment required for local species (sheep, dog, cow, horse)?
 - Ø If yes – what kind of support is required?
 - Ø PR
 - Ø Material support (credits)
- § Do you know that Tusheti is within protected territories?
 - Ø What does it mean for you?
 - Ø What kind of information do you have on it?
- § Did the establishment of protected territories provide a benefit or loss to you?
 - Ø Explain
- § Is there any problem regarding the availability of pastures?
 - Ø If yes – what kind of problem?
 - Ø With whom?
 - Ø Will it be reflected on income?
- § Except for pasture availability, do shepherds have any other problems? for example::
 - Ø veterinary service
 - Ø quality of pastures (grass)
 - Ø plant diseases
 - Ø animal diseases
- § People say that in the last years sheep is moved from Tusheti to Khevsureti and/or Mtiuleti. Is it true?
 - Ø If yes – what is the reason for this moving?
- § What kind of products do you produce?
 - Ø meat
 - Ø milk
 - Ø cheese
 - Ø wool
- § Do you have product realization problem?
 - Ø What kind of problem namely?
 - Ø In your opinion, what cause these problems?
- § What kind of support do you require and from whom?

Annex 1.3: Guide for Focus-Group Discussions with Rangers of Protected Territories of Tusheti

- § To what extent does Tusheti population depend on the resources of protected territories?
 - Ø pastures
 - Ø forests (wood, timber)
 - Ø mushroom, berries, medicinal and dye plants
 - Ø other
- § Does the population encounter the problem regarding obtaining of these resources?
- § Who is more suffered in this situation - population or natural resources?
- § Are these resources reduced as a result of their application by the population?
- § Are there any tourist, violating the rules of conduct at protected territories?
 - Ø If yes – what kind of tourists and how (what do they do)?
- § What is the purpose for Tusheti visiting?
- § What is the tourism support?
- § Who hunts in Tusheti?
 - Ø when?
 - Ø where?
 - Ø what species are hunted?
- § What is the hunting purpose for Tushetians?
- § Are the Tushetians aware of the hunting rules, regulating the population number?
- § What is the hunting purpose for visitors?
- § What do you think, will the hunting prohibition result in tourists number reduction?
- § What can be used for replacement of hunting/resources application maintaining of Tusheti attractivity?
- § Is the prohibition of hunting actually effective?
- § What kinds of violations are more frequent?
- § Who violates the law more frequently?
 - Ø Why?
- § What do you think, what is the most harmful for protected territories?

- § What will eliminate problems?
 - Ø Law reinforcement
 - Ø more protection
 - Ø population awareness
 - Ø changing of population understanding
 - Ø system of penalties
- § What kind of support is required?

Annex 1.4: Guide for Focus-Group Discussions with the Owners of Family Hotels located at Protected Territories of Tusheti

- § How many Family Hotels are there in Tusheti?
- § How many guests on average does each guest house receive per year?
- § What kinds of services are offered (except for overnight)?
- § Are there any additional services?
 - Ø horses
 - Ø cars
 - Ø tour guides
 - Ø other
- § What kinds of tourists visit Tusheti?
 - Ø Georgian tourists
 - Ø Foreign tourists
 - Ø Hunters
 - Ø Scientists
- § Are there any orders of group recreations?
- § What in your opinion attracts tourists?
 - Ø landscape
 - Ø architect
 - Ø nature – flora, fauna
 - Ø culture – traditions, art
 - Ø other
- § What in your opinion is more interesting for tourists from abovementioned?
- § What do you think, is the tourism developed enough in Tusheti?
 - Ø If no – why?
 - Ø What in addition should be developed?
 - Ø What are the impeding factors?
 - ü Infrastructure – roads, power-supply
 - ü PR – awareness
 - ü Bank support – credits
 - ü Development of skills – trainings
 - ü other
- § What do you think, what may be additionally offered by Tusheti for the purpose of tourism development (what is the potential)?
- § What do you think, in case of relevant conditions, will the winter tourism work in Tusheti?
 - Ø Why?
- § What do you think, will the development of tourism in Georgia generally result in development of tourism in Tusheti?

Annex 2: Statistical Tables

Settlements

	Frequency	Percent
Dartlo	12	12.5
Bochorna	2	2.1
Shenako	5	5.2
Zemo Omalo	5	5.2
Diklo	10	10.4
Kvemo Omalo	28	29.2
Tchesho	4	4.2
Chigo	3	3.1
Omalo	2	2.1
Shtrolta	3	3.1
Riglaurta	1	1.0
Dochu	2	2.1
Dano	5	5.2
Kumelaurta	3	3.1
Chala	2	2.1
Khiso	2	2.1
Kvavilo	2	2.1
Begela	4	4.2
Girevi	1	1.0
Total	96	100.0

Do you and your family members live mostly here or in another village/town?

	Frequency	Percent
In this village	17	17.7
In other village of Kakheti	26	27.1
In Tbilisi	2	2.1
Zemo Alvani	9	9.4
Kvemo Alvani	39	40.6
Laliskuri	3	3.1
Total	96	100.0

What is the main reason for your and your family members' arrival here in summer?

	Frequency	Valid Percent
Work	44	55.7
Holiday	20	25.3
House maintenance	9	11.4
Other	6	7.6
Total	79	100.0

For how many years has your family lived here?

	Frequency	Percent
3 -100 years	62	67.4
About one century	18	18.8
173 years	1	1.0
More then one century	2	2.1
Long times	1	1.0
About three centuries	1	1.0
About four centuries	1	1.0
About two centuries	6	6.3
Total	92	95.8

Number of people currently live in your Household

	Household		
	Permanent	Seasonal	Total
N	17	79	96
Median	3.00	4.00	4.00
Mean	3.71	4.27	4.17
Std. Deviation	2.365	1.654	1.799
Minimum	1	1	1
Maximum	10	8	10

ANOVA

F	Sig.
1.361	0.246

He/She currently is in Tusheti

	Household		
	Permanent	Seasonal	Total
currently is in Tusheti	55.6%	58.9%	58.4%
currently is NOT in Tusheti	44.4%	41.1%	41.6%
Total	100.0%	100.0%	100.0%

$\chi^2=0.248$; $P=0.618$

Gender

	Household		
	Permanent	Seasonal	Total
Female	50.8%	49.7%	49.9%
Male	49.2%	50.3%	50.1%
Total	100.0%	100.0%	100.0%

$\chi^2=0.025$; $P=0.874$

Age

	Household		
	Permanent	Seasonal	Total
N	63	325	388
Median	43.00	33.00	34.50
Mean	46.06	36.22	37.82
Std. Deviation	23.630	21.706	22.296
Minimum	3	0	0
Maximum	84	87	87

ANOVA

F	Sig.
10.529	0.001

Level of education

	Household		
	Permanent	Seasonal	Total
Less than Elementary	0.0%	0.4%	0.3%
Incomplete Secondary	16.7%	3.5%	5.8%
Complete Secondary	35.2%	40.5%	39.6%
Special Technical (PTU, SPTU)	31.5%	23.9%	25.2%
Incomplete higher (discontinued)	0.0%	2.3%	1.9%
Student of higher institution	3.7%	1.5%	1.9%
Higher	13.0%	27.8%	25.2%
Total	100.0%	100.0%	100.0%

$\chi^2=21.296$; $P=0.002$

Marital status

	Household		
	Permanent	Seasonal	Total
Married	63.0%	70.2%	69.0%
Single (never married)	27.8%	24.4%	25.0%
Divorced/separated	0.0%	0.4%	0.3%
Widow/Widower	9.3%	5.0%	5.7%
Total	100.0%	100.0%	100.0%

$\chi^2=2.201$; $P=0.532$

Primary occupation

	Household		
	Permanent	Seasonal	Total
Administrator/supervisor/ manager	0.0%	0.8%	0.6%
Highly skilled white collar (specialist)	7.4%	11.0%	10.4%
Less skilled white collar	1.9%	5.5%	4.9%
Skilled worker	5.6%	9.0%	8.4%
Unskilled worker	3.7%	3.1%	3.2%
Business/entrepreneur person	0.0%	4.3%	3.6%
Small scale farmer	18.5%	16.5%	16.8%
Pensioner/disabled person (not employed)	18.5%	7.8%	9.7%
Housewife	16.7%	20.8%	20.1%
Student	5.6%	3.1%	3.6%
Unemployed	22.2%	18.0%	18.8%
Total	100.0%	100.0%	100.0%

$\chi^2=12.063$; $P=0.281$

Sector of primary occupation

	Household		
	Permanent	Seasonal	Total
Own business	10.0%	6.3%	6.8%
Wage earner in private organization, company or enterprise	5.0%	8.7%	8.2%
Foreign or international organization, company, enterprise or joint venture	0.0%	1.6%	1.4%
State organization, company or enterprise	25.0%	15.9%	17.1%
Government body	5.0%	.8%	1.4%
Private (own) farm	55.0%	46.0%	47.3%
Other	.0%	20.6%	17.8%
Total	100.0%	100.0%	100.0%

$\chi^2=8.435$; $P=0.208$

How many members of your household live under the same roof and regularly share expenses and income? Please include those who currently are away for work and/or study remitting money. You can give more than one answer?

		Household		
		Permanent	Seasonal	Total
Family members currently living at home and working in Tusheti	N	17	79	96
	Median	1.00	1.00	1.00
	Mean	1.29	1.46	1.43
	Std. Deviation	.772	1.023	.981
	Minimum	0	0	0
	Maximum	3	5	5
Family members currently living at home and working in other village of Kakheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.76	.78	.78
	Std. Deviation	1.200	1.173	1.172
	Minimum	0	0	0
	Maximum	4	5	5
Family members currently away for temporary work and/or study in Tbilisi or other city of Georgia	N	17	78	95
	Median	.00	.00	.00
	Mean	.41	.28	.31
	Std. Deviation	.870	.938	.923
	Minimum	0	0	0
	Maximum	3	6	6
Family members currently away	N	17	79	96

for temporary work and/or study abroad	Median	.00	.00	.00
	Mean	.29	.46	.43
	Std. Deviation	1.213	.874	.937
	Minimum	0	0	0
	Maximum	5	4	5
Total Number of Family Members	N	17	79	96
	Median	3.00	4.00	4.00
	Mean	3.88	4.32	4.24
	Std. Deviation	2.261	1.622	1.746
	Minimum	1	0	0
	Maximum	10	8	10

ANOVA

	F	Sig.
Family members currently living at home and working in Tushety lives * HH	0.377	0.541
Family members currently living at home and working in other village of Kakheti * HH lives	0.004	0.949
Family members currently away for temporary work and/or study in Tbilisi or other city of Georgia * HH lives	0.273	0.602
Family members currently away for temporary work and/or study abroad * HH lives	0.413	0.522
Total Number of Family Members * HH lives	0.864	0.355

Do you and/or your family own any of the following?

		Household		
		Permanent	Seasonal	Total
Total Mobile Phone	N	17	79	96
	Median	3.00	2.00	2.00
	Mean	2.24	2.46	2.42
	Std. Deviation	1.393	1.526	1.499
	Minimum	0	0	0
	Maximum	5	8	8
Total Color TV set	N	17	79	96
	Median	1.00	1.00	1.00
	Mean	.82	.99	.96
	Std. Deviation	.809	.543	.597
	Minimum	0	0	0
	Maximum	2	2	2

Total DVD / Video player/recorder	N	17	79	96
	Median	.00	.00	.00
	Mean	.24	.42	.39
	Std. Deviation	.437	.522	.510
	Minimum	0	0	0
	Maximum	1	2	2
Total Satellite antenna	N	17	79	96
	Median	.00	.00	.00
	Mean	.65	.58	.59
	Std. Deviation	.931	.969	.958
	Minimum	0	0	0
	Maximum	3	4	4

		Household		
		Permanent	Seasonal	Total
Total Digital camera	N	17	79	96
	Median	.00	.00	.00
	Mean	.06	.18	.16
	Std. Deviation	.243	.416	.393
	Minimum	0	0	0
	Maximum	1	2	2
Total Tractor	N	17	79	96
	Median	.00	.00	.00
	Mean	.24	.13	.15
	Std. Deviation	.437	.335	.355
	Minimum	0	0	0
	Maximum	1	1	1
Total Car, minibus (van), truck	N	17	79	96
	Median	.00	.00	.00
	Mean	.12	.37	.32
	Std. Deviation	.332	.535	.513
	Minimum	0	0	0
	Maximum	1	2	2
Total Electricity generator	N	17	79	96
	Median	.00	.00	.00
	Mean	.29	.38	.36
	Std. Deviation	.470	.881	.822
	Minimum	0	0	0
	Maximum	1	6	6

ANOVA

	F	Sig.
Total Mobile Phone * HH lives	.300	.585

Total Color TV set * HH lives	1.055	.307
Total DVD / Video player/recorder * HH lives	1.803	.183
Total Satellite antenna * HH lives	.063	.802
Total Digital camera * HH lives	1.275	.262
Total Tractor * HH lives	1.318	.254
Total Car, minibus (van), truck * HH lives	3.392	.069
Total Electricity generator * HH lives	.150	.699

Do you and/or your family own any of the following in Tusheti?

		Household		
		Permanent	Seasonal	Total
Mobile Phone in Tusheti	N	17	79	96
	Median	1.00	1.00	1.00
	Mean	1.35	1.24	1.26
	Std. Deviation	.606	.866	.824
	Minimum	1	0	0
	Maximum	3	6	6
Color TV set in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.41	.06	.12
	Std. Deviation	.507	.245	.332
	Minimum	0	0	0
	Maximum	1	1	1
DVD / Video player/recorder in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.06	.01	.02
	Std. Deviation	.243	.113	.144
	Minimum	0	0	0
	Maximum	1	1	1
Satellite antenna in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.35	.10	.15
	Std. Deviation	.493	.411	.435
	Minimum	0	0	0
	Maximum	1	2	2
Digital camera in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.08	.06
	Std. Deviation	.000	.267	.243
	Minimum	0	0	0
	Maximum	0	1	1
Tractor in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.29	.03	.07
	Std. Deviation	.470	.158	.261
	Minimum	0	0	0
	Maximum	1	1	1

		Household		
		Permanent	Seasonal	Total
Car, minibus (van), truck in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.06	.13	.11
	Std. Deviation	.243	.335	.320
	Minimum	0	0	0
	Maximum	1	1	1
Electricity generator in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.35	.16	.20
	Std. Deviation	.493	.436	.450
	Minimum	0	0	0
	Maximum	1	2	2

ANOVA

	F	Sig.
Mobile Phone in Tusheti * HH lives	.258	.612
Color TV set in Tusheti * HH lives	18.144	.000
DVD / Video player/recorder in Tusheti * HH lives	1.453	.231
Satellite antenna in Tusheti * HH lives	4.879	.030
Digital camera in Tusheti * HH lives	1.368	.245
Tractor in Tusheti * HH lives	17.342	.000
Car, minibus (van), truck in Tusheti * HH lives	.624	.432
Electricity generator in Tusheti * HH lives	2.490	.118

Expenses

		Household		
		Permanent	Seasonal	Total
Total Everyday expenses (GEL)	N	11	53	64
	Median	500.00	300.00	300.00
	Mean	371.82	331.51	338.44
	Std. Deviation	219.946	183.831	189.227
	Minimum	80	50	50
	Maximum	600	1000	1000

		Household		
		Permanent	Seasonal	Total
Everyday expenses (GEL) in Tusheti	N	12	59	71
	Median	200.00	100.00	100.00
	Mean	207.50	159.49	167.61
	Std. Deviation	136.789	171.046	165.861
	Minimum	0	0	0
	Maximum	500	1000	1000
	Total Long-term expenses (GEL)	N	8	41
Median		200.00	200.00	200.00
Mean		235.00	271.95	265.92
Std. Deviation		242.782	242.953	240.779
Minimum		0	0	0
Maximum		600	1000	1000
Long-term expenses (GEL) in Tusheti		N	9	57
	Median	.00	.00	.00
	Mean	86.67	67.89	70.45
	Std. Deviation	196.469	93.936	111.334
	Minimum	0	0	0
	Maximum	600	400	600
	Total Utilities bills (GEL)	N	15	72
Median		80.00	100.00	100.00
Mean		134.00	115.63	118.79
Std. Deviation		166.167	129.603	135.687
Minimum		0	0	0
Maximum		600	650	650
Utilities bills (GEL) in Tusheti		N	16	79
	Median	15.00	.00	.00
	Mean	46.88	26.46	29.89
	Std. Deviation	62.793	37.503	43.073
	Minimum	0	0	0
	Maximum	200	200	200

ANOVA

	F	Sig.
Total Everyday expenses (GEL) * HH lives	.409	.525
Everyday expenses (GEL) in Tusheti * HH lives	.833	.364
Total Long-term expenses (GEL) * HH lives	.155	.696
Long-term expenses (GEL) in Tusheti * HH lives	.218	.642
Total Utilities bills (GEL) * HH lives	.226	.636
Utilities bills (GEL) in Tusheti * HH lives	3.056	.084

Total Expenses

		Household		
		in Tusheti	Elsewhere	Total
Total HH Expenses	N	15	75	90
	Median	400.00	470.00	470.00
	Mean	532.00	493.93	500.28
	Std. Deviation	480.761	381.535	396.984
	Minimum	0	0	0
	Maximum	1300	1400	1400
Total HH Expenses in Tusheti	N	16	79	95
	Median	215.00	150.00	150.00
	Mean	251.25	194.56	204.11
	Std. Deviation	302.167	222.747	237.056
	Minimum	0	0	0
	Maximum	1200	1000	1200

ANOVA

	F	Sig.
Total HH Expenses * HH lives	.114	.737
Total HH Expenses in Tusheti * HH lives	.759	.386

Income

		Household		
		Permanent	Seasonal	Total
Salary/wages/income activities	N	17	79	96
	Median	.00	100.00	80.00
	Mean	101.18	306.08	269.79
	Std. Deviation	143.783	429.998	401.840
	Minimum	0	0	0
	Maximum	400	2000	2000
Age/veteran/disability pensions/student benefits	N	17	79	96
	Median	85.00	.00	.00
	Mean	98.53	50.37	58.90
	Std. Deviation	67.100	69.473	71.153
	Minimum	0	0	0
	Maximum	180	300	300
Alimony	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Child benefits	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Dividends/shares/percentages	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	37.97	31.25
	Std. Deviation	.000	167.412	152.393
	Minimum	0	0	0
	Maximum	0	1000	1000

		Household		
		Permanent	Seasonal	Total
Income from rental property	N	17	79	96
	Median	.00	.00	.00
	Mean	20.59	123.29	105.10
	Std. Deviation	73.013	346.886	318.196
	Minimum	0	0	0
	Maximum	300	2000	2000
Sales of agricultural products you produced	N	17	79	96
	Median	.00	.00	.00
	Mean	658.82	90.89	191.46
	Std. Deviation	1898.127	469.709	914.028
	Minimum	0	0	0
	Maximum	7000	4000	7000
Value of in-kind payments for services	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	3.85	3.16
	Std. Deviation	.000	33.968	30.779
	Minimum	0	0	0
	Maximum	0	300	300
Remittances from relatives within Georgia	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	66.46	54.69
	Std. Deviation	.000	562.659	510.473
	Minimum	0	0	0
	Maximum	0	5000	5000
Remittances from relatives outside Georgia	N	17	79	96
	Median	.00	.00	.00
	Mean	2.35	85.44	70.73
	Std. Deviation	9.701	463.484	421.199
	Minimum	0	0	0
	Maximum	40	4000	4000

		Household		
		Permanent	Seasonal	Total
Other	N	4	3	7
	Median	.00	.00	.00
	Mean	.00	1333.33	571.43
	Std. Deviation	.000	2309.401	1511.858
	Minimum	0	0	0
	Maximum	0	4000	4000

ANOVA

	F	Sig.
Salary/wages/income activities * HH lives	3.742	.056
Age/veteran/disability pensions/student benefits * HH lives	6.801	.011
Dividends/shares/percentages * HH lives	.867	.354
Income from rental property * HH lives	1.465	.229
Sales of agricultural products you produced * HH lives	5.666	.019
Value of in-kind payments for services * HH lives	.216	.643
Remittances from relatives within Georgia * HH lives	.235	.629
Remittances from relatives outside Georgia * HH lives	.542	.464
Other * HH lives	1.429	.286

Total HH Income

Household	N	Median	Mean	Std. Deviation	Minimum	Maximum
Permanent	17	200.00	881.47	1932.491	20	7365
Seasonal	79	385.00	814.92	1340.063	0	8800
Total	96	300.00	826.71	1450.532	0	8800

ANOVA

F	Sig.
.029	.865

Are you and/or your family members engaged in any economic activities in the protected area in Tusheti?

	Household		
	Permanent	Seasonal	Total
Yes	47.1%	46.8%	46.9%
No	52.9%	53.2%	53.1%
Total	100.0%	100.0%	100.0%

$\chi^2=0.000$; $P=0.987$

What kind of activities?

	Household		
	Permanent	Seasonal	Total
Activities related with Tourism	83.3%	82.6%	82.8%
Sheep breeding	.0%	17.4%	13.8%
Other	16.7%	.0%	3.4%
Total	100.0%	100.0%	100.0%

$\chi^2=4.877$; $P=0.087$

What part of your income comes from these activities?

	Household		
	Permanent	Seasonal	Total
N	8	35	43
Median	50.00	40.00	40.00
Mean	44.38	42.80	43.09
Std. Deviation	27.182	31.067	30.081
Minimum	5	1	1
Maximum	80	100	100

ANOVA

F	Sig.
0.017	0.896

Compared to other families of Tusheti, which group best describes your family?

	Household		
	Permanent	Seasonal	Total
Very poor	18.8%	.0%	3.2%
Poor	37.5%	20.8%	23.7%
Medium income	43.8%	76.6%	71.0%
More than medium	.0%	2.6%	2.2%
Total	100.0%	100.0%	100.0%

$\chi^2=18.436$; $P=0.000$

Do you and/or family use service of any bank?

	Household		
	Permanent	Seasonal	Total
Yes	11.8%	31.6%	28.1%
No	88.2%	68.4%	71.9%
Total	100.0%	100.0%	100.0%

$\chi^2=2.735$; $P=0.098$

What kind of banking service do you/your family use?

	Household		
	Permanent	Seasonal	Total
Personal account(s)	100.0%	36.0%	40.7%
Money order	.0%	32.0%	29.6%
Commercial transfers	.0%	32.0%	29.6%
Credit	.0%	48.0%	44.4%
Other	.0%	20.0%	18.5%

Total size of plot area owned by household (in all locations)

	Household		
	Permanent	Seasonal	Total
N	17	77	94
Median	3700.00	5800.00	5650.00
Mean	4426.94	7448.44	6902.00
Std. Deviation	3803.466	6686.266	6355.306
Minimum	0	0	0
Maximum	15000	41000	41000

ANOVA

F	Sig.
3.223	.076

Size of plot areas owned by households Elsewhere

		Household		
		Permanent	Seasonal	Total
Irrigated cultivation Elsewhere	N	17	76	93
	Median	.00	.00	.00
	Mean	264.71	209.28	219.41
	Std. Deviation	752.447	694.315	701.373
	Minimum	0	0	0
	Maximum	2500	3300	3300
Orchard (including hazel nut/walnut trees) Elsewhere	N	17	77	94
	Median	.00	.00	.00
	Mean	288.24	841.95	741.81
	Std. Deviation	485.904	1345.545	1251.428
	Minimum	0	0	0
	Maximum	1500	5000	5000
Vegetable garden Elsewhere	N	17	75	92
	Median	.00	100.00	60.00
	Mean	338.24	559.95	518.98
	Std. Deviation	756.771	1291.553	1210.234
	Minimum	0	0	0
	Maximum	3000	8600	8600

		Household		
		Permanent	Seasonal	Total
Household area Elsewhere	N	17	74	91
	Median	100.00	300.00	300.00
	Mean	690.18	1000.73	942.71
	Std. Deviation	980.218	1567.820	1476.274
	Minimum	0	0	0
	Maximum	2700	10000	10000
Other irrigated Elsewhere	N	17	77	94
	Median	.00	.00	.00
	Mean	.00	26.13	21.40
	Std. Deviation	.000	227.907	206.275
	Minimum	0	0	0
	Maximum	0	2000	2000
Non-irrigated cultivation Elsewhere	N	17	75	92
	Median	.00	75.00	.00
	Mean	576.47	1968.13	1710.98
	Std. Deviation	1350.708	3879.608	3585.428
	Minimum	0	0	0
	Maximum	5000	30000	30000
Pasture Elsewhere	N	16	74	90
	Median	.00	.00	.00
	Mean	62.50	256.76	222.22
	Std. Deviation	250.000	933.557	854.963
	Minimum	0	0	0
	Maximum	1000	5000	5000
Non-fruit trees Elsewhere	N	17	76	93
	Median	.00	.00	.00
	Mean	5.88	39.80	33.60
	Std. Deviation	24.254	255.087	230.915
	Minimum	0	0	0
	Maximum	100	2000	2000

		Household		
		Permanent	Seasonal	Total
Fallow land Elsewhere	N	17	76	93
	Median	.00	.00	.00
	Mean	341.18	789.47	707.53
	Std. Deviation	729.776	1611.969	1497.086
	Minimum	0	0	0
	Maximum	2500	8500	8500
Other non-irrigated Elsewhere	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	51.28	42.11
	Std. Deviation	.000	356.660	323.406
	Minimum	0	0	0
	Maximum	0	3000	3000
Total area Elsewhere	N	17	77	94
	Median	2900.00	4700.00	4512.50
	Mean	2579.59	5659.12	5102.18
	Std. Deviation	2522.573	5034.701	4819.697
	Minimum	0	0	0
	Maximum	7700	27000	27000

ANOVA

	F	Sig.
Irrigated cultivation Elsewhere * HH lives	.086	.770
Orchard (including hazel nut/walnut trees) Elsewhere * HH lives	2.778	.099
Vegetable garden Elsewhere * HH lives	.462	.498
Household area Elsewhere * HH lives	.609	.437
Other irrigated Elsewhere * HH lives	.222	.639
Non-irrigated cultivation Elsewhere * HH lives	2.113	.149
Pasture Elsewhere * HH lives	.677	.413
Non-fruit trees Elsewhere * HH lives	.297	.587
Fallow land Elsewhere * HH lives	1.249	.267
Other non-irrigated Elsewhere * HH lives	.349	.556
Total area Elsewhere * HH lives	5.990	.016

Size of plot areas owned by households in Tusheti

		Household		
		Permanent	Seasonal	Total
Irrigated cultivation in Tusheti	N	17	75	92
	Median	.00	.00	.00
	Mean	41.18	.00	7.61
	Std. Deviation	169.775	.000	72.980
	Minimum	0	0	0
	Maximum	700	0	700
Orchard (including hazel nut/walnut trees) in Tusheti	N	17	77	94
	Median	.00	.00	.00
	Mean	41.18	326.23	274.68
	Std. Deviation	127.764	1102.147	1003.821
	Minimum	0	0	0
	Maximum	500	5000	5000
Vegetable garden in Tusheti	N	17	74	91
	Median	500.00	4.50	24.00
	Mean	498.24	196.93	253.22
	Std. Deviation	568.091	377.826	432.558
	Minimum	0	0	0
	Maximum	2100	2000	2100
Household area in Tusheti	N	17	71	88
	Median	200.00	200.00	200.00
	Mean	590.29	347.68	394.55
	Std. Deviation	986.044	510.797	630.889
	Minimum	0	0	0
	Maximum	3000	2500	3000
Other irrigated in Tusheti	N	17	76	93
	Median	.00	.00	.00
	Mean	.00	1.32	1.08
	Std. Deviation	.000	11.471	10.370
	Minimum	0	0	0
	Maximum	0	100	100

		Household		
		Permanent	Seasonal	Total
Non-irrigated cultivation in Tusheti	N	17	75	92
	Median	.00	.00	.00
	Mean	647.06	984.00	921.74
	Std. Deviation	2422.323	2244.756	2268.602
	Minimum	0	0	0
	Maximum	10000	10000	10000
Pasture in Tusheti	N	17	74	91
	Median	.00	.00	.00
	Mean	.00	65.54	53.30
	Std. Deviation	.000	322.546	291.624
	Minimum	0	0	0
	Maximum	0	2000	2000
Non-fruit trees in Tusheti	N	16	76	92
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Fallow land in Tusheti	N	17	73	90
	Median	.00	.00	.00
	Mean	29.41	143.15	121.67
	Std. Deviation	121.268	488.998	445.076
	Minimum	0	0	0
	Maximum	500	2500	2500
Other non-irrigated in Tusheti	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0

		Household		Total
		Permanent	Seasonal	
Total area in Tusheti	N	17	76	93
	Median	1000.00	800.00	800.00
	Mean	1847.35	2136.55	2083.69
	Std. Deviation	2525.240	3435.835	3277.996
	Minimum	0	0	0
	Maximum	10700	16000	16000

ANOVA

	F	Sig.
Irrigated cultivation in Tusheti * HH lives	4.586	.035
Orchard (including hazel nut/walnut trees) in Tusheti * HH lives	1.124	.292
Vegetable garden in Tusheti * HH lives	7.167	.009
Household area in Tusheti * HH lives	2.053	.156
Other irrigated in Tusheti * HH lives	.222	.639
Non-irrigated cultivation in Tusheti * HH lives	.303	.583
Pasture in Tusheti * HH lives	.696	.406
Fallow land in Tusheti * HH lives	.899	.346
Total area in Tusheti * HH lives	.107	.744

Housing

		Household		
		Permanent	Seasonal	Total
Number of storeys in HH's house in Tusheti	N	17	77	94
	Median	2.00	1.00	1.00
	Mean	1.59	1.49	1.51
	Std. Deviation	.618	.620	.618
	Minimum	1	1	1
	Maximum	3	3	3
Area of the house	N	17	74	91
	Median	81.00	67.00	70.00
	Mean	87.35	87.53	87.49
	Std. Deviation	30.678	76.146	69.787
	Minimum	30	16	16
	Maximum	150	535	535

ANOVA

	F	Sig.
Number of storeys in HH's house in Tusheti * HH lives	.325	.570
Area of the house * HH lives	.000	.993

Wall material

	Household		
	Permanent	Seasonal	Total
Stone	94.1%	84.4%	86.2%
Brick	.0%	3.9%	3.2%
Wood	5.9%	11.7%	10.6%
Total	100.0%	100.0%	100.0%

$\chi^2=1.256$; $P=0.534$

Roof material

	Household		
	Permanent	Seasonal	Total
Traditional Tusheti Roof	11.1%	25.8%	24.0%
Tin	88.9%	72.7%	74.7%
Other	.0%	1.5%	1.3%
Total	100.0%	100.0%	100.0%

$\chi^2=1.121$; $P=0.571$

When was the house built

	Household		
	Permanent	Seasonal	Total
VIII century	.0%	1.8%	1.5%
XVI century	.0%	1.8%	1.5%
XVI century	.0%	1.8%	1.5%
XVI century	20.0%	3.5%	6.0%
XIX century	30.0%	22.8%	23.9%
XX century	50.0%	59.6%	58.2%
XXI century	.0%	8.8%	7.5%
Total	100.0%	100.0%	100.0%

$\chi^2=5.599$; $P=0.470$

Condition of the Walls

	Household		
	Permanent	Seasonal	Total
Good condition	17.6%	28.6%	26.6%
Needs to be repaired slightly	29.4%	20.8%	22.3%
Needs to be repaired seriously	41.2%	48.1%	46.8%
It's destroyed and can't be repaired	11.8%	2.6%	4.3%
Total	100.0%	100.0%	100.0%

$\chi^2=3.980$; $P=0.264$

Condition of the Doors and windows

	Household		
	Permanent	Seasonal	Total
Good condition	23.5%	29.9%	28.7%
Needs to be repaired slightly	23.5%	23.4%	23.4%
Needs to be repaired seriously	41.2%	45.5%	44.7%
It's destroyed and can't be repaired	11.8%	1.3%	3.2%
Total	100.0%	100.0%	100.0%

$\chi^2=5.032$; $P=0.169$

Condition of the Roof

	Household		
	Permanent	Seasonal	Total
Good condition	29.4%	37.7%	36.2%
Needs to be repaired slightly	29.4%	15.6%	18.1%
Needs to be repaired seriously	35.3%	42.9%	41.5%
It's destroyed and can't be repaired	5.9%	3.9%	4.3%
Total	100.0%	100.0%	100.0%

$\chi^2=2.055$; $P=0.561$

Condition of the Floor

	Household		
	Permanent	Seasonal	Total
Good condition	35.3%	29.9%	30.9%
Needs to be repaired slightly	11.8%	24.7%	22.3%
Needs to be repaired seriously	41.2%	42.9%	42.6%
It's destroyed and can't be repaired	11.8%	2.6%	4.3%
Total	100.0%	100.0%	100.0%

$\chi^2=3.931$; $P=0.269$

Do you or your family own any other structures (save the residential house) in the protected area of Tusheti?

	Household		
	Permanent	Seasonal	Total
Yes	47.1%	16.5%	21.9%
No	52.9%	83.5%	78.1%
Total	100.0%	100.0%	100.0%

$\chi^2=7.667$; $P=0.006$

Type of these building(s) or structure(s)

	Responses		
	N	Percent	Percent of Cases
Hotel (Guest house)	4	16.0%	19.0%
Shepherd's cabin	4	16.0%	19.0%
Cattle-shed	10	40.0%	47.6%
Cow-house	7	28.0%	33.3%
Total	25	100.0%	119.0%

Do you cultivate any State owned lands?

	Household		
	Permanent	Seasonal	Total
Yes	11.8%	8.9%	9.4%
No	88.2%	91.1%	90.6%
Total	100.0%	100.0%	100.0%

$\chi^2=0.139$; $P=0.709$

Do you graze your livestock at the State owned land?

	Household		
	Permanent	Seasonal	Total
Yes	76.5%	47.4%	52.6%
No	23.5%	52.6%	47.4%
Total	100.0%	100.0%	100.0%

$\chi^2=4.720$; $P=0.030$

What kind of agreement do you have for using State owned lands?

	Household		
	Permanent	Seasonal	Total
Long-term lease	.0%	8.0%	6.5%
Short-term lease	.0%	6.0%	4.8%
No formal agreement	100.0%	84.0%	87.1%
Do not know	.0%	2.0%	1.6%
Total	100.0%	100.0%	100.0%

$\chi^2=2.204$; $P=0.531$

How much of the food products listed below (in kg) has your household produced totally during the last year?

		Household		Total
		Permanent	Seasonal	
Total Potatoes	N	17	77	94
	Median	300.00	150.00	175.00
	Mean	1170.59	635.58	732.34
	Std. Deviation	1873.754	1146.186	1311.675
	Minimum	0	0	0
	Maximum	7000	6000	7000
Total Haricot	N	17	75	92
	Median	.00	.00	.00
	Mean	2.47	9.93	8.55
	Std. Deviation	3.793	27.079	24.644
	Minimum	0	0	0
	Maximum	10	200	200
Total Maize/maize flour	N	17	77	94
	Median	.00	.00	.00
	Mean	182.35	314.29	290.43
	Std. Deviation	726.494	1418.857	1318.548
	Minimum	0	0	0
	Maximum	3000	10000	10000
Total Wheat/wheat flour	N	17	77	94
	Median	.00	.00	.00
	Mean	50.00	354.55	299.47
	Std. Deviation	129.904	1745.675	1583.390
	Minimum	0	0	0
	Maximum	500	15000	15000
Total Vegetables	N	17	71	88
	Median	.00	50.00	17.50
	Mean	33.82	157.30	133.44
	Std. Deviation	59.043	302.970	277.307
	Minimum	0	0	0
	Maximum	200	1500	1500

		Household		
		Permanent	Seasonal	Total
Total Beef	N	17	75	92
	Median	.00	.00	.00
	Mean	17.65	69.20	59.67
	Std. Deviation	72.761	407.288	369.093
	Minimum	0	0	0
	Maximum	300	3500	3500
Total Pork	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	1.28	1.05
	Std. Deviation	.000	11.323	10.260
	Minimum	0	0	0
	Maximum	0	100	100
Total Mutton	N	17	77	94
	Median	.00	.00	.00
	Mean	7.06	19.55	17.29
	Std. Deviation	24.435	57.102	52.827
	Minimum	0	0	0
	Maximum	100	300	300
Total Bird meat	N	17	73	90
	Median	.00	.00	.00
	Mean	5.41	8.12	7.61
	Std. Deviation	7.054	14.588	13.500
	Minimum	0	0	0
	Maximum	20	100	100
Total Fish	N	17	77	94
	Median	.00	.00	.00
	Mean	.00	.84	.69
	Std. Deviation	.000	4.961	4.496
	Minimum	0	0	0
	Maximum	0	40	40

		Household		
		Permanent	Seasonal	Total
Total Sunflower beans	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	.04	.03
	Std. Deviation	.000	.340	.308
	Minimum	0	0	0
	Maximum	0	3	3
Total Egg	N	16	65	81
	Median	80.00	100.00	100.00
	Mean	171.87	320.77	291.36
	Std. Deviation	263.950	690.306	630.745
	Minimum	0	0	0
	Maximum	1000	5000	5000
Total Milk	N	16	68	84
	Median	135.00	.00	.00
	Mean	1407.50	642.79	788.45
	Std. Deviation	3722.996	1546.486	2127.625
	Minimum	0	0	0
	Maximum	15000	8000	15000
Total Cheese/butter	N	16	69	85
	Median	50.00	.00	.00
	Mean	250.00	140.94	161.47
	Std. Deviation	372.881	286.113	304.853
	Minimum	0	0	0
	Maximum	1100	1000	1100
Total Grape	N	17	77	94
	Median	.00	.00	.00
	Mean	41.18	115.06	101.70
	Std. Deviation	100.367	284.539	262.132
	Minimum	0	0	0
	Maximum	300	1500	1500

		Household		
		Permanent	Seasonal	Total
Total Honey	N	17	78	95
	Median	.00	.00	.00
	Mean	.00	2.27	1.86
	Std. Deviation	.000	12.718	11.544
	Minimum	0	0	0
	Maximum	0	100	100
Total Fruit	N	17	75	92
	Median	.00	.00	.00
	Mean	39.41	94.24	84.11
	Std. Deviation	85.328	179.773	167.388
	Minimum	0	0	0
	Maximum	300	1000	1000
Total Other	N		2	2
	Median		125.00	125.00
	Mean		125.00	125.00
	Std. Deviation		106.066	106.066
	Minimum		50	50
	Maximum		200	200

ANOVA

	F	Sig.
Total Potatoes * HH lives	2.350	.129
Total Haricot * HH lives	1.275	.262
Total Maize/maize flour * HH lives	.138	.711
Total Wheat/wheat flour * HH lives	.512	.476
Total Vegetables * HH lives	2.775	.099
Total Beef * HH lives	.268	.606
Total Pork * HH lives	.216	.643
Total Mutton * HH lives	.776	.381
Total Bird meat * HH lives	.554	.459
Total Fish * HH lives	.488	.487
Total Sunflower beans * HH lives	.216	.643
Total Egg * HH lives	.713	.401
Total Milk * HH lives	1.687	.198
Total Cheese/butter * HH lives	1.676	.199
Total Grape * HH lives	1.108	.295
Total Honey * HH lives	.537	.466
Total Fruit * HH lives	1.495	.225

How much of the food products listed below (in kg) has your household produced in Tusheti during the last year?

		Household		Total
		Permanent	Seasonal	
Potatoes in Tusheti	N	17	79	96
	Median	1000.00	300.00	450.00
	Mean	1647.06	709.24	875.31
	Std. Deviation	1942.009	1075.306	1309.224
	Minimum	0	0	0
	Maximum	7000	5000	7000
Haricot in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.76	.63
	Std. Deviation	.000	3.847	3.498
	Minimum	0	0	0
	Maximum	0	20	20
Maize/maize flour in Tusheti	N	17	78	95
	Median	.00	.00	.00
	Mean	176.47	.00	31.58
	Std. Deviation	727.607	.000	307.794
	Minimum	0	0	0
	Maximum	3000	0	3000
Wheat/wheat flour in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	2.53	2.08
	Std. Deviation	.000	22.502	20.412
	Minimum	0	0	0
	Maximum	0	200	200
Vegetables in Tusheti	N	17	78	95
	Median	.00	.00	.00
	Mean	10.12	41.19	35.63
	Std. Deviation	21.985	129.081	117.789
	Minimum	0	0	0
	Maximum	80	900	900

		Household		
		Permanent	Seasonal	Total
Beef in Tusheti	N	17	78	95
	Median	.00	.00	.00
	Mean	17.65	10.26	11.58
	Std. Deviation	72.761	52.446	56.235
	Minimum	0	0	0
	Maximum	300	300	300
Pork in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Mutton in Tusheti	N	17	78	95
	Median	.00	.00	.00
	Mean	6.47	14.36	12.95
	Std. Deviation	24.223	52.238	48.419
	Minimum	0	0	0
	Maximum	100	300	300
Bird meat in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	4.29	1.47	1.97
	Std. Deviation	7.465	4.579	5.270
	Minimum	0	0	0
	Maximum	20	20	20
Fish in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.06	.05
	Std. Deviation	.000	.563	.510
	Minimum	0	0	0
	Maximum	0	5	5

		Household		
		Permanent	Seasonal	Total
Sunflower beans in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Egg in Tusheti	N	16	74	90
	Median	.00	.00	.00
	Mean	53.75	58.38	57.56
	Std. Deviation	108.743	154.308	146.719
	Minimum	0	0	0
	Maximum	300	600	600
Milk in Tusheti	N	16	71	87
	Median	135.00	.00	.00
	Mean	1951.25	489.86	758.62
	Std. Deviation	4301.003	1418.929	2278.057
	Minimum	0	0	0
	Maximum	15000	8000	15000
Cheese/butter in Tusheti	N	16	74	90
	Median	85.00	.00	.00
	Mean	255.00	127.91	150.50
	Std. Deviation	370.117	401.767	397.332
	Minimum	0	0	0
	Maximum	1100	3000	3000
Grape in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	1.27	1.04
	Std. Deviation	.000	11.251	10.206
	Minimum	0	0	0
	Maximum	0	100	100

		Household		
		Permanent	Seasonal	Total
Honey in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.00	.00
	Std. Deviation	.000	.000	.000
	Minimum	0	0	0
	Maximum	0	0	0
Fruit in Tusheti	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	26.33	21.67
	Std. Deviation	.000	79.955	73.150
	Minimum	0	0	0
	Maximum	0	500	500

ANOVA

	F	Sig.
Potatoes in Tusheti * HH lives	7.683	.007
Haricot in Tusheti * HH lives	.657	.420
Maize/maize flour in Tusheti * HH lives	4.772	.031
Wheat/wheat flour in Tusheti * HH lives	.213	.645
Vegetables in Tusheti * HH lives	.971	.327
Beef in Tusheti * HH lives	.239	.626
Mutton in Tusheti * HH lives	.368	.546
Bird meat in Tusheti * HH lives	4.155	.044
Fish in Tusheti * HH lives	.213	.645
Egg in Tusheti * HH lives	.013	.910
Milk in Tusheti * HH lives	5.665	.020
Cheese/butter in Tusheti * HH lives	1.351	.248
Grape in Tusheti * HH lives	.213	.645
Fruit in Tusheti * HH lives	1.828	.180

How much livestock do you own?

		Household		
		Permanent	Seasonal	Total
Cattle (Total)	N	17	79	96
	Median	6.00	1.00	2.00
	Mean	9.94	5.22	6.05
	Std. Deviation	9.928	8.564	8.951
	Minimum	0	0	0
	Maximum	35	35	35
Milk cow	N	17	79	96
	Median	4.00	1.00	1.00
	Mean	5.71	3.34	3.76
	Std. Deviation	6.018	5.053	5.281
	Minimum	0	0	0
	Maximum	20	20	20
Pig	N	17	79	96
	Median	.00	.00	.00
	Mean	.00	.13	.10
	Std. Deviation	.000	.540	.492
	Minimum	0	0	0
	Maximum	0	4	4
Horse	N	17	79	96
	Median	.00	.00	.00
	Mean	1.12	1.41	1.35
	Std. Deviation	2.058	2.981	2.832
	Minimum	0	0	0
	Maximum	8	17	17
Bull	N	17	79	96
	Median	.00	.00	.00
	Mean	.29	.10	.14
	Std. Deviation	.686	.900	.866
	Minimum	0	0	0
	Maximum	2	8	8

		Household		
		Permanent	Seasonal	Total
Donkey/mule	N	17	79	96
	Median	.00	.00	.00
	Mean	.06	.09	.08
	Std. Deviation	.243	.398	.375
	Minimum	0	0	0
	Maximum	1	3	3
Sheep	N	17	79	96
	Median	.00	.00	.00
	Mean	2.35	22.53	18.96
	Std. Deviation	7.348	100.553	91.491
	Minimum	0	0	0
	Maximum	30	700	700
Goat	N	17	79	96
	Median	.00	.00	.00
	Mean	.29	.75	.67
	Std. Deviation	1.213	2.426	2.260
	Minimum	0	0	0
	Maximum	5	10	10
Poultry	N	17	79	96
	Median	10.00	15.00	14.50
	Mean	11.71	18.03	16.91
	Std. Deviation	11.873	26.861	24.941
	Minimum	0	0	0
	Maximum	50	200	200
Bee hive	N	17	79	96
	Median	.00	.00	.00
	Mean	.06	.53	.45
	Std. Deviation	.243	2.536	2.307
	Minimum	0	0	0
	Maximum	1	15	15

ANOVA

	F	Sig.
Cattle (Total) * HH lives	4.024	.048
Milk cow * HH lives	2.858	.094
Pig * HH lives	.927	.338
Horse * HH lives	.143	.706
Bull * HH lives	.692	.408
Donkey/mule * HH lives	.088	.768
Sheep * HH lives	.678	.412
Goat * HH lives	.559	.457
Poultry * HH lives	.897	.346
Bee hive * HH lives	.585	.446

Do you have any livestock in Tusheti?

	Household		
	Permanent	Seasonal	Total
I do not have any livestock	38.5%	48.0%	46.6%
Yes, we have livestock	61.5%	52.0%	53.4%
Total	100.0%	100.0%	100.0%

$\chi^2=0.405$; $P=0.524$

Where do you feed/graze your livestock for much of the year?

	Household		
	Permanent	Seasonal	Total
In the stalls or near the house	50.0%	14.3%	22.2%
At the village pasture (pastures owned by the village administration)	91.7%	92.9%	92.6%
At the pasture of my own	16.7%	4.8%	7.4%
At the state land	66.7%	35.7%	42.6%
In the deep forest	41.7%	7.1%	14.8%

Do you cut wood for fuel?

	Household		Total
	Permanent	Seasonal	
Yes	100.0%	53.2%	61.5%
No	.0%	46.8%	38.5%
Total	100.0%	100.0%	100.0%

$\chi^2=12.955$; $P=0.000$

Wood for fuel How many?

	Household		Total
	Permanent	Seasonal	
Small amount	58.8%	71.4%	67.8%
Average amount	41.2%	23.8%	28.8%
Big amount	.0%	4.8%	3.4%
Total	100.0%	100.0%	100.0%

$\chi^2=2.360$; $P=0.307$

Wood for fuel How often?

	Household		Total
	Permanent	Seasonal	
Routinely	.0%	7.1%	5.1%
Sometimes	58.8%	45.2%	49.2%
Rarely	41.2%	47.6%	45.8%
Total	100.0%	100.0%	100.0%

$\chi^2=1.778$; $P=0.411$

Wood for fuel, for what purpose?

	Household		Total
	Permanent	Seasonal	
For self-consumption	100.0%	97.6%	98.3%
For sale	.0%	2.4%	1.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.412$; $P=0.521$

Do you cut wood for timber?

	Household		Total
	Permanent	Seasonal	
Yes	23.5%	13.9%	15.6%
No	76.5%	86.1%	84.4%
Total	100.0%	100.0%	100.0%

$\chi^2=0.979$; $P=0.322$

Wood for timber How many?

	Household		Total
	Permanent	Seasonal	
Small amount	75.0%	63.6%	66.7%
Average amount	25.0%	27.3%	26.7%
Big amount	.0%	9.1%	6.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.246$; $P=0.808$

Wood for timber How often?

	Household		Total
	Permanent	Seasonal	
Routinely	.0%	9.1%	6.7%
Sometimes	25.0%	45.5%	40.0%
Rarely	75.0%	45.5%	53.3%
Total	100.0%	100.0%	100.0%

$\chi^2=1.151$; $P=0.563$

Wood for fuel, for what purpose?

	Household		Total
	Permanent	Seasonal	
For self-consumption	100.0%	100.0%	100.0%
For sale	.0%	.0%	.0%
Total	100.0%	100.0%	100.0%

Do you pick mushrooms, herbs and/or berries in the woods?

	Household		
	Permanent	Seasonal	Total
Yes	35.3%	38.0%	37.5%
No	64.7%	62.0%	62.5%
Total	100.0%	100.0%	100.0%

$\chi^2=0.043$; $P=0.836$

Mushrooms, herbs and/or berries in the woods How many?

	Household		
	Permanent	Seasonal	Total
Small amount	83.3%	70.0%	72.2%
Average amount	.0%	30.0%	25.0%
Big amount	16.7%	.0%	2.8%
Total	100.0%	100.0%	100.0%

$\chi^2=6.923$; $P=0.031$

Mushrooms, herbs and/or berries in the woods How often?

	Household		
	Permanent	Seasonal	Total
Routinely	.0%	10.0%	8.3%
Sometimes	16.7%	56.7%	50.0%
Rarely	83.3%	33.3%	41.7%
Total	100.0%	100.0%	100.0%

$\chi^2=5.200$; $P=0.074$

Mushrooms, herbs and/or berries in the woods, for what purpose?

	Household		
	Permanent	Seasonal	Total
For self-consumption	100.0%	96.7%	97.2%
For sale	.0%	3.3%	2.8%
Total	100.0%	100.0%	100.0%

$\chi^2=0.206$; $P=0.650$

Do you pick bilberries afield?

	Household		
	Permanent	Seasonal	Total
Yes	29.4%	35.4%	34.4%
No	70.6%	64.6%	65.6%
Total	100.0%	100.0%	100.0%

$\chi^2=0.226$; $P=0.635$

Bilberries afield How many?

	Household		
	Permanent	Seasonal	Total
Small amount	100.0%	67.9%	72.7%
Average amount	.0%	32.1%	27.3%
Big amount	.0%	.0%	.0%
Total	100.0%	100.0%	100.0%

$\chi^2=2.210$; $P=0.137$

Bilberries afield How often?

	Household		
	Permanent	Seasonal	Total
Routinely	20.0%	.0%	3.0%
Sometimes	.0%	57.1%	48.5%
Rarely	80.0%	42.9%	48.5%
Total	100.0%	100.0%	100.0%

$\chi^2=9.664$; $P=0.008$

Bilberries afield, for what purpose?

	Household		
	Permanent	Seasonal	Total
For self-consumption	100.0%	100.0%	100.0%
For sale	.0%	.0%	.0%
Total	100.0%	100.0%	100.0%

Do you collect herbs?

	Household		Total
	Permanent	Seasonal	
Yes	52.9%	68.4%	65.6%
No	47.1%	31.6%	34.4%
Total	100.0%	100.0%	100.0%

$\chi^2=1.473$; $P=0.225$

Herbs How many?

	Household		Total
	Permanent	Seasonal	
Small amount	55.6%	64.8%	63.5%
Average amount	33.3%	29.6%	30.2%
Big amount	11.1%	5.6%	6.3%
Total	100.0%	100.0%	100.0%

$\chi^2=0.514$; $P=0.773$

Herbs How often?

	Household		Total
	Permanent	Seasonal	
Routinely	.0%	14.8%	12.7%
Sometimes	55.6%	55.6%	55.6%
Rarely	44.4%	29.6%	31.7%
Total	100.0%	100.0%	100.0%

$\chi^2=1.867$; $P=0.393$

Herbs, for what purpose?

	Household		Total
	Permanent	Seasonal	
For self-consumption	100.0%	90.7%	92.1%
For sale	.0%	9.3%	7.9%
Total	100.0%	100.0%	100.0%

$\chi^2=0.905$; $P=0.341$

Do you collect the natural coloration herbs?

	Household		Total
	Permanent	Seasonal	
Yes	17.6%	12.7%	13.5%
No	82.4%	87.3%	86.5%
Total	100.0%	100.0%	100.0%

$\chi^2=0.297$; $P=0.586$

Natural dye herbs How many?

	Household		Total
	Permanent	Seasonal	
Small amount	33.3%	90.0%	76.9%
Average amount	66.7%	10.0%	23.1%
Big amount	.0%	.0%	.0%
Total	100.0%	100.0%	100.0%

$\chi^2=4.174$; $P=0.041$

Natural coloration herbs How often?

	Household		Total
	Permanent	Seasonal	
Routinely	.0%	.0%	.0%
Sometimes	33.3%	80.0%	69.2%
Rarely	66.7%	20.0%	30.8%
Total	100.0%	100.0%	100.0%

$\chi^2=2.359$; $P=0.125$

Natural coloration herbs, for what purpose?

	Household		Total
	Permanent	Seasonal	
For self-consumption	100.0%	100.0%	100.0%
For sale	.0%	.0%	.0%
Total	100.0%	100.0%	100.0%

Do you catch any fish to sell in the river, stream, and/or lake around here?

	Household		
	Permanent	Seasonal	Total
Yes	11.8%	6.3%	7.3%
No	88.2%	93.7%	92.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.611$; $P=0.434$

Please, indicate the percentage of the family income that the following resources account for: hay, fish, wood, building materials, berries, mushrooms, medicinal and coloration herbs etc.

	Household		
	Permanent	Seasonal	Total
N	11	63	74
Median	3.00	2.00	2.00
Mean	3.00	9.30	8.36
Std. Deviation	1.949	16.717	15.588
Minimum	0	0	0
Maximum	5	80	80

ANOVA

F	Sig.
1.542	.218

Do you think the National Park established in 2005 has affected the accessibility of the said resources?

	Household		
	Permanent	Seasonal	Total
Much less accessible	52.9%	58.9%	57.8%
Somewhat less accessible	29.4%	16.4%	18.9%
Unchanged	17.6%	19.2%	18.9%
Somewhat more accessible	.0%	1.4%	1.1%
Much more accessible	.0%	4.1%	3.3%
Total	100.0%	100.0%	100.0%

$\chi^2=2.262$; $P=0.688$

Do you get any problems with the protected area Administration in terms of obtainment of the said resources?

	Household		
	Permanent	Seasonal	Total
Yes	37.5%	32.0%	33.0%
No	62.5%	68.0%	67.0%
Total	100.0%	100.0%	100.0%

$\chi^2=0.181$; $P=0.671$

Who do you think are the people that most often go hunting in Tusheti?

	Household		
	Permanent	Seasonal	Total
City dwellers	33.3%	81.3%	73.7%
Foreigners	.0%	6.3%	5.3%
Other	66.7%	12.5%	21.1%
Total	100.0%	100.0%	100.0%

$\chi^2=4.496$; $P=0.106$

When do they hunt most often?

	Household		
	Permanent	Seasonal	Total
Winter	5.9%	1.3%	2.1%
Spring	5.9%	5.1%	5.2%
Summer	.0%	13.9%	11.5%
Autumn	17.6%	12.7%	13.5%
Difficult to answer	70.6%	67.1%	67.7%
Total	100.0%	100.0%	100.0%

$\chi^2=4.099$; $P=0.393$

Which are the most hunted animals and birds in Tusheti?

	Household		Total
	Permanent	Seasonal	
Tur	36.4%	46.4%	45.0%
Wild goat	18.2%	17.4%	17.5%
Deer	.0%	2.9%	2.5%
Bear	18.2%	31.9%	30.0%
Lynx	9.1%	.0%	1.3%
Jackel	.0%	1.4%	1.3%
Hare	18.2%	23.2%	22.5%
Wolf	9.1%	8.7%	8.8%
Black Grouse / Caucasian Snowcock	.0%	5.8%	5.0%

Why do you think most of the Tushetians go hunting ?

	Household		Total
	Permanent	Seasonal	
Entertainment	28.6%	29.8%	29.6%
Tradition	14.3%	8.5%	9.3%
Trophies (skin, horns)	.0%	2.1%	1.9%
Meat	42.9%	55.3%	53.7%
Other	14.3%	4.3%	5.6%
Total	100.0%	100.0%	100.0%

$\chi^2=1.651$; $P=0.800$

Do you know that the following animals are on the list of the endangered species

	Household		Total
	Permanent	Seasonal	
Tur	75.0%	82.1%	80.9%
Wild goat	87.5%	76.9%	78.7%
Deer	81.3%	76.9%	77.7%
Bear	56.3%	56.4%	56.4%
Lynx	81.3%	59.0%	62.8%

Do you know that hunting has been banned in Tusheti?

	Household		
	Permanent	Seasonal	Total
Yes	94.1%	97.5%	96.9%
No	5.9%	2.5%	3.1%
Total	100.0%	100.0%	100.0%

$\chi^2=0.519$; $P=0.471$

In relation to the ban on hunting, which statement do you most agree with?

	Household		
	Permanent	Seasonal	Total
A ban on hunting is necessary or else the unique local species will become extinct	66.7%	63.3%	64.0%
Only the outsiders (city dwellers and foreigners) should be kept from hunting ; As to the Tushetians, hunting is their traditional sport and it should be allowed to continue	26.7%	28.3%	28.0%
All hunting should be permitted	6.7%	5.0%	5.3%
Other	.0%	3.3%	2.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.595$; $P=0.898$

In your opinion, how has the environment (ecology) changed over the last 5 years - Air?

	Household		
	Permanent	Seasonal	Total
Got Worse Significantly	35.3%	11.4%	15.6%
Got Worse Insignificantly	11.8%	11.4%	11.5%
Not changed	47.1%	70.9%	66.7%
Improved Insignificantly	.0%	3.8%	3.1%
Improved Significantly	5.9%	2.5%	3.1%
Total	100.0%	100.0%	100.0%

$\chi^2=7.456$; $P=0.114$

In your opinion, how has the environment (ecology) changed over the last 5 years - Water?

	Household		
	Permanent	Seasonal	Total
Got Worse Significantly	23.5%	8.9%	11.5%
Got Worse Insignificantly	11.8%	7.6%	8.3%
Not changed	58.8%	72.2%	69.8%
Improved Insignificantly	5.9%	6.3%	6.3%
Improved Significantly	.0%	5.1%	4.2%
Total	100.0%	100.0%	100.0%

$\chi^2=4.140$; $P=0.387$

In your opinion, how has the environment (ecology) changed over the last 5 years - Land?

	Household		
	Permanent	Seasonal	Total
Got Worse Significantly	17.6%	8.9%	10.4%
Got Worse Insignificantly	23.5%	7.6%	10.4%
Not changed	47.1%	79.7%	74.0%
Improved Insignificantly	5.9%	2.5%	3.1%
Improved Significantly	5.9%	1.3%	2.1%
Total	100.0%	100.0%	100.0%

$\chi^2=8.402$; $P=0.078$

In your opinion, how has the environment (ecology) changed over the last 5 years - Climate?

	Household		
	Permanent	Seasonal	Total
Got Worse Significantly	35.3%	10.1%	14.6%
Got Worse Insignificantly	11.8%	22.8%	20.8%
Not changed	47.1%	62.0%	59.4%
Improved Insignificantly	5.9%	2.5%	3.1%
Improved Significantly	.0%	2.5%	2.1%
Total	100.0%	100.0%	100.0%

$\chi^2=8.352$; $P=0.079$

Which of the following best describes what "The Environment" means to you

	Household		
	Permanent	Seasonal	Total
Surroundings of your town/village	.0%	3.1%	2.5%
Your district	25.0%	25.0%	25.0%
Georgia	62.5%	46.9%	50.0%
The Earth and its Biosphere	12.5%	25.0%	22.5%
Total	100.0%	100.0%	100.0%

$\chi^2=2.014$; $P=0.570$

In your opinion, who should be responsible for taking care/ preserving natural resources nearby your town/village?

	Household		
	Permanent	Seasonal	Total
Individuals	41.2%	32.1%	33.7%
Families	.0%	9.0%	7.4%
Young generation	.0%	1.3%	1.1%
Entire Community	17.6%	37.2%	33.7%
The State	41.2%	20.5%	24.2%
Total	100.0%	100.0%	100.0%

$\chi^2=6.131$; $P=0.190$

How would you personally contribute to the Protection of Environment?

	Household		
	Permanent	Seasonal	Total
Countenance (moral support)	5.9%	3.8%	4.2%
Will not pollute nature myself	52.9%	53.2%	53.1%
Working; Spend time/energy	41.2%	43.0%	42.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.157$; $P=0.924$

Have you heard that Tusheti has been proclaimed a protected area?

	Household		
	Permanent	Seasonal	Total
Yes	88.2%	96.2%	94.8%
No	11.8%	3.8%	5.2%
Total	100.0%	100.0%	100.0%

$\chi^2=1.799$; $P=0.180$

Did you hear something about twin national parks?

	Household		
	Permanent	Seasonal	Total
Yes	17.6%	16.5%	16.7%
No	82.4%	83.5%	83.3%
Total	100.0%	100.0%	100.0%

$\chi^2=0.014$; $P=0.905$

What do you think is the most urgent for the improvement of the Tushetians socio –economic environment?

	Household		
	Permanent	Seasonal	Total
Support to the traditional agriculture	81.3%	65.8%	68.5%
Support to tourism	18.8%	32.9%	30.3%
Other	.0%	1.4%	1.1%
Total	100.0%	100.0%	100.0%

$\chi^2=1.542$; $P=0.462$

Which do you think the most efficient power supply scheme could be for Tusheti?

	Household		
	Permanent	Seasonal	Total
Centralized power supply like it was in the 80's	12.5%	40.5%	35.6%
The diesel /petrol generators	12.5%	10.8%	11.1%
Alternative sources of power	75.0%	45.9%	51.1%
Other	.0%	2.7%	2.2%
Total	100.0%	100.0%	100.0%

$\chi^2=2.774$; $P=0.428$

If there is a project regarding Tusheti, which do you think is (are) the best way to spread the relevant information (the objectives, plans, research results, etc) among the locals

	Responses		
	N	Percent	Percent of Cases
Mass Media (Press/TV)	19	19.8%	21.1%
Through the most authoritative persons in the village (informal leaders of the village)	5	5.2%	5.6%
Representatives of Local government (District)	9	9.4%	10.0%
Representatives of Local government (Sakrebulo)	11	11.5%	12.2%
Representatives of organization(s) implementing the project	43	44.8%	47.8%
Representatives of Georgian NGOs	1	1.0%	1.1%
Special Newsletters distributed in the Village	8	8.3%	8.9%
Total	96	100.0%	106.7%

Do you think tourism is important for the prospects of Tusheti?

	Household		
	Permanent	Seasonal	Total
Very important	70.6%	81.1%	79.1%
Tourism brings profit to those engaged in the business	29.4%	14.9%	17.6%
Tourism is unimportant for Tusheti	.0%	2.7%	2.2%
Tourism is harmful to the nature and/or cultural traditions of Tusheti	.0%	1.4%	1.1%
Total	100.0%	100.0%	100.0%

$\chi^2=2.545$; $P=0.467$

What do you think is the main tourist attraction in Tusheti?

	Household		
	Permanent	Seasonal	Total
Traditional culture	11.8%	12.7%	12.5%
Architecture	.0%	2.5%	2.1%
Nature	88.2%	84.8%	85.4%
Total	100.0%	100.0%	100.0%

$\chi^2=0.459$; $P=0.795$

Scenery (mountains, valleys, rivers, etc.) Rank

	Household		
	Permanent	Seasonal	Total
1	88.2%	97.5%	95.8%
2	5.9%	2.5%	3.1%
3	5.9%	.0%	1.0%
Total	100.0%	100.0%	100.0%

$\chi^2=5.274$; $P=0.072$

Flora (plants) Rank

	Household		
	Permanent	Seasonal	Total
1	11.8%	1.3%	3.1%
2	52.9%	68.4%	65.6%
3	35.3%	30.4%	31.3%
Total	100.0%	100.0%	100.0%

$\chi^2=5.549$; $P=0.062$

Fauna (animals, birds) Rank

	Household		
	Permanent	Seasonal	Total
1	.0%	1.3%	1.0%
2	41.2%	29.1%	31.3%
3	58.8%	69.6%	67.7%
Total	100.0%	100.0%	100.0%

$\chi^2=1.107$; $P=0.575$

Tur Rank

	Household		
	Permanent	Seasonal	Total
1	64.7%	75.6%	73.7%
2	29.4%	15.4%	17.9%
3	5.9%	9.0%	8.4%
Total	100.0%	100.0%	100.0%

$\chi^2=1.920$; $P=0.383$

Wild goat Rank

	Household		
	Permanent	Seasonal	Total
1	29.4%	10.3%	13.7%
2	58.8%	71.8%	69.5%
3	11.8%	17.9%	16.8%
Total	100.0%	100.0%	100.0%

$\chi^2=4.398$; $P=0.111$

„Large birds“ – eagles, neophron etc. Rank

	Household		
	Permanent	Seasonal	Total
1	5.9%	14.1%	12.6%
2	11.8%	12.8%	12.6%
3	82.4%	73.1%	74.7%
Total	100.0%	100.0%	100.0%

$\chi^2=0.920$; $P=0.631$

Are you and/or your family members engaged in a tourism-related activity?

	Household		
	Permanent	Seasonal	Total
Yes	35.3%	25.3%	27.1%
No, but we'd like to	52.9%	50.6%	51.0%
No, we do not wish to	11.8%	24.1%	21.9%
Total	100.0%	100.0%	100.0%

$\chi^2=1.494$; $P=0.474$

What kind of service can you offer to tourists?

	Responses		
	N	Percent	Percent of Cases
Family hotel	53	41.1%	71.6%
Horse rent	25	19.4%	33.8%
Car service	19	14.7%	25.7%
Guided tours	20	15.5%	27.0%
Trade in the local handicraft	12	9.3%	16.2%
Total	129	100.0%	174.3%