# **United Nations Food and Agriculture Organization (FAO) Green Climate Foundation (GCF)**

Rural household survey on energy use and the main driversof forest and other natural resource degradation focusing on women as actor of change of natural resource management in Lori, Tavush and Syunik Provinces of Armenia

Support for development of Green Climate Fund Project and Capacity Building Development in Armenia (LOA2017/27)

The project implemented under the FAO UNGA Programme

Organisation: Armenian Women for Health and Healthy Environment NGO (AWHHE)

Country: Armenia

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# **List of Abbreviations**

AWHHE	Armenian Women for Health and Healthy Environment
FAO	Food and Agriculture Organization
GCF	Green Climate Foundation
NGO	Non-governmental organization
UNDP	United Nations Development Programme
WWF	World Wild Fund

# Acknowledgements

AWHHE expresses appreciation to the team of FAO for the valuable input for the present report as well as technical guidance and assistance throughout the project including survey methodology and analysis, liaison with the national authorities in Armenia, etc. AWHHE is grateful to Hyantar experts for consultative support. AWHHE also would like to acknowledge the cooperation with the administration of the surveyed village communities.

# **Executive summary**

The present household survey was conducted by the NGO Armenian Women for Health and Healthy Environment (AWHHE) as part of activities for the provision of "Support for the development of Green Climate Fund project and capacity building development in Armenia".

The household survey contributes to the FAO Strategic Objective 2 – Make agriculture, forestry and fisheries more productive and sustainable; Organizational outcome 2.2 countries developed or improved policies and governance mechanisms to address sustainable production, climate change and environmental degradation in agriculture, fisheries and forestry; output 2.2.1 policies, strategies and investment programmes formulate, in support to sustainable agriculture, forestry and fishery, and address climate change and environmental degradation.

The present report summarizes the results of a household survey completed under FAO UNGA Programme and contributes to FAO support to the Government of Armenia in developing its Green Climate Fund capacities and project portfolio for achieving its commitments under its (intended) nationally determined contribution (I)NDC under the UNFCCC Paris Agreement.

AWHHE used a household survey template prepared by FAO to undertake household research which will be elaborated by FAO and partners. The household survey was undertaken using a template provided by FAO and based on the agreed criteria.

The provinces (marzes) and villages where the household surveys was undertaken were determined in coordination FAO and Hyantar. The survey was conducted in 28 villages in three Armenia's marzes: Tavush, Lori and Syunik. The work also ensured the engagement with local communities (the administration/ mayors of the villages). The criteria of selection of individuals to be interviewed were determined based on village, household structure as well as location of the villages compared to forested areas. The necessary training of the staff who were to undertake the survey work was provided to ensure quality and consistency of the results. The surveys were undertaken on a one-to-one individual basis addressing women as the main target. A total of 280 people were interviewed of which 140 people were interviewed in 14 villages in location in proximity of relevant forest resources and 140 people interveiwed in 14 villages where forest resources were not available in a radius of 15 km.

The compiled numeric data is provided in one excel sheet to allow easy elaboration of the data and the non-numeric responses (worded replies) are provided in a word document. The information is also provided in a gender disaggregated form.

During the survey, AWHHE made the following observations regarding the key barriers and enabling factors which could be created in developing an overview/vision and roadmap of women's engagement in forest management:

#### Should be accomplished

- The survey showed that....
- Main findings....
- women...

## 1. The obective of the survey

The objective of the present rural household survey is to

- a) establish baselines of energy use and type (wood, gas, etc.) at different times of the year and
- b) determine the main drivers of forest and other natural resource degradation focusing on women as actor of change of natural resource management.

## 2. The task of the survey

In line with the above objectives, the analysis focuses on the following issues:

- 1.1 To what extent does the use of energy sources (wood, gas, etc.) in cold and hot seasons affect the degradation of forest and natural sources?
- 1.2 To what extent is the climate change driven by the use of energy sources (wood, gas, etc.)?
- 1.3 What are the major driving forces of forest and natural resource degradation?
- 1.4 To what extent do the women as actor of change of natural resource management manage or influence those changes?

#### 3. The household selection

The selection of households was done in a multi-layered way to ensure that the full picture of each community is reflected.

The following selection layers were taken into account:

- a. geographical location by provinces;
- b. location by Forest Enterprises;
- c. location of communities: nearness to and remoteness from forests;
- d. division of the community area;
- e. selection of families:
- f. selection of a family member.

#### 3.1 Target Provinces

The following provinces of Armenia were selected for the survey: Lori, Tavush and Syunik.

#### 3.2 Selection of the Forest Enterprises

The Forest Enterprises, as well as the communities of Lori and Tavush provinces were selected and provided to "Armenian Woman for Health and Healthy Envtronment" (AWHHE) NGO by "Hayantar" ("ArmForest") SNCO.

The choice of Forest Enterprises and communities of Syunik Province was made by GIS Officer of WWF - Armenia Mr. Arman Kandaryan.

Table 1 presents the provinces and Forest Enterprises selected for each province survey.

Table 1. Provinces & Forest Enterprises

No	Lori Province	Tavush Province	Syunik Province			
1	Gugark Forest Enterprise	Dilijan National Park	Arevik National Park			
2	Yeghegnut Forest Enterprise	Artsvaberd Forest Enterprise	Kapan Forest Enterprise			
3	Lalvar Forest Enterprise	Ijevan Forest Enterprise	Syunik Forest Enterprise			
4	Jiliza Forest Enterprise	Noyemberyan Forest Enterprise	Sisian Forest Enterprise			
5	Stepanavan Forest Enterprise	Sevkar Forest Enterprise				

### 3.3 Location of communities: nearness to and remoteness from the forest

Under the terms of the contract, "Hayantar" ("ArmForest") SNCO provided a list of villages in Lori and Tavush provinces, 10 of which were close to the forest and 10 beyond the radius of 15 km.

Since the territory of Syunik Province is large and the population is small, the size of population was also considered when selecting the nearby and remote communities. Based on the information about the official population size of Armenia in 2017, the villages with a population over an average in the given Forest Enterprise area were selected.

According to "Hayantar" SNCO, there are no villages beyond the radius of 15 km in the territory of Armenia. Forest areas in Armenia are small and located close to rural communities. The selected communities are located at a maximum distance from the forests.

Below is the list of villages in Lori, Tavush and Syunik provinces (Tables 2, 3 and 4). The tables contain the names of the Forest Enterprises and communities close to the forest and far away from the forest.

Table 2. Lori Province

No	Forest Enterprise	<b>Community close to the forest</b>	<b>Community far from the forest</b>
1	Gugark Forest Enterprise	Margahovit	Shirakamut (appr. 8 km)
2	Yeghegnut Forest Enterprise	Dsegh	Arevatsag (appr. 6 km)
3	Lalvar Forest Enterprise	Haghpat	Koghes (appr. 4 km)
4	Jiliza Forest Enterprise	Shamlugh	Dashtadem (appr. 10 km)
5	Stepanavan Forest Enterprise	Gyulagarak	Lejan (appr. 8 km)

Table 3. Tavush Province

No	Forest Enterprise	<b>Community close to the forest</b>	Community far from the forest
1	Dilijan National Park	Haghartsin	Azatamut (appr. 2.5 km)
2	Artsvaberd Forest Enterprise	Aygedzor	Chinari(appr. 2.5 km)
3	Ijevan Forest Enterprise	Gandzaqar	Khashtarak (appr. 2.5 km)
4	Noyemberyan Forest Enterprise	Kogb	Bagratashen (appr. 9 km)
5	Sevkar Forest Enterprise	Atcharkut	Berkaber(appr. 4 km)

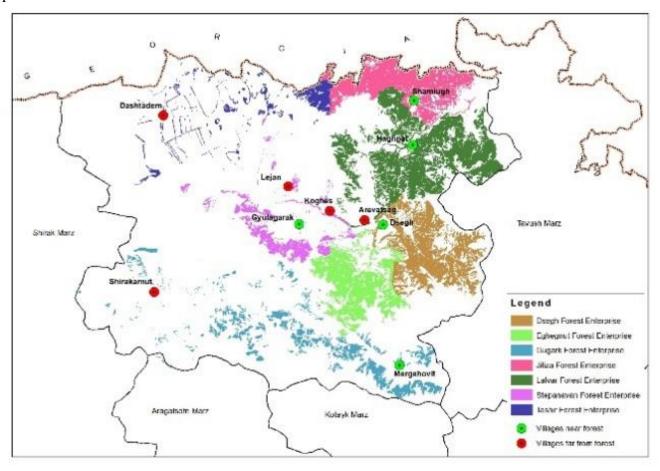
Table 4. Syunik Province

No	Forest Enterprise	<b>Community close to the forest</b>	Community far from the forest
1	Arevik National Park	Vardanidzor	Shvanidzor (appr. 10 km)
2	Kapan Forest Enterprise	Arajadzor	Syunik (appr. 10 km)
3	Syunik Forest Enterprise	Tatev	Tegh (appr. 25 km)
4	Sisian Forest Enterprise	Darbas	Angeghakot (appr. 15 km)

# Below are the maps<sup>1</sup> in which:

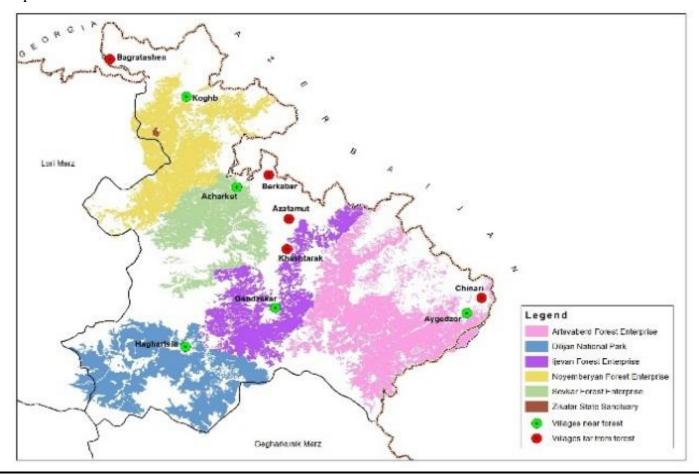
- the areas of Forest Enterprises are marked in different colors;
- the green spots indicate the communities close to the forest;
- the red spots indicate the communities far away from the forest.

# Map of Lori Province

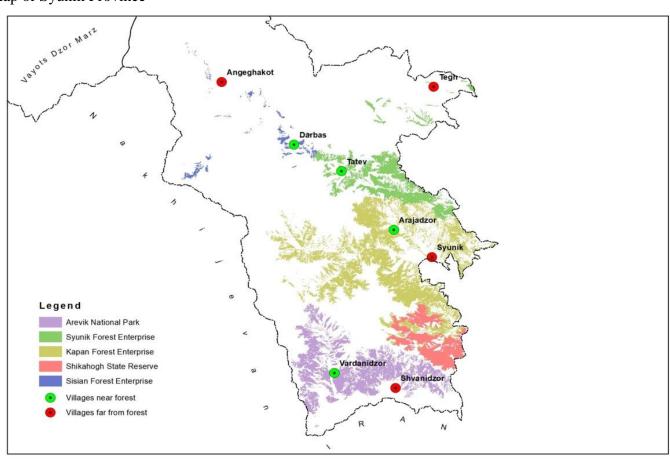


<sup>&</sup>lt;sup>1</sup> The maps were provided by Arman Kandaryan, GIS Officer of WWF – Armenia

# Map of Tavush Province



# Map of Syunik Province



#### 3.4 Breakdown of communities

The community area was divided into 5 parts staring from the center to the outskirts. When dividing the area, the geographical location of the community, the gasified and not gasified areas and the distance from the forest and the central road were also taken into account.

#### 3.5 Selection of families

In each of the 5 areas, a survey of 2 families was conducted. The selection of families was done based on the following criteria:

### 1. the composition of the families:

**1.1** a nuclear or incomplete family;

**1.2** an extended family.

#### For information

A nuclear family is a family group consisting of two parents and their children.

An incomplete or one-parent family is a family in which one of the parents is absent.

An extended family consists of people who are related by marriage and descent.

#### Other information

The newly-formed Armenian family, as a rule, does not leave their parents. Most families are extended, which means that the male and female spouses and their children mostly live with the parents of the male spouse. Sometimes the husband's brother or sister live either alone or with their families under the same roof. There are very few families in which the nuclear family lives with the parents of the female spouse.

#### 2. engagement in agriculture, forest use and cattle-breeding

In cases where

- the community population was small;
- the community was a border village and the rural and forest lands were often fired or mined;
- most of the households did not have land plots or the lands were very small or
- few households were involved in cattle-breeding.

those families were selected which could provide exhaustive information.

#### 3.6 Selection of a family member

The required quota was randomly chosen in the communities, and the best informed female member of the family was interviewed.

Women were not interviewed in case they were not at home or if they were not aware about the questions included in the questionnaire. In such cases, the male member of the household responded.

A survey was conducted with male residents to have comparable results, as well.

# 4. Questionnaire adaptation

At the initial stage of the survey, the questionnaire was tested and reviewed based on the pilot results, the following work was accomplished:

- examining the questionnaire;
- translating it into Armenian;
- making some adjustments (the changes are insignificant and have no impact on the outcome of the survey) as follows:
- removing some issues to avoid misleading the respondents (in consultation with FAO) as AO and JC organizations do not exist in Armenia;
- moving some questions by grouping themes;
- adding the explanatory notes to the responses (including the results of the first pilot survey).

# 5. Selection and training of survey participants

Before the survey, an announcement was made for an "interviewer" position among AWHHE volunteers and partners. The following criteria were taken into account:

- experience in the field of sociological research;
- communication skills;
- some knowledge in agriculture;
- possibility to be included in the survey for a few days away from home.

Eleven candidates were selected for a pilot survey.

At the introductory meeting the following topics were discussed:

- contents of the questionnaire;
- the survey route;
- conducting the survey (the procedure for selecting respondents; the procedure to clarify the issues raised during the survey);
- information on payment amount and modality;
- information on survey logistics (accommodation and transportation).

After pilot survey the mistakes and omissions made by the interviewers were presented to them and corrected.

To conduct a survey, 10 interviewers were selected instead of 4 which helped reduce the percentage of systematic errors due to misperception.

The interviewers were divided into two groups: one group was assigned a task to conduct a survey in Lori Province (the interviewers were selected from residents of Lori and Tavush provinces) and the other group in Tavush Province (the interviewers were selected from residents of Yerevan and adjacent provinces). At the end of the first day of the fieldwork, all participants gathered and discussed the issues related to the survey; based on that discussion some corrections were made to the organization of the work. An employee of AWHHE NGO was assigned as leader to each of the two survey groups to ensure the quality and assist the teams as needed.

The four best interviewers who participated in the surveys in Lori and Tavush were selected to conducts the the survey in Syunik province (a group leader from AWHHE was assigned). They participated in a brief instruction as a refresher training (the survey questions, the new route and other conditions related to the survey).

# 6. Pilot survey

A pilot survey was conducted in the village of Shirakamut of Lori Province.

The goal of the pilot survey was to find out:

- whether the questionnaire serves the purpose of the survey;
- the quality of interviewers' work and the availability of probable mistakes and misunderstandings;
  - The accuracy of selections.

The survey was conducted in 5 different parts of the community. 5 of 10 interviewers interviewed extended families, and 5 of them interviewed nuclear families (1 questionnaire was not included in the

survey results, as further collaboration with the interviewer was suspended). The target group included women.

The analysis of the survey results showed that 80% of respondents were women. Among the respondents there were households engaged in crop cultivation and livestock and bee-keeping. During the pilot survey, it became clear which issues were difficult to perceive by respondents and needed additional interpretation. There were some questions that the interviewers misunderstood. The unclear issues were clarified by calling the respondents. As a result, some stylistic changes were made in the questionnaire.

# 7. Working with authorities

Official letters were submitted to Lori, Tavush and Syunik governorates presenting the purpose of the survey and informing about the intention to conduct a survey in the above-mentioned communities. The consent was given and letters of recommendation were sent to the community mayors to assist and provide with relevant information and activities. As needed, mayors supported and provided with the necessary information.

## 8. Organization of fieldwork

The survey was conducted involving 280 households of 28 communities of 14 forest enterprises located in three provinces of Armenia. The survey was carried out in two stages.

The first stage of the survey was conducted in Lori and Tavush provinces starting from March 21, 2018. The survey lasted 5 days involving 10 people. The survey route was divided into two parts: a group of interviewers mostly conducted the survey in Lori Province and the other group in Tavush Province. Initially the survey was conducted in the nearest areas and then it was continued according to the following route:

1<sup>st</sup> group (participants were selected from Yerevan and adjacent regions) - departure from Yerevan to Berkaber, Azatamut, Khashtarak, Aygedzor, Atcharkut, Koghb, Bagratashen, Shamlugh and Haghpat communities, and back to Yerevan.

2<sup>nd</sup> group (participants were selected from Lori and Tavush provinces) - departure from Vanadzor to Margahovit, Haghartsin, Gandzakar, Dsegh, Arevatsag. Koghes, Lejan, Gyulagarak and Dashtadem communities, and back to Vanadzor.

The interviewers stayed in the nearby guesthouses.

The survey was conducted in a friendly atmosphere, timely and without incident.

The second stage of the survey was conducted in Synik Province starting from June 14, 2018.

The fieldwork lasted 5 days. The study involved 4 interviewers.

The interviewers were selected from Yerevan and adjacent regions. The route was as follows: from Yerevan to Angeghakot, Tatev, Tegh, Vardanidzor, Shvanidzor, Syunik, Arajadzor, Darbas and return to Yerevan. They stayed in the nearby guesthouses.

The survey was conducted in a friendly atmosphere, timely and without incident.

## 9. Survey reliability

The following measures were implemented to ensure the reliability of the survey results. The instructions given to interviewers were as follows:

- When entering each household, introduce yourself and tell them that the survey is carried out jointly with the UN FAO and GCF international organizations and the "Armenian Women for Health and Healthy Environment" NGO and aimed to contribute to the development of agriculture and environmental protection. Their responses will help to carry out a proper policy in that area.
- Let people know beforehand that the survey will take a long time (about 1-2 hours). Do not insist in case of refusal. The survey involved the members of the family who could provide their free time (the survey season coincided with the early spring, when farmers were mainly busy).
- Be polite and courteous. If people give wrong answers, do not try to correct them. You can only modify and explain the issue in case they do not understand it. Write information in their presence, without changing anything.
- Inform the respondents that the data related to financial costs, their savings, loans, debts, valuables, income, material conditions, and other matters that are considered confidential, will not be provided to a third party and the responsibility for the dissemination of information lies with the organization. Never insist on answering if they refuse to answer.
- Finally, thank the respondent for their contribution to the collection of information in the field of agriculture and nature protection.
- At the end, ask the respondent's name. Ask a phone number and tell that the interviewers' work is supervised and they can call and ask questions. You can also call them in case there is a need for clarification.

Following the above instructions ensured that the respondents had confidence in the organization conducting the survey and helped people to be more honest in their answers. As a result, there were only 10 refusals. This was mainly due to being busy. No refusals were recorded in the middle of the survey.

In order to ensure the quality of the interviewer's work, they were asked to mention the when they started and ended working with each respondent (hour, minutes). To facilitate the logistics, each interviewer was taken by car to the intended area of the community and brought back after completion of work. A few days after the survey, the respondents were called by the phone numbers listed in 1 or 2 questionnaires of each interviewer and given control questions. In case some errors or ommissions were found when entering data in Excel, they were clarified by contacting the respondents.

## 10. Data processing and analysis process

The questionnaires were imported into Excel, the open issues were grouped into Word files. Later, tha data were finalized with SPSS and analyzed.

## 11. Analysis, general notes

Percentage analysis of survey results is presented bearing in mind the following issues:

- a. women participation;
- b. climate change;
- c. use of fuel;
- d. forest use.
- e. Women's readiness for the involvement in forest use management processes (comparative results of males' and females' answers).
- f. To what extent do the women consider effective the activities carried out by Forest Enterprises and what are the issues that need to be addressed? (comparative results of males' and females' answers).
- g. In the opinion of women, which factors are important for achieving confidence? (comparative results of males' and females' answers).

The results below are presented in percentage.

#### 11.1 Participation of female and male resspondents

Table 5

RESPONDENT	Frequency	Percent
Male	94	33.6
Female	186	66.4
Total	280	100.0

#### 11.2 Participation of female and male resspondents by provincess and Forest Enterprises

Table 6

DISTRICT	VILLAGE	MALE %	FEMALE %
	AREVATSAG	30	70
	DASHTADEM	30	70
LORI	DSEGH	30	70
	GYULAGARAK	40	60
	HAGHPAT	40	60
	KOGHES	80	20
	LEJAN	30	70
	MARGAHOVIT	40	60
	SHAMLUGH	30	70
	SHIRAKAMUT	20	80
Total		37	63
	ACHARKUT	20	80
	AYGEDZOR	30	70
	AZATAMUT	40	60
	BAGRATASHEN	40	60
TAVUSH	BERQABER	50	50
IAVUSII	CHINARI	10	90
	GANDZAQAR	30	70
	HAGHARTSIN	50	50
	KHASHTARAK	50	50
	KOGHB	20	80
Total		34	66
	ANGEKHAKOT	10	90
	ARAJADZOR	50	50
	DARBAS	30	70
SYUNIK	SHVANIDZOR	20	80
ST OIVIK	SYUNIK	40	60
	TATEV	20	80
	TEKH	30	70
	VARDANIDZOR	30	70
Total		28,75	71,25

The number of female resspondents by provinces is more than 60 %.

#### 11.3 Gender of the head of the family

Table 7

HH SEX										
RESPONDENT	Frequency	Percent								
Male	231	82.5								
Female	49	17.5								
Total	280	100.0								

In the opinion of 82.5% of the participants, the male member of the family is the head of the family. The table below shows that a very small percentage of male respondents mentioned women as the head of the family.

Table 8

HH SEX										
RESPODENT SEX		Male	Female							
Male	Count	91	3	94						
	% of Total	32.5%	1.1%	33.6%						
Female	Count	140	46	186						
	% of Total	50.0%	16.4%	66.4%						
Total	Count	231	49	280						
	% of Total	82.5%	17.5%	100.0%						

#### **Observation**

The results of interviews with women showed that, even if the household management was on their shoulders, they considered their husbands as the head of the household, even in families where husbands earn money through a long-term or short-term work abroad, and some of them have been living abroad for years, particularly in Russia. Although the care for the household was on the shoulders of women, they and other members of the family insisted that the head of the house was their husband.

Here is another important fact: traditionally the oldest member of the household is considered to be the head of the husehold, even if he is an old man. Hierarchy is arranged as follows:

- 1. the oldest male member,
- 2. the oldest female member,
- 3. their son and other children,
- 4. daughter-in-law,
- 5. children,
- 6. grandchildren.

It does not depend on hierarchy which family member earns money to keep the family.

It should also be noted that a women after marriage mainly lives with her husband's family, and in very few cases the newly married man lives with his wife's family.

# 11.4 The picture of provinces and forest areas associated with climate change

The answers of female and male respondents are presented together. This table will help to understand the general picture of climate change in the area of each Forest Enterprise.

Table 9

PROVINCE	FOREST ENTERPISE	NTERPISE RESULTS	RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
			No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	STEPANAVAN F/E	% within	20.00%	80.00%	-	20.00%	80.00%	100.00%	-	55.00%	45.00%	25.00%	75.00%	20.00%	80.00%	-
	STEPANAVANT/E	% of Total	4.00%	16.00%	-	4.00%	16.00%	20.00%	-	11.00%	9.00%	5.00%	15.00%	4.00%	16.00%	-
	YEGHEGNUT F/E	% within	15.00%	80.00%	5.00%	15.00%	85.00%	100.00%	-	30.00%	70.00%	30.00%	70.00%	5.00%	95.00%	-
	TEGREGNUT F/E	% of Total	3.00%	16.00%	1.00%	3.00%	17.00%	20.00%	-	6.00%	14.00%	6.00%	14.00%	1.00%	19.00%	-
LORI	GUGARK F/E	% within	10.00%	80.00%	10.00%	20.00%	80.00%	95.00%	5.00%	20.00%	80.00%	35.00%	65.00%	10.00%	90.00%	-
LOKI		% of Total	2.00%	16.00%	2.00%	4.00%	16.00%	19.00%	1.00%	4.00%	16.00%	7.00%	13.00%	2.00%	18.00%	-
	JILIZA F/E	% within	10.00%	70.00%	20.00%	15.00%	85.00%	95.00%	5.00%	45.00%	55.00%	40.00%	60.00%	5.00%	95.00%	-
	JILIZA F/E	% of Total	2.00%	14.00%	4.00%	3.00%	17.00%	19.00%	1.00%	9.00%	11.00%	8.00%	12.00%	1.00%	19.00%	-
	LALVAR F/E	% within	15.00%	80.00%	5.00%	-	100.00%	100.00%		60.00%	40.00%	35.00%	65.00%	-	95.00%	5.00%
		% of Total	3.00%	16.00%	1.00%	-	20.00%	20.00%		12.00%	8.00%	7.00%	13.00%	-	19.00%	1.00%
	Total	% within	14.00%	78.00%	8.00%	14.00%	86.00%	98.00%	2.00%	42.00%	58.00%	33.00%	67.00%	8.00%	91.00%	1.00%
	Total	% of Total	14.00%	78.00%	8.00%	14.00%	86.00%	98.00%	2.00%	42.00%	58.00%	33.00%	67.00%	8.00%	91.00%	1.00%

Table 10

PROVINCE	FOREST ENTERPISE	RESULTS	RAINFALL			DROU	DROUGHTS FLOOD		ODS	DS DELAY RAINS		END RAINS		HOT DAYS		
			No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	SEVKAR F/E	% within	20.00%	55.00%	25.00%	15.00%	85.00%	90.00%	10.00%	55.00%	45.00%	30.00%	70.00%	15.00%	80.00%	5.00%
	SEVICAL 17E	% of Total	4.00%	11.00%	5.00%	3.00%	17.00%	18.00%	2.00%	11.00%	9.00%	6.00%	14.00%	3.00%	16.00%	1.00%
	ARTSVABERD F/E	% within	25.00%	65.00%	10.00%	10.00%	90.00%	100.00%	ı	45.00%	55.00%	35.00%	65.00%	15.00%	85.00%	-
	AICTOVADEICOT/E	% of Total	5.00%	13.00%	2.00%	2.00%	18.00%	20.00%	ı	9.00%	11.00%	7.00%	13.00%	3.00%	17.00%	-
TAVUSH	DILIJAN N/P	% within	35.00%	55.00%	10.00%	25.00%	75.00%	100.00%	ı	65.00%	35.00%	55.00%	45.00%	25.00%	75.00%	=
IAVOSIT		% of Total	7.00%	11.00%	2.00%	5.00%	15.00%	20.00%	ı	13.00%	7.00%	11.00%	9.00%	5.00%	15.00%	-
	IJEVAN F/E	% within	20.00%	50.00%	30.00%	10.00%	90.00%	100.00%	1	65.00%	35.00%	70.00%	30.00%	5.00%	80.00%	15.00%
	IJE VAN 17E	% of Total	4.00%	10.00%	6.00%	2.00%	18.00%	20.00%	ı	13.00%	7.00%	14.00%	6.00%	1.00%	16.00%	3.00%
	NOYEMBERYAN F/E	% within	15.00%	70.00%	15.00%	25.00%	75.00%	100.00%	ı	75.00%	25.00%	65.00%	35.00%	15.00%	85.00%	=
	NOTEINBERTANT/E	% of Total	3.00%	14.00%	3.00%	5.00%	15.00%	20.00%	ı	15.00%	5.00%	13.00%	7.00%	3.00%	17.00%	=
Total	Total	% within	23.00%	59.00%	18.00%	17.00%	83.00%	98.00%	2.00%	61.00%	39.00%	51.00%	49.00%	15.00%	81.00%	4.00%
	Total	% of Total	23.00%	59.00%	18.00%	17.00%	83.00%	98.00%	2.00%	61.00%	39.00%	51.00%	49.00%	15.00%	81.00%	4.00%

Table 11

PROVINCE	FOREST ENTERPISE	RESULTS	ı	RAINFALL		DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
			No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	AREVIK N/P	% within	30.00%	35.00%	35.00%	35.00%	65.00%	80.00%	20.00%	55.00%	45.00%	65.00%	35.00%	25.00%	55.00%	20.00%
	AREVIK N/P	% of Total	7.50%	8.80%	8.80%	8.80%	16.20%	20.00%	5.00%	13.80%	11.20%	16.20%	8.80%	6.20%	13.80%	5.00%
	SISIAN F/E	% within	-	45.00%	55.00%	25.00%	75.00%	100.00%	ı	55.00%	45.00%	40.00%	60.00%	35.00%	40.00%	25.00%
SYUNIK		% of Total	-	11.20%	13.80%	6.20%	18.80%	25.00%	-	13.80%	11.20%	10.00%	15.00%	8.80%	10.00%	6.20%
STOWN	SYUNIK F/E % within	% within	25.00%	20.00%	55.00%	45.00%	55.00%	85.00%	15.00%	85.00%	15.00%	75.00%	25.00%	25.00%	30.00%	45.00%
		% of Total	6.20%	5.00%	13.80%	11.20%	13.80%	21.20%	3.80%	21.20%	3.80%	18.80%	6.20%	6.20%	7.50%	11.20%
	KAPAN F/E	% within	5.00%	15.00%	80.00%	45.00%	55.00%	85.00%	15.00%	75.00%	25.00%	55.00%	45.00%	25.00%	40.00%	35.00%
	TOTAL PINT / L	% of Total	1.20%	3.80%	20.00%	11.20%	13.80%	21.20%	3.80%	18.80%	6.20%	13.80%	11.20%	6.20%	10.00%	8.80%
	Total	% within	15.00%	28.80%	56.20%	37.50%	62.50%	87.50%	12.50%	67.50%	32.50%	58.80%	41.20%	27.50%	41.20%	31.20%
	Total	% of Total	15.00%	28.80%	56.20%	37.50%	62.50%	87.50%	12.50%	67.50%	32.50%	58.80%	41.20%	27.50%	41.20%	31.20%

## 11.5 How does the use of fuel for heating and cooking affect climate change?

Below is presented the general picture of the types of fuel used for heating homes the previous winter and cooking during hot and cold seasons. Answers of female and male resspondents are presented together. These tables will help you understand the general picture of climate change caused by the use of fuel.

Table 12

R	AINFALL		HEAT	ING			COOK	ING	
HEATING	RESULTS	No change in rain	Less rain	More rain	Total	No change in rain	Less rain	More rain	Total
	Count	7	23	5	35	64	231	68	363
Gas	% within	20.00%	65.70%	14.30%		17.60%	63.60%	18.70%	
Gas	% within RAINFALL	14.30%	14.40%	7.00%		130.60%	144.40%	95.80%	
	% of Total	2.50%	8.20%	1.80%	12.50%	22.90%	82.50%	24.30%	129.60%
	Count	1	2	1	4	2	10	8	20
Electricity	% within	25.00%	50.00%	25.00%		10.00%	50.00%	40.00%	
Electricity	% within RAINFALL	2.00%	1.20%	1.40%		4.10%	6.20%	11.30%	
	% of Total	0.40%	0.70%	0.40%	1.40%	0.70%	3.60%	2.90%	7.10%
	Count	43	142	61	246	6	64	27	97
Wood	% within	17.50%	57.70%	24.80%		6.20%	66.00%	27.80%	
vvood	% within RAINFALL	87.80%	88.80%	85.90%		12.20%	40.00%	38.00%	
	% of Total	15.40%	50.70%	21.80%	87.90%	2.10%	22.90%	9.60%	34.60%
-	Count					1			1
	% within					100.00%			
Coai	% within RAINFALL					2.00%			
	% of Total					0.40%			0.40%
	Count	1	3	8	12		1	9	10
Bush	% within	8.30%	25.00%	66.70%			10.00%	90.00%	
Dusii	% within RAINFALL	2.00%	1.90%	11.30%			0.60%	12.70%	
	% of Total	0.40%	1.10%	2.90%	4.30%		0.40%	3.20%	3.60%
	Count	1	19	10	30	2	6	3	11
Dung	% within	3.30%	63.30%	33.30%		18.20%	54.50%	27.30%	
Dung	% within RAINFALL	2.00%	11.90%	14.10%		4.10%	3.80%	4.20%	
	% of Total	0.40%	6.80%	3.60%	10.70%	0.70%	2.10%	1.10%	3.90%
	Count					23	25	42	90
Liquid goo	% within					25.60%	27.80%	46.70%	
Liquid gas	% within RAINFALL					46.90%	15.60%	59.20%	
. 0	% of Total					8.20%	8.90%	15.00%	32.10%
Total	Count	49	160	71	280	49	160	71	280
Total	% of Total	17.50%	57.10%	25.40%	100.00%	17.50%	57.10%	25.40%	100.00%

Table 13

Г	PROUGHTS		HEATIN	G		COOKING	â
HEATING	RESULTS	NO	YES	Total	NO	YES	Total
	Count	5	30	35	63	300	363
Gas	% within	14.30%	85.70%		17.40%	82.60%	
Gas	% within DROUGHTS	8.20%	13.70%		103.30%	137.00%	
	% of Total	1.80%	10.70%	12.50%	22.50%	107.10%	129.60%
	Count	3	1	4	8	12	20
Electricity	% within	75.00%	25.00%		40.00%	60.00%	
Electricity	% within DROUGHTS	4.90%	0.50%		13.10%	5.50%	
	% of Total	1.10%	0.40%	1.40%	2.90%	4.30%	7.10%
	Count	50	196	246	17	80	97
Wood	% within	20.30%	79.70%		17.50%	82.50%	
vvoou	% within DROUGHTS	82.00%	89.50%		27.90%	36.50%	
	% of Total	17.90%	70.00%	87.90%	6.10%	28.60%	34.60%
	Count				1		1
Cool	% within				100.00%		
Coai	% within DROUGHTS				1.60%		
	% of Total				0.40%		0.40%
	Count	4	8	12	6	4	10
Buch	% within	33.30%	66.70%		60.00%	40.00%	
Dusii	% within DROUGHTS	6.60%	3.70%		9.80%	1.80%	
	% of Total	1.40%	2.90%	4.30%	2.10%	1.40%	3.60%
	Count	6	24	30	2	9	11
Dung	% within	20.00%	80.00%		18.20%	81.80%	
Durig	% within DROUGHTS	9.80%	11.00%		3.30%	4.10%	
	% of Total	2.10%	8.60%	10.70%	0.70%	3.20%	3.90%
	Count				35	55	90
Liquid gas	% within				38.90%	61.10%	
Liquiu gas	% within DROUGHTS				57.40%	25.10%	
Wood  Coal  Bush  Dung  Liquid gas	% of Total				12.50%	19.60%	32.10%
Total	Count	61	219	280	61	219	280
Total	% of Total	21.80%	78.20%	100.00%	21.80%	78.20%	100.00%

Table 14

					COOKING			
F	LOODS	H	HEATING	G	C	OOKIN	G 	
HEATING	RESULTS	NO	YES	Total	NO	YES	Total	
	Count	33	2	35	353	10	363	
Gas	% within	94.30%	5.70%		97.20%	2.80%		
Ous	% within FLOODS	12.40%	14.30%		132.70%	71.40%		
	% of Total	11.80%	0.70%	12.50%	126.10%	3.60%	129.60%	
	Count	4		4	20		20	
Electricity	% within	100.00%			100.00%			
Licotriony	% within FLOODS	1.50%			7.50%			
	% of Total	1.40%		1.40%	7.10%		7.10%	
	Count	236	10	246	93	4	97	
Wood	% within	95.90%	4.10%		95.90%	4.10%		
vvood	% within FLOODS	88.70%	71.40%		35.00%	28.60%		
	% of Total	84.30%	3.60%	87.90%	33.20%	1.40%	34.60%	
	Count				1		1	
Coal	% within				100.00%			
Coai	% within FLOODS				0.40%			
	% of Total				0.40%		0.40%	
	Count	7	5	12	6	4	10	
Bush	% within	58.30%	41.70%		60.00%	40.00%		
Dusii	% within FLOODS	2.60%	35.70%		2.30%	28.60%		
	% of Total	2.50%	1.80%	4.30%	2.10%	1.40%	3.60%	
	Count	29	1	30	10	1	11	
Dung	% within	96.70%	3.30%		90.90%	9.10%		
Dung	% within FLOODS	10.90%	7.10%		3.80%	7.10%		
	% of Total	10.40%	0.40%	10.70%	3.60%	0.40%	3.90%	
	Count				77	13	90	
Liquid gas	% within				85.60%	14.40%		
Liquid gas	% within FLOODS				28.90%	92.90%		
	% of Total				27.50%	4.60%	32.10%	
Total	Count	266	14	280	266	14	280	
Total	% of Total	95.00%	5.00%	100.00%	95.00%	5.00%	100.00%	

Table 15

	STLAW DAING			6		500KINK	
U	ELAY RAINS	ļ	HEATIN	G		COOKING	)
HEATING	RESULTS	NO	YES	Total	NO	YES	Total
	Count	17	18	35	198	165	363
Gas	% within	48.60%	51.40%		54.50%	45.50%	
Gas	% within DELAY RAINS	10.80%	14.60%		126.10%	134.10%	
	% of Total	6.10%	6.40%	12.50%	70.70%	58.90%	129.60%
	Count	3	1	4	15	5	20
Electricity	% within	75.00%	25.00%		75.00%	25.00%	
Electricity	% within DELAY RAINS	1.90%	0.80%		9.60%	4.10%	
	% of Total	1.10%	0.40%	1.40%	5.40%	1.80%	7.10%
	Count	139	107	246	53	44	97
Wood	% within	56.50%	43.50%		54.60%	45.40%	
vvood	% within DELAY RAINS	88.50%	87.00%		33.80%	35.80%	
	% of Total	49.60%	38.20%	87.90%	18.90%	15.70%	34.60%
	Count				1		1
Coal	% within				100.00%		
Coai	% within DELAY RAINS				0.60%		
	% of Total				0.40%		0.40%
	Count	7	5	12	6	4	10
Duch	% within	58.30%	41.70%		60.00%	40.00%	
Bush	% within DELAY RAINS	4.50%	4.10%		3.80%	3.30%	
	% of Total	2.50%	1.80%	4.30%	2.10%	1.40%	3.60%
	Count	13	17	30	5	6	11
Duna	% within	43.30%	56.70%		45.50%	54.50%	
Dung	% within DELAY RAINS	8.30%	13.80%		3.20%	4.90%	
	% of Total	4.60%	6.10%	10.70%	1.80%	2.10%	3.90%
	Count				63	27	90
Liquid gas	% within				70.00%	30.00%	
Liquid gas	% within DELAY RAINS				40.10%	22.00%	
Liquid gas	% of Total				22.50%	9.60%	32.10%
Total	Count	157	123	280	157	123	280
Total	% of Total	56.10%	43.90%	100.00%	56.10%	43.90%	100.00%

Table 16 Table 17

E	END RAINS		HEATIN	G	(	COOKING	i i
HEATING	RESULTS	NO	YES	Total	NO	YES	Total
	Count	17	18	35	163	200	363
Gas	% within	48.60%	51.40%		44.90%	55.10%	
Oas	% within END RAINS	13.00%	12.10%		124.40%	134.20%	
	% of Total	6.10%	6.40%	12.50%	58.20%	71.40%	129.60%
	Count	3	1	4	9	11	20
Electricity	% within	75.00%	25.00%		45.00%	55.00%	
Electricity	% within END_RAINS	2.30%	0.70%		6.90%	7.40%	
	% of Total	1.10%	0.40%	1.40%	3.20%	3.90%	7.10%
	Count	113	133	246	38	59	97
Wood	% within	45.90%	54.10%		39.20%	60.80%	
vvood	% within END RAINS	86.30%	89.30%		29.00%	39.60%	
	% of Total	40.40%	47.50%	87.90%	13.60%	21.10%	34.60%
	Count				1		1
Coal	% within				100.00%		
Coai	% within END RAINS				0.80%		
	% of Total				0.40%		0.40%
	Count	5	7	12	8	2	10
Duch	% within	41.70%	58.30%		80.00%	20.00%	
DuSII	% within END RAINS	3.80%	4.70%		6.10%	1.30%	
	% of Total	1.80%	2.50%	4.30%	2.90%	0.70%	3.60%
	Count	10	20	30	4	7	11
Duna	% within	33.30%	66.70%		36.40%	63.60%	
Dung	% within END RAINS	7.60%	13.40%		3.10%	4.70%	
	% of Total	3.60%	7.10%	10.70%	1.40%	2.50%	3.90%
	Count				56	34	90
Liquid acc	% within				62.20%	37.80%	
Liquid gas	% within END RAINS				42.70%	22.80%	
Bush  Dung  Liquid gas	% of Total				20.00%	12.10%	32.10%
Total	Count	131	149	280	131	149	280
Total	% of Total	46.80%	53.20%	100.00%	46.80%	53.20%	100.00%

	HOT DAYS		HEAT	ING			соок	ING	
HEATING	RESULTS	No change	Increase in hot days	Decline in hot days	Total	No change	Increase in hot days	Decline in hot days	Total
	Count	4	30	1	35	50	294	19	363
Gas	% within	11.40%	85.70%	2.90%		13.80%	81.00%	5.20%	
Gas	% within HOT DAYS	8.90%	14.60%	3.30%		111.10%	143.40%	63.30%	
	% of Total	1.40%	10.70%	0.40%	12.50%	17.90%	105.00%	6.80%	129.60%
	Count		3	1	4	4	12	4	20
Electricity	% within		75.00%	25.00%		20.00%	60.00%	20.00%	
Electricity	% within HOT DAYS		1.50%	3.30%		8.90%	5.90%	13.30%	
	% of Total		1.10%	0.40%	1.40%	1.40%	4.30%	1.40%	7.10%
	Count	37	184	25	246	11	73	13	97
Wood	% within	15.00%	74.80%	10.20%		11.30%	75.30%	13.40%	
vvood	% within HOT DAYS	82.20%	89.80%	83.30%		24.40%	35.60%	43.30%	
	% of Total	13.20%	65.70%	8.90%	87.90%	3.90%	26.10%	4.60%	34.60%
	Count					1			1
Coal	% within					100.00%			
Coai	% within HOT DAYS					2.20%			
	% of Total					0.40%			0.40%
	Count	3	5	4	12	3	3	4	10
Bush	% within \$HEATING_ALL	25.00%	41.70%	33.30%		30.00%	30.00%	40.00%	
DuSII	% within HOT DAYS	6.70%	2.40%	13.30%		6.70%	1.50%	13.30%	
	% of Total	1.10%	1.80%	1.40%	4.30%	1.10%	1.10%	1.40%	3.60%
	Count	6	18	6	30	1	7	3	11
Dung	% within	20.00%	60.00%	20.00%		9.10%	63.60%	27.30%	
Dung	% within HOT DAYS	13.30%	8.80%	20.00%		2.20%	3.40%	10.00%	
	% of Total	2.10%	6.40%	2.10%	10.70%	0.40%	2.50%	1.10%	3.90%
	Count					25	38	27	90
Liquid gas	% within					27.80%	42.20%	30.00%	
Liquiu yas	% within HOT DAYS					55.60%	18.50%	90.00%	
	% of Total					8.90%	13.60%	9.60%	32.10%
Total	Count	45	205	30	280		205	30	280
Total	% of Total	16.10%	73.20%	10.70%	100.00%		73.20%	10.70%	100.00%

# 11.6 Forest use

Table 18 Table 19

# **RAINFALL**

	TOTAL RES	ULTS	WOOD T		NON T PROD	
			YES	NO	YES	NO
	No observations	% within	32.70%	67.30%	32.70%	67.30%
	No change in rain	% of Total	5.70%	11.80%	5.70%	11.80%
	Less rain	% within	41.90%	58.10%	30.60%	69.40%
	Less rain	% of Total	23.90%	33.20%	17.50%	39.60%
	More rain	% within	40.80%	59.20%	32.40%	67.60%
	Wore rain	% of Total	10.40%	15.00%	8.20%	17.10%
_	Total	% of Total	40.00%	60.00%	31.40%	68.60%
	No chango in rain	% within	25.80%	74.20%	35.50%	64.50%
	No change in rain	% of Total	4.30%	12.40%	5.90%	10.80%
	Less rain	% within	39.80%	60.20%	32.00%	68.00%
Female	Less faili	% of Total	22.00%	33.30%	17.70%	37.60%
	More rain	% within	34.60%	65.40%	30.80%	69.20%
	Wore rain	% of Total	9.70%	18.30%	8.60%	19.40%
	Total	% of Total	36.00%	64.00%	32.30%	67.70%
	No change in rain	% within	44.40%	55.60%	27.80%	72.20%
	No change in fain	% of Total	8.50%	10.60%	5.30%	13.80%
	Less rain	% within	45.60%	54.40%	28.10%	71.90%
Male	Less faili	% of Total	27.70%	33.00%	17.00%	43.60%
	More rain	% within	57.90%	42.10%	36.80%	63.20%
	IVIOLE TAILL	% of Total	11.70%	8.50%	7.40%	12.80%
	Total	% of Total	47.90%	52.10%	29.80%	70.20%

# **DROUGHTS**

	TOTAL RESU	JLTS	WOOD T PROD		NON T PROD							
			YES	NO	YES	NO						
	NO	% within	24.60%	75.40%	34.40%	65.60%						
	NO	% of Total	5.40%	16.40%	7.50%	14.30%						
	YES	% within	44.30%	55.70%	30.60%	69.40%						
	123	% of Total	34.60%	43.60%	23.90%	54.30%						
	Total	% of Total	40.00%	60.00%	31.40%	68.60%						
	NO	% within	22.20%	77.80%	33.30%	66.70%						
	NO	% of Total	5.40%	18.80%	8.10%	16.10%						
Female	YES	% within	40.40%	59.60%	31.90%	68.10%						
	ILS	% of Total	30.60%	45.20%	24.20%	51.60%						
	Total	% of Total	36.00%	64.00%	32.30%	67.70%						
	NO	% within	31.20%	68.80%	37.50%	62.50%						
	NO	% of Total	5.30%	11.70%	6.40%	10.60%						
Male	YES	% within	51.30%	48.70%	28.20%	71.80%						
	ILO	% of Total	42.60%	40.40%	23.40%	59.60%						
	Total	% of Total	47.90%	52.10%	29.80%	70.20%						

Table 20 Table 21

# **FLOODS**

	TOTAL RESU	JLTS	WOOD T		NON T PROD	
			YES	NO	YES	NO
	NO	% within	40.20%	59.80%	30.10%	69.90%
	NO	% of Total	38.20%	56.80%	28.60%	66.40%
	YES	% within	35.70%	64.30%	57.10%	42.90%
	TES	% of Total	1.80%	3.20%	2.90%	2.10%
	Total	% of Total	40.00%	60.00%	31.40%	68.60%
	NO	% within	36.00%	64.00%	30.90%	69.10%
	NO	% of Total	33.90%	60.20%	29.00%	65.10%
Female	YES	% within	36.40%	63.60%	54.50%	45.50%
	160	% of Total	2.20%	3.80%	3.20%	2.70%
	Total	% of Total	36.00%	64.00%	32.30%	67.70%
	NO	% within	48.40%	51.60%	28.60%	71.40%
	NO	% of Total	46.80%	50.00%	27.70%	69.10%
Male	YES	% within	33.30%	66.70%	66.70%	33.30%
	IEO	% of Total	1.10%	2.10%	2.10%	1.10%
	Total	% of Total	47.90%	52.10%	29.80%	70.20%

# **DELAY RAINS**

	TOTAL RESU	JLTS	WOOD T	TIMBER DUCT	NON T PROD	
			YES	NO	YES	NO
	NO	% within	43.30%	56.70%	36.90%	63.10%
	NO	% of Total	24.30%	31.80%	20.70%	35.40%
	YES	% within	35.80%	64.20%	24.40%	75.60%
	163	% of Total	15.70%	28.20%	10.70%	33.20%
	Total	% of Total	40.00%	60.00%	31.40%	68.60%
	NO	% within	36.20%	63.80%	38.10%	61.90%
	NO	% of Total	20.40%	36.00%	21.50%	34.90%
Female	YES	% within	35.80%	64.20%	24.70%	75.30%
	123	% of Total	15.60%	28.00%	10.80%	32.80%
	Total	% of Total	36.00%	64.00%	32.30%	67.70%
	NO	% within	57.70%	42.30%	34.60%	65.40%
	NO	% of Total	31.90%	23.40%	19.10%	36.20%
Male	YES	% within	35.70%	64.30%	23.80%	76.20%
	123	% of Total	16.00%	28.70%	10.60%	34.00%
	Total	% of Total	47.90%	52.10%	29.80%	70.20%

Table 22 Table 23

# **END RAINS**

	TOTAL RESU	ULTS	WOOD T		NON T PROD					
			YES	NO	YES	NO				
	NO	% within	42.00%	58.00%	34.40%	65.60%				
	NO	% of Total	19.60%	27.10%	16.10%	30.70%				
	YES	% within	38.30%	61.70%	28.90%	71.10%				
	TES	% of Total	20.40%	32.90%	15.40%	37.90%				
	Total	% of Total	40.00%	60.00%	31.40%	68.60%				
	NO	% within	35.20%	64.80%	35.20%	64.80%				
	NO	% of Total	17.20%	31.70%	17.20%	31.70%				
Female	YES	% within	36.80%	63.20%	29.50%	70.50%				
	ILO	% of Total	18.80%	32.30%	15.10%	36.00%				
	Total	% of Total	36.00%	64.00%	32.30%	67.70%				
	NO	% within	57.50%	42.50%	32.50%	67.50%				
	NO	% of Total	24.50%	18.10%	13.80%	28.70%				
Male	YES	% within	40.70%	59.30%	27.80%	72.20%				
	ILO	% of Total	23.40%	34.00%	16.00%	41.50%				
	Total	% of Total	47.90%	52.10%	29.80%	70.20%				

# **HOT DAYS**

	TOTAL DEGI	п те	WOOD PROI		NON TIMBER PRODUCT				
	TOTAL RESU	JLIS	YES	NO	YES	NO			
	No change in the	% within	35.60%	64.40%	33.30%	66.70%			
	number of hot days	% of Total	5.70%	10.40%	5.40%	10.70%			
	Increase in bot days	% within	42.90%	57.10%	32.20%	67.80%			
	Increase in hot days	% of Total	31.40%	41.80%	23.60%	49.60%			
	Decline in hot days	% within	26.70%	73.30%	23.30%	76.70%			
	Decline in not days	% of Total	2.90%	7.90%	2.50%	8.20%			
	Total	% of Total	40.00%	60.00%	31.40%	68.60%			
	No change in the	% within	31.20%	68.80%	34.40%	65.60%			
	number of hot days	% of Total	5.40%	11.80%	5.90%	11.30%			
	Increase in hot days	% within	39.60%	60.40%	34.30%	65.70%			
Female	increase in not days	% of Total	28.50%	43.50%	24.70%	47.30%			
	Decline in hot days	% within	20.00%	80.00%	15.00%	85.00%			
	Decline in not days	% of Total	2.20%	8.60%	1.60%	9.10%			
	Total	% of Total	36.00%	64.00%	32.30%	67.70%			
	No change in the	% within	46.20%	53.80%	30.80%	69.20%			
	number of hot days	% of Total	6.40%	7.40%	4.30%	9.60%			
	Increase in hot days	% within	49.30%	50.70%	28.20%	71.80%			
Male	increase in not days	% of Total	37.20%	38.30%	21.30%	54.30%			
	Decline in hot days	% within	40.00%	60.00%	40.00%	60.00%			
	Decline in not days	% of Total	4.30%	6.40%	4.30%	6.40%			
		% of Total	47.90%	52.10%	29.80%	70.20%			

# 11.7 Women's readiness for the involvement in forest use management processes Comparative results of males' and females' answers.

Table 23

TAKE PART LEXKHOS MANAGEMENT

RESPO	DENT SEX	YES	NO	DON'T KNOW
Male	% within	48.90%	21.30%	29.80%
	% of Total	16.40%	7.10%	10.00%
Female	% within	52.70%	12.40%	34.90%
remale	% of Total	35.00%	8.20%	23.20%
Total % of Total		51.40%	15.40%	33.20%

11.8 To what extent do the women consider effective the activities carried out by Forest Enterprises and what are the issues that need to be addressed? Comparative results of males' and females' answers.

#### **EFFECTIVE WORK OF LESKHOZ**

RESULTS		RESPODENT S	EX	Total
RESULTS		Male	Female	Total
	Count	47	90	137
They plant trees	% within	34.30%	65.70%	
	% of Total	24.50%	46.90%	71.40%
	Count	51	113	164
YEThey make sure that there is no illegal use	% within	31.10%	68.90%	
	% of Total	26.60%	58.90%	85.40%
	Count	47	85	132
They clean forest	% within	35.60%	64.40%	
	% of Total	24.50%	44.30%	68.80%
	Count	24	46	70
They improve infrastructure (roads, bridges)	% within	34.30%	65.70%	
	% of Total	12.50%	24.00%	36.50%
Total	Count	64	128	192
Total	% of Total	33.30%	66.70%	100.00%

## NON EFFECTIVE WORK OF LESKHOZ

DECLUTE		RESPODENT S	EX	Tatal
RESULTS		Male	Female	Total
	Count	22	28	50
People harvest timber and fuelwood illegally	% within	44.00%	56.00%	
	% of Total	21.60%	27.50%	49.00%
	Count	6	20	26
People graze too many lives tock	% within	23.10%	76.90%	
	% of Total	5.90%	19.60%	25.50%
	Count	14	23	37
Rivers and lakes get polluted	% within	37.80%	62.20%	
	% of Total	13.70%	22.50%	36.30%
	Count	18	28	46
Some plants disappear	% within	39.10%	60.90%	
	% of Total	17.60%	27.50%	45.10%
	Count	32	52	84
Less trees in the forest	% within	38.10%	61.90%	
	% of Total	31.40%	51.00%	82.40%
	Count	0	2	2
Other	% within	0.00%	100.00%	
	% of Total	0.00%	2.00%	2.00%
Total	Count	39	63	102
Total	% of Total	38.20%	61.80%	100.00%

# 11.9 In the opinion of women, which factors are important for achieving confidence?

Comparative results of males' and females' answers.

# Transparency in establishing fees and rules

IMPORTANT FAC	ΓORS-1	RESPODE	Total	
		Male	Female	
not important at all	% within	53.30%	46.70%	100.00%
not important at all	% of Total	2.90%	2.50%	5.40%
not important	% within	40.00%	60.00%	100.00%
not important	% of Total	5.00%	7.50%	12.50%
may be important	% within	25.00%	75.00%	100.00%
may be important	% of Total	4.30%	12.90%	17.10%
im nortont	% within	29.50%	70.50%	100.00%
important	% of Total	13.90%	33.20%	47.10%
most important	% within	41.90%	58.10%	100.00%
most important	% of Total	6.40%	8.90%	15.40%
No answer	% within	42.90%	57.10%	100.00%
INO allowel	% of Total	1.10%	1.40%	2.50%
Total	% of Total	33.60%	66.40%	100.00%

# Accountability to people in reporting on plans and work

IMPORTANT FA	CTORS-2	RESPODE	RESPODENT SEX						
		Male	Female						
not important at all	% within	45.50%	54.50%	100.00%					
not important at all	% of Total	1.80%	2.10%	3.90%					
not important	% within	25.90%	74.10%	100.00%					
not important	% of Total	5.40%	15.40%	20.70%					
may be important	% within	25.90%	74.10%	100.00%					
may be important	% of Total	5.40%	15.40%	20.70%					
important	% within	37.10%	62.90%	100.00%					
important	% of Total	16.40%	27.90%	44.30%					
m a a t im n a rtant	% within	40.00%	60.00%	100.00%					
most important	% of Total	3.60%	5.40%	8.90%					
No onewer	% within	75.00%	25.00%	100.00%					
No answer	% of Total	1.10%	0.40%	1.40%					
Total	% of Total	33.60%	66.40%	100.00%					

# Participation of community in decision making

IMPORTANT FACT	TORS-3	RESPODE	Total	
		Male	Female	
not important at all	% within	41.70%	58.30%	100.00%
not important at all	% of Total	1.80%	2.50%	4.30%
not important	% within	27.90%	72.10%	100.00%
not important	% of Total	4.30%	11.10%	15.40%
may be important	% within	21.70%	78.30%	100.00%
may be important	% of Total	4.60%	16.80%	21.40%
important	% within	41.00%	59.00%	100.00%
important	% of Total	15.40%	22.10%	37.50%
moat important	% within	33.30%	66.70%	100.00%
most important	% of Total	6.80%	13.60%	20.40%
No anawar	% within	66.70%	33.30%	100.00%
No answer	% of Total	0.70%	0.40%	1.10%
Total	% of Total	33.60%	66.40%	100.00%

# Fairness/equity in providing access to all

IMPORTANT FACT	ORS-4	RESPODE	Total	
		Male	Female	
not important at all	% within	57.10%	42.90%	100.00%
not important at all	% of Total	1.40%	1.10%	2.50%
notimportant	% within	12.50%	87.50%	100.00%
not important	% of Total	0.40%	2.50%	2.90%
may be important	% within	23.10%	76.90%	100.00%
may be important	% of Total	1.10%	3.60%	4.60%
important	% within	29.50%	70.50%	100.00%
important	% of Total	10.00%	23.90%	33.90%
most important	% within	35.90%	64.10%	100.00%
most important	% of Total	19.60%	35.00%	54.60%
No anguer	% within	75.00%	25.00%	100.00%
No answer	% of Total	1.10%	0.40%	1.40%
Total	% of Total	33.60%	66.40%	100.00%

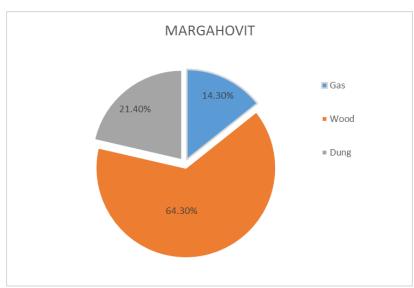
# 12. Analysis, by Communities

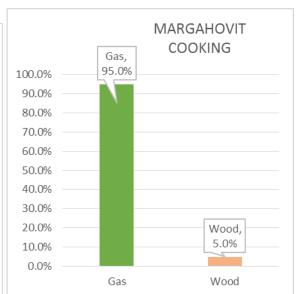
The information on the communities included in the survey is presented as follows:

- 1. **The use of fuel for heating and cooking purposes**. Information on the use of different types of fuel in the community during the period between November 2017 and January 2018 and for cooking purposes in summer and winter months is presented in the form of a diagram. Also are presented the total results of the answers of the male and female respondents.
- 2. The answers of the **female respondents as agents of change of natural resource management** are presented about the following issues:
  - a. The impact of fuel use on climate change
  - b. The ways to obtain wood as a factor influencing climate change
  - c. The use of timber and non timber forest products as a factor influencing climate change
  - d. The observations of interviewers about the communities

# 12.1 Lori Province, Gugark Forest Enterprise, Community close to the forest –Margahovit

# The use of fuel for heating and cooking purposes





The impact of fuel use on climate change

For heating																
			RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE	RESULTS		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
	Gas	Count	1				1	1			1		1	1		
		% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	16.70%				16.70%	16.70%			16.70%		16.70%	16.70%		
		Count	3	2		1	4	5		2	3	2	3	5		
MARGAHOVIT	Wood	% within	60.00%	40.00%		20.00%	80.00%	100.00%		40.00%	60.00%	40.00%	60.00%	100.00%		
		% of Total	50.00%	33.30%		16.70%	66.70%	83.30%		33.30%	50.00%	33.30%	50.00%	83.30%		
		Count	2				2	2		1	1	1	1	2		
- 1	Dung	% within	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	33.30%				33.30%	33.30%		16.70%	16.70%	16.70%	16.70%	33.30%		

	For cooking															
	Cooking warm & cold season		RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	7	4		2	9	11		4	7	3	8	11		
	Gas	% within	63.60%	36.40%		18.20%	81.80%	100.00%		36.40%	63.60%	27.30%	72.70%	100.00%		
MARGAHOVIT		% of Total	116.70%	66.70%		33.30%	150.00%	183.30%		66.70%	116.70%	50.00%	133.30%	183.30%		
IVIANGAROVII		Count	1				1	1			1	1		1		
	Wood	% within	100.00%				100.00%	100.00%			100.00%	100.00%		100.00%		
		% of Total	16.70%				16.70%	16.70%			16.70%	16.70%		16.70%		

The ways to obtain wood as a factor influencing climate change

					PURCHA	ASE OF TIM	√IBER									
				RAINFALL		DROU	JGHTS	FLOODS		DELAY RAINS		END RAINS		HOT DAYS		5
VILLAGE	RESULTS		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
Market	Count	1	1			2	2			2	1	1	2			
	Market	% within	50.00%	50.00%			100.00%	100.00%			100.00%	50.00%	50.00%	100.00%		
		% of Total	20.00%	20.00%			40.00%	40.00%			40.00%	20.00%	20.00%	40.00%		
		Count	1				1	1		1			1	1		
	Collection on own land	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
MARGAHOVIT		% of Total	20.00%				20.00%	20.00%		20.00%			20.00%	20.00%		
IVIANGAROVII		Count	1	1		1	1	2		1	1	1	1	2		
	Collection from forest	% within	50.00%	50.00%		50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	20.00%	20.00%		20.00%	20.00%	40.00%		20.00%	20.00%	20.00%	20.00%	40.00%		
		Count	1				1	1			1	1		1		
	Bought in leskhozes	% within	100.00%		_		100.00%	100.00%			100.00%	100.00%		100.00%		
		% of Total	20.00%			·	20.00%	20.00%			20.00%	20.00%		20.00%		

#### The use of timber and non - timber forest products as a factor influencing climate change

						TIMBEI	R OR NO	N-TIMBER	PRODUC	т							
					RAINFALL		DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE FOREST PRODUCT		RESULTS		No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	WOOD TIMBER PRODUCT	YES	% within		50.00%	50.00%	50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
		TES	% of Total		16.70%	16.70%	16.70%	16.70%	33.30%		16.70%	16.70%	16.70%	16.70%		33.30%	
		NO	% within		75.00%	25.00%		100.00%	100.00%		25.00%	75.00%	25.00%	75.00%		100.00%	
MARGAHOVIT		INO	% of Total		50.00%	16.70%		66.70%	66.70%		16.70%	50.00%	16.70%	50.00%		66.70%	
WARGAROVII		VEC	% within			100.00%	100.00%		100.00%		100.00%			100.00%		100.00%	
	NON TIMEER PROPILET	YES	% of Total			16.70%	16.70%		16.70%		16.70%			16.70%		16.70%	
	NON TIMBER PRODUCT	NO	% within		80.00%	20.00%		100.00%	100.00%		20.00%	80.00%	40.00%	60.00%		100.00%	
	N		% of Total		66.70%	16.70%		83.30%	83.30%		16.70%	66.70%	33.30%	50.00%		83.30%	

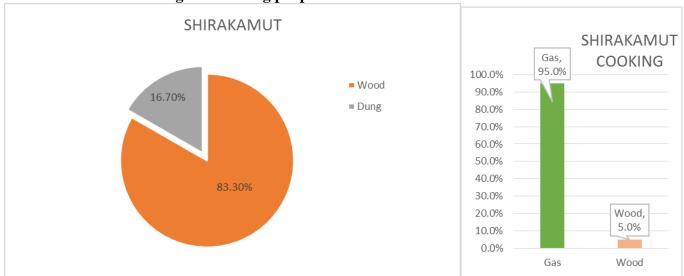
#### **Observation**

## Margahovit

A community in Lori Province. During the survey, it became clear that the community residents were not free, they were hesitant to answer. Villagers are mainly engaged in public or private activities either in urban areas of the province or in the capital or abroad. Liquid gas is used as the main fuel. There is also a forest near the village, which is used by villagers in case of lack of gas. The community residents never exceed the limit of 8 cubic meters. Since the level of precipitation is high in this community, no irrigation system had been installed in the past. But in recent years, farmers complain of droughts, which have led the loss of the crop. People often get sick due to humidity caused by heavy rains.

# 12.2 Lori Province, Gugark Forest Enterprise, Community far from the forest Shirakamut

The use of fuel for heating and cooking purposes.



The impact of fuel use on climate change

							For h	eating										
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S		
VILLAGE	RESULTS		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days		
		Count	8			2	6	7	1	1	7	2	6	7	1			
		% within	100.00%			25.00%	75.00%	87.50%	12.50%	12.50%	87.50%	25.00%	75.00%	87.50%	12.50%			
SHIRAKAMUT		% of Total	100.00%			25.00%	75.00%	87.50%	12.50%	12.50%	87.50%	25.00%	75.00%	87.50%	12.50%			
SHIKAKAIVIUT		Count	1				1	1			1		1	1				
	Dung	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%				
	_		_	% of Total	12.50%				12.50%	12.50%			12.50%		12.50%	12.50%		

							For	ooking								
	Coc	king		RAINFALI	L	DROL	IGHTS	TS FLOODS		DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE	warm & cold seas		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	15			4	11	13	2	2	13	4	11	13	2	
		% within	100.00%			26.70%	73.30%	86.70%	13.30%	13.30%	86.70%	26.70%	73.30%	86.70%	13.30%	
SHIRAKAMUT		% of Total	187.50%			50.00%	137.50%	162.50%	25.00%	25.00%	162.50%	50.00%	137.50%	162.50%	25.00%	
SHIRAKAIVIUT		Count	1				1	1			1		1	1		
	Wood	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	12.50%				12.50%	12.50%			12.50%		12.50%	12.50%		

The ways to obtain wood as a factor influencing climate change

		actor influencing ch			PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	5
VILLAGE				More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days		Decline in hot days
		Count	3			1	2	3		1	2	1	2	3		
	Market	% within	100.00%			33.30%	66.70%	100.00%		33.30%	66.70%	33.30%	66.70%	100.00%		
		% of Total	37.50%			12.50%	25.00%	37.50%		12.50%	25.00%	12.50%	25.00%	37.50%		
		Count	1			1		1			1	1			1	
SHIRAKAMUT	Collection on own land	% within	100.00%			100.00%		100.00%			100.00%	100.00%			100.00%	
		% of Total	12.50%			12.50%		12.50%			12.50%	12.50%			12.50%	
		Count	4				4	3	1		4		4	4		
	Liquid gas	% within	100.00%				100.00%	75.00%	25.00%		100.00%		100.00%	100.00%		
		% of Total	50.00%				50.00%	37.50%	12.50%		50.00%		50.00%	50.00%		

The use of timber and non - timber forest products as a factor influencing climate change

			_			TIMBEI	R OR NO	N-TIMBER	PRODUC								
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
,	WOOD TIMBER PRODUCT	NO	% within		100.00%		25.00%	75.00%	87.50%	12.50%	12.50%	87.50%	25.00%	75.00%	12.50%	87.50%	
		NO	% of Total		100.00%		25.00%	75.00%	87.50%	12.50%	12.50%	87.50%	25.00%	75.00%	12.50%	87.50%	
SHIRAKAMUT			% within		100.00%			100.00%	100.00%			100.00%		100.00%		100.00%	
SHIRARAWO	NON TIMBER PRODUCT	YES	% of Total		12.50%			12.50%	12.50%			12.50%		12.50%		12.50%	
ľ			% within		100.00%		28.60%	71.40%	85.70%	14.30%	14.30%	85.70%	28.60%	71.40%	14.30%	85.70%	
	N		% of Total		87.50%		25.00%	62.50%	75.00%	12.50%	12.50%	75.00%	25.00%	62.50%	12.50%	75.00%	

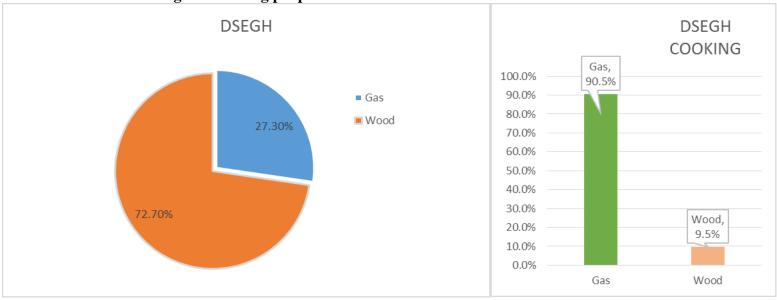
#### **Observation**

#### **Shirakamut**

A large community in Lori Province. Many years ago, it was completely destroyed because of the earthquake, and as a result of the construction works implemented by a number of foreign countries, the community was partially restored. The surveyed families mostly complained about the lack of pastures and irrigation water; arable lands are scarce, and their fertility is low. If in the rainy years it is possible to collect some crops, in the drought years, as well as in case of hail, the community loses most of the crop. According to respondents, community residents are mainly engaged in cultivation of potatoes, cabbage, carrots, separate vegetable crops, wheat, barley, alfalfa and coriander. According to the respondents, most farms are engaged in cattle breeding. There are difficulties in the collection of feed. Only a few households are engaged in beekeeping and poultry farming. Residents of Shirakamut community do not use the forest, reasoning that they are far from their houses, and that thebruse the lands of the Forest Enterprise in very rare cases. Basically they collect herbs and berries. The community is gasified, but during winter months the main means of heating is wood, which is bought from individuals. They have with drinking water, the supply of which is not round the clock. The community has secondary and eight-year schools. There is a health center in the community. A church built in the 7<sup>th</sup> century has been preserved in the community. Some families still live in shelters, which were provided to them after the earthquake for temporary use. A large proportion of the population, according to the respondents, earns a living from the work abroad, and a small proportion is working in the private and public sectors.

# 12.3 Lori Province, Yeghegnut Forest Enterprise, Community close to the forest-Dsegh

The use of fuel for heating and cooking purposes.



The impact of fuel use on climate change

The impact of	i iuci usc	on ciiiiat	c chang	<u> </u>												
							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3				3	3		1	2	2	1	3		
	Gas	% within	100.00%				100.00%	100.00%		33.30%	66.70%	66.70%	33.30%	100.00%		
DSEGH		% of Total	42.90%				42.90%	42.90%		14.30%	28.60%	28.60%	14.30%	42.90%		
DSEGR		Count	5				5	5		1	4	1	4	5		
	Wood	% within	100.00%				100.00%	100.00%		20.00%	80.00%	20.00%	80.00%	100.00%		
		% of Total	71.40%				71.40%	71.40%		14.30%	57.10%	14.30%	57.10%	71.40%		

							For	cooking								
	Coc	king		RAINFALI	L	DROU	JGHTS	FLOODS		DELAY RAINS		END	RAINS	HOT DAYS		
VILLAGE	warm & cold season		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	13				13	13		4	9	4	9	13		
	Gas	% within	100.00%				100.00%	100.00%		30.80%	69.20%	30.80%	69.20%	100.00%		
DSEGH		% of Total	185.70%				185.70%	185.70%		57.10%	128.60%	57.10%	128.60%	185.70%		
DSLGIT		Count	2				2	2		1	1		2	2		
	Wood	% within	100.00%				100.00%	100.00%		50.00%	50.00%		100.00%	100.00%		
		% of Total	28.60%				28.60%	28.60%		14.30%	14.30%		28.60%	28.60%		

The ways to obtain wood as a factor influencing climate change

ine ways u	Jobiani wood as a	lactor influencing ci	illiate C	nange												
	PURCHASE OF TIMBER															
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	<del></del>
VILLAGE	RES	SULTS	Less rain	More rain	rain No	NO	YES	NO	YES	NO	YES	NO	YES	Increase in	No	Decline in
			EC33 Tulli	Wiore ruin	change	110	123	110		140	123	110	123	hot days	change	hot days
		Count	1				1	1		1			1	1		
	Market	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
DSEGH		% of Total	16.70%				16.70%	16.70%		16.70%			16.70%	16.70%		
DSLGIT		Count	6				6	6		2	4	1	5	6		
	Collection from forest	% within	100.00%				100.00%	100.00%		33.30%	66.70%	16.70%	83.30%	100.00%		
	%	% of Total	100.00%				100.00%	100.00%		33.30%	66.70%	16.70%	83.30%	100.00%		

The use of timber and non - timber forest products as a factor influencing climate change

			-		Т	IMBER	OR NON	I-TIMBE	R PROD	UCT								
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS		
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days	
		YES	% within		100.00%			100.00%	100.00%		33.30%	66.70%	16.70%	83.30%		100.00%		
	WOOD TIMBER PRODUCT	TES	% of Total		85.70%			85.70%	85.70%		28.60%	57.10%	14.30%	71.40%		85.70%		
		NO	% within		100.00%			100.00%	100.00%			100.00%	100.00%			100.00%		
DSEGH		NO	% of Total		14.30%			14.30%	14.30%			14.30%	14.30%			14.30%		
DSEGR			% within		100.00%			100.00%	100.00%		33.30%	66.70%	16.70%	83.30%		100.00%		
		YES.	% of Total		85.70%			85.70%	85.70%		28.60%	57.10%	14.30%	71.40%		85.70%		
		NO	% within		100.00%			100.00%	100.00%			100.00%	100.00%			100.00%		
	N	No	INU	% of Total		14.30%			14.30%	14.30%			14.30%	14.30%			14.30%	

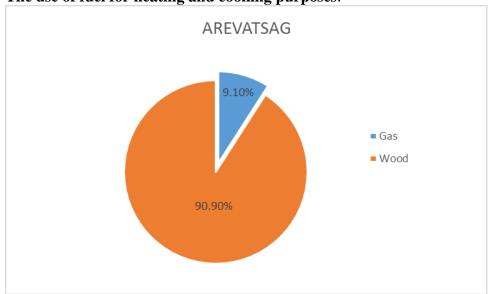
#### **Observation**

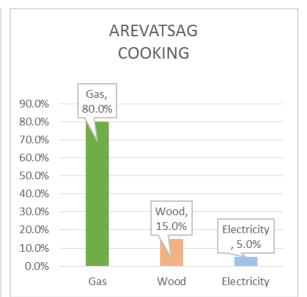
## **Dsegh**

A community in Lori Province. Lands are not cultivated, at best, the grass is reaped. Cattle breeding is developed. Male residents mostly go to work abroad. The community residents benefit from the forest. They also have income from tourism. They have a basic school and a kindergarten. The central part of the village has been renovated, but the outskirts are abandoned and have problems with road repair. There is an irrigation system, but due to the abundance of precipitation, people usually do not use it. There is also a community water source. There is a problem with heating: the majority of residents can't afford using gas.

# 12.4 Lori Province, Yeghegnut Forest Enterprise, Community far from the forest- Arevatsag

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1			1	1		
	Gas	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
AREVATSAG		% of Total	14.30%				14.30%	14.30%		14.30%			14.30%	14.30%		
ARLVATSAG		Count	6		1	2	5	7		2	5	2	5	7		
	Wood	% within	85.70%		14.30%	28.60%	71.40%	100.00%		28.60%	71.40%	28.60%	71.40%	100.00%		
		% of Total	85.70%		14.30%	28.60%	71.40%	100.00%		28.60%	71.40%	28.60%	71.40%	100.00%		

							For	cooking								
	Coo	king		RAINFALL	-	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	9		2	4	7	11		3	8	4	7	11		
	Gas	% within	81.80%		18.20%	36.40%	63.60%	100.00%		27.30%	72.70%	36.40%	63.60%	100.00%		
		% of Total	128.60%		28.60%	57.10%	100.00%	157.10%		42.90%	114.30%	57.10%	100.00%	157.10%		
		Count	1				1	1			1		1	1		
AREVATSAG	Electricity	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	14.30%				14.30%	14.30%			14.30%		14.30%	14.30%		
		Count	2				2	2		1	1		2	2		
	Wood	% within	100.00%				100.00%	100.00%		50.00%	50.00%		100.00%	100.00%		
		% of Total	28.60%				28.60%	28.60%		14.30%	14.30%		28.60%	28.60%		

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	5
VILLAGE	RES	RESULTS Count		More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5		1	2	4	6		2	4	2	4	6		
	Market	% within	83.30%		16.70%	33.30%	66.70%	100.00%		33.30%	66.70%	33.30%	66.70%	100.00%		
AREVATSAG		% of Total	71.40%		14.30%	28.60%	57.10%	85.70%		28.60%	57.10%	28.60%	57.10%	85.70%		
AREVAISAG		Count	1				1	1			1		1	1		
	Liquid gas	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	14.30%				14.30%	14.30%			14.30%		14.30%	14.30%		

			_			TIMBEI	R OR NO	I-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	DDS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	WOOD TIMBER PRODUCT	NO	% within	14.30%	85.70%		28.60%	71.40%	100.00%		28.60%	71.40%	28.60%	71.40%		100.00%	
	WOOD HIVIDEN PRODUCT	_	% of Total	14.30%	85.70%		28.60%	71.40%	100.00%		28.60%	71.40%	28.60%	71.40%		100.00%	
AREVATSAG		YES	% within	50.00%	50.00%		50.00%	50.00%	100.00%		50.00%	50.00%	100.00%			100.00%	
AREVATSAG	NON TIMBER PRODUCT	_	% of Total	14.30%	14.30%		14.30%	14.30%	28.60%		14.30%	14.30%	28.60%			28.60%	
	NON HIVIBER PRODUCT	NO	% within		100.00%		20.00%	80.00%	100.00%		20.00%	80.00%		100.00%		100.00%	
		_	% of Total		71.40%		14.30%	57.10%	71.40%		14.30%	57.10%		71.40%		71.40%	

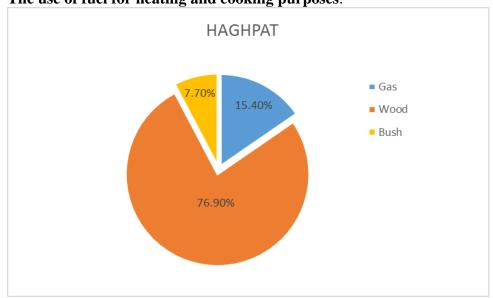
### **Observation**

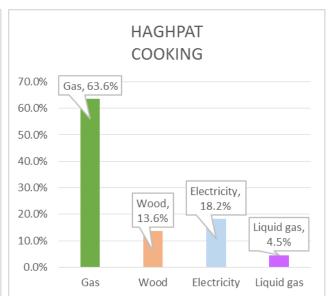
## **Arevatsag**

The nearest town is Alaverdi, from which the village is 14 km away. This community has almost no uncultivated land. People grow wheat and potatoes. There are also livestock farmers, some households keep pigs and chickens. The residents of this community do not generally use the forest. There is no irrigation system. The old one has been destroyed. Most of the lands are arable. Many people are engaged in cattle breeding. There are 2-4 main shepherds in the community whose the villagers trust their livestock, pay the shepherd, and while the animals are grazing in the mountains, they have the opportunity to do farming. There is a kindergarten and a school. There is also a mini-aid station adjacent to the village administration. Roads need improvement. There is a street lighting in the community. In winter, the thick layer of snow causes difficulties for the movement.

# 12.5 Lori Province, Lalvar Forest Enterprise Community close to the forest Haghpat

The use of fuel for heating and cooking purposes.





			<u> </u>				For h	eating								
				RAINFALI	_	DRO	UGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAY	S
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			1		1	1		1		1		1		
	Gas	% within			100.00%		100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total			16.70%		16.70%	16.70%		16.70%		16.70%		16.70%		
		Count	3	1	2		6	6		4	2	3	3	6		
HAGHPAT	Wood	% within	50.00%	16.70%	33.30%		100.00%	100.00%		66.70%	33.30%	50.00%	50.00%	100.00%		
		% of Total	50.00%	16.70%	33.30%		100.00%	100.00%		66.70%	33.30%	50.00%	50.00%	100.00%		
		Count			1		1	1		1			1	1		
	Bush	% within			100.00%		100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total			16.70%		16.70%	16.70%		16.70%			16.70%	16.70%		

							For	cooking								
	Coo	king		RAINFALI	-	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	I .	-	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5	2	2		9	9		6	3	6	3	9		
	Gas	% within	55.60%	22.20%	0.222		100.00%	100.00%		66.70%	33.30%	66.70%	33.30%	100.00%		
		% of Total	83.30%	33.30%	0.333		150.00%	150.00%		100.00%	50.00%	100.00%	50.00%	150.00%		
		Count	1		1		2	2		1	1		2	2		
HAGHPAT	Wood	% within	50.00%		50.00%		100.00%	100.00%		50.00%	50.00%		100.00%	100.00%		
		% of Total	16.70%		16.70%		33.30%	33.30%		16.70%	16.70%		33.30%	33.30%		
		Count			1		1	1		1			1	1		
	Liquid gas	% within			100.00%		100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total			16.70%		16.70%	16.70%		16.70%			16.70%	16.70%		

-			0		PURCHA	SE OF TIE	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	,
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1		1		1		
	Market	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total	16.70%				16.70%	16.70%		16.70%		16.70%		16.70%		
		Count	1		2		3	3		2	1	1	2	3		
	Collection from forest	% within	33.30%		66.70%		100.00%	100.00%		66.70%	33.30%	33.30%	66.70%	100.00%		
HAGHPAT		% of Total	16.70%		33.30%		50.00%	50.00%		33.30%	16.70%	16.70%	33.30%	50.00%		
HAGHFAT		Count		1	1		2	2		1	1	2		2		
	Bought in leskhozes	% within		50.00%	50.00%		100.00%	100.00%		50.00%	50.00%	100.00%		100.00%		
		% of Total		16.70%	16.70%		33.30%	33.30%		16.70%	16.70%	33.30%		33.30%		
		Count	1		1	·	2	2		2			2	2		
	Liquid gas	% within	50.00%		50.00%		100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total	16.70%		16.70%		33.30%	33.30%		33.30%			33.30%	33.30%		

				-		TIMBEI	R OR NO	N-TIMBER	PRODUC	T							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within	50.00%	25.00%	25.00%		100.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
	WOOD TIMBER PRODUCT		% of Total	33.30%	16.70%	16.70%		66.70%	66.70%		33.30%	33.30%	33.30%	33.30%		66.70%	
		NO	% within		100.00%			100.00%	100.00%		100.00%		50.00%	50.00%		100.00%	
HAGHPAT			% of Total		33.30%			33.30%	33.30%		33.30%		16.70%	16.70%		33.30%	
ПАОПРАТ		VEC	% within	33.30%	66.70%			100.00%	100.00%		66.70%	33.30%	33.30%	66.70%		100.00%	
	NON TIMBER PRODUCT NO	% of Total	16.70%	33.30%			50.00%	50.00%		33.30%	16.70%	16.70%	33.30%		50.00%		
		% within	33.30%	33.30%	33.30%		100.00%	100.00%		66.70%	33.30%	66.70%	33.30%		100.00%		
		_	% of Total	16.70%	16.70%	16.70%		50.00%	50.00%		33.30%	16.70%	33.30%	16.70%		50.00%	

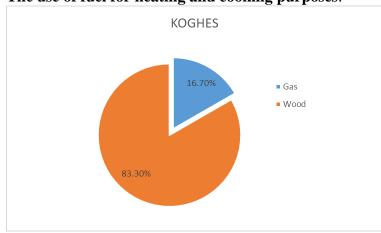
### **Observation**

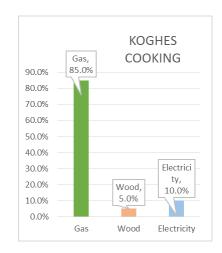
## **Haghpat**

It is one of the beautiful and ancient communities of Lori Province, where medieval "Haghpat" Monastery Complex is located. Livestock breeding and farming are not well developed because of a problem of irrigation water in the community. There are no prerequisites for cattle-breeding development. According to the families interviewed, the reason for that is the lack of pastures and access to the adjacent forest. The villagers are mainly engaged in cultivation of potatoes, vegetable crops and cigarettes. The community is gasified, but people use wood as the main source of heat. The Forest Enterprise provides the residents with a certain amount of firewood. During the summer – autumn period, residents of the community enjoy the benefits of the forest. They use the forest products mostly for their own needs. Although drinking water reaches homes, it is not suitable for drinking, therefore some of the residents fetch water from distant areas. The community has a secondary school, an outpatient clinicl, and intercommunity transportation. The intra community roads need improvement. The families surveyed mainly complain of lack of employment. According to respondents, some of the residents are working in Teghut mine and its sudden closure has caused financial difficulties. The problem of employment in the community contributes to migration.

# 12.6 Lori Province, Lalvar Forest Enterprise, Community far from the forest Koghes

The use of fuel for heating and cooking purposes.





i ne impaci o	I luci usc	on ciimat	e chang	<u> </u>												
							For h	neating								
				RAINFALL	-	DRO	JGHTS	FLC	ODS	DELA	Y RAINS	END	RAINS		HOT DAYS	
VILLAGE	RESI	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1		1		1	Ŭ	
	Gas	% within	100.00%				100.00%	100.00%		100.00%		100.00%	ć	100.00%		
KOGHES		% of Total	50.00%				50.00%	50.00%		50.00%		50.00%		50.00%		
ROGILS		Count	2				2	2		1	1	1	1	2		
	Wood	% within	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
							For c	ooking								
	Coo	king		RAINFALI	L	DROU	JGHTS	FLO	DDS	DELAY	RAINS	END R	RAINS		HOT DAYS	
VILLAGE		old season	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	4				4	4		2	2	2	2	4		
KOGHES	Gas	% within	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	200.00%				200.00%	200.00%		100.00%	100.00%	100.00%	100.00%	200.00%		

					PURCHA	SE OF TII	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	SULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2				2	2		1	1	1	1	2		
KOGHES	Market	% within	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	100.00%				100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		

The use of timber and non - timber forest products as a factor influencing climate change

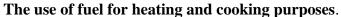
THE USE OF t	miner and non - un	ibei	Torest pro	ouucis t	is a raci	OI IIIII	ciiciiig	Cillian	chang								
						TIMBER	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
	WOOD TIMBER PRODUCT	NO	% within		100.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
	WOOD HIVIBER PRODUCT		% of Total		100.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
KOGHES		YES	% within		100.00%			100.00%	100.00%		100.00%		100.00%			100.00%	
KOGHES	NON TIMBED DPODUCT		% of Total		50.00%			50.00%	50.00%		50.00%		50.00%			50.00%	
	NON TIMBER PRODUCT	NO	% within		100.00%			100.00%	100.00%			100.00%		100.00%		100.00%	
			% of Total		50.00%			50.00%	50.00%			50.00%		50.00%		50.00%	

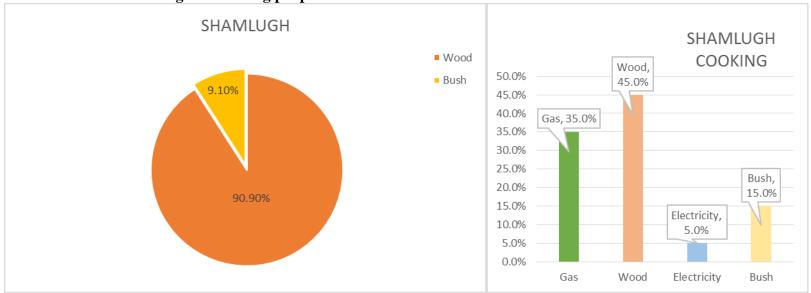
### **Observation**

## **Koghes**

A community in Lori Province. There is a considerable polarization of social status in this community. Approximately half of the respondents have very large farms, and consequently high profits during the year, and the other part of the respondents has a small plot of land, a cattle and a few chickens, which is not enough to meet the daily needs of their families. Almost all the lands are under cultivation. People sow autumn wheat and late season potatoes. Due to the frequent rainfall and favorable climate conditions, the need for irrigation water is not great. They cultivate potatoes, wheat, corn and other crops. However, due to the difference in the levels of terraces, it is difficult to install an irrigation system (the system is used only during the seasons with less precipitation). The residents use only non - timber forest products.

# 12.7 Lori Province, Jiliza Forest Enterprise Community close to the forest Shamlugh





			<u> </u>				For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RESI	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	2	2	2	5	6	1	4	3	5	2	6	1	
	Wood	% within	42.90%	28.60%	28.60%	28.60%	71.40%	85.70%	14.30%	57.10%	42.90%	71.40%	28.60%	85.70%	14.30%	
SHVMITICH		% of Total	42.90%	28.60%	28.60%	28.60%	71.40%	85.70%	14.30%	57.10%	42.90%	71.40%	28.60%	85.70%	14.30%	
STIAIVILOGIT	SHAMLUGH -	Count		1		1			1		1	1		1		
	Bush	% within		100.00%		100.00%			100.00%		100.00%	100.00%		100.00%		
		% of Total		14.30%		14.30%			14.30%		14.30%	14.30%		14.30%		

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		ممممم	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	1	2	2	3	5		4	1	4	1	4	1	
	Gas	% within	40.00%	20.00%	40.00%	40.00%	60.00%	100.00%		80.00%	20.00%	80.00%	20.00%	80.00%	20.00%	
		% of Total	28.60%	14.30%	28.60%	28.60%	42.90%	71.40%		57.10%	14.30%	57.10%	14.30%	57.10%	14.30%	
		Count	1				1	1			1		1	1		
	Electricity	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
SHAMLUGH		% of Total	14.30%				14.30%	14.30%			14.30%		14.30%	14.30%		
STIAIVILOGIT		Count	3	1	2		6	6		4	2	4	2	5	1	
	Wood	% within	50.00%	16.70%	33.30%		100.00%	100.00%		66.70%	33.30%	66.70%	33.30%	83.30%	16.70%	
		% of Total	42.90%	14.30%	28.60%		85.70%	85.70%		57.10%	28.60%	57.10%	28.60%	71.40%	14.30%	
		Count		2		2			2		2	2		2		
	Bush	% within		100.00%		100.00%			100.00%		100.00%	100.00%		100.00%		
		% of Total		28.60%		28.60%			28.60%		28.60%	28.60%		28.60%		

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			1	1		1		1		1		1		
	Market	% within			100.00%	100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total			14.30%	14.30%		14.30%		14.30%		14.30%		14.30%		
		Count	3	1	1	1	4	4	1	2	3	3	2	5		
SHAMLUGH	Collection from forest	% within	60.00%	20.00%	20.00%	20.00%	80.00%	80.00%	20.00%	40.00%	60.00%	60.00%	40.00%	100.00%		
		% of Total	42.90%	14.30%	14.30%	14.30%	57.10%	57.10%	14.30%	28.60%	42.90%	42.90%	28.60%	71.40%		
		Count		1			1	1		1		1			1	
	Liquid gas	% within		100.00%			100.00%	100.00%		100.00%		100.00%			100.00%	
		% of Total		14.30%			14.30%	14.30%		14.30%		14.30%			14.30%	

			_			TIMBE	R OR NON	I-TIMBER	PRODUC	т							
					RAINFALL		DROU	IGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		VEC	% within	20.00%	60.00%	20.00%	20.00%	80.00%	80.00%	20.00%	40.00%	60.00%	60.00%	40.00%		100.00%	
	WOOD TIMBER PRODUCT		% of Total	14.30%	42.90%	14.30%	14.30%	57.10%	57.10%	14.30%	28.60%	42.90%	42.90%	28.60%		71.40%	
	WOOD HIVIBER PRODUCT	NO	% within	50.00%		50.00%	50.00%	50.00%	100.00%		100.00%		100.00%		50.00%	50.00%	
SHAMLUGH		NO	% of Total	14.30%		14.30%	14.30%	14.30%	28.60%		28.60%		28.60%		14.30%	14.30%	
SHAIVILUGH		VES	% within	25.00%	50.00%	25.00%	25.00%	75.00%	75.00%	25.00%	50.00%	50.00%	75.00%	25.00%		100.00%	
			% of Total	14.30%	28.60%	14.30%	14.30%	42.90%	42.90%	14.30%	28.60%	28.60%	42.90%	14.30%		57.10%	
	NON TIMBER PRODUCT	% within	33.30%	33.30%	33.30%	33.30%	66.70%	100.00%		66.70%	33.30%	66.70%	33.30%	33.30%	66.70%		
		NO	% of Total	14.30%	14.30%	14.30%	14.30%	28.60%	42.90%		28.60%	14.30%	28.60%	14.30%	14.30%	28.60%	

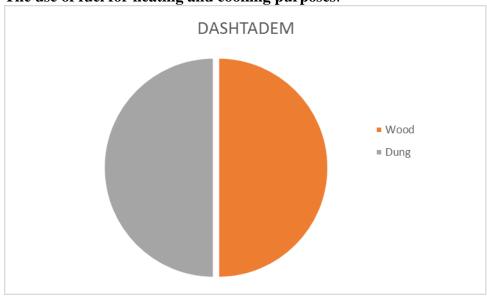
#### **Observation**

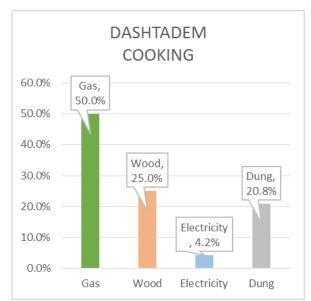
### Shamlugh

This community in Lori Province is a town settlement, which has formerly been inhabited by miners originally from Greece and Georgia. There are few prerequisites for being engaged in agriculture and cattle-breeding, as the community does not have grasslands or pastures. Also, few people are engaged in agriculture because of the lack of water. Both drinking water and irrigation water are insufficient, with low quality due to mine exploitation in recent years. Mining also harms the forests: the survey participants say that the forests have dried up. The community is not gasified, so the houses are heated by firewood. They gather forest berries, fruits, and other crops for their own use, and sell a very small part of it. The community has a school, a kindergarten, an outpatient clinic. There is no kindergarten, natural gas and intercommunity public transport. One of the main sources of income is the job abroad. There are mines near the community that provide many local people with jobs, but the mines also cause great harm to their health.

# 12.8 Lori Province, Jiliza Forest Enterprise, Community far from the forest- Dashtadem

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALI	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESI	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5			1	4	5		2	3	2	3	5		
	Wood	% within	100.00%			20.00%	80.00%	100.00%		40.00%	60.00%	40.00%	60.00%	100.00%		
DASHTADEM		% of Total	71.40%			14.30%	57.10%	71.40%		28.60%	42.90%	28.60%	42.90%	71.40%		
DASHTADEW		Count	5			1	4	5		1	4	1	4	5		
	Dung	% within	100.00%			20.00%	80.00%	100.00%		20.00%	80.00%	20.00%	80.00%	100.00%		
		% of Total	71.40%			14.30%	57.10%	71.40%		14.30%	57.10%	14.30%	57.10%	71.40%		

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	10			2	8	10		3	7	3	7	10		
	Gas	% within	100.00%			20.00%	80.00%	100.00%		30.00%	70.00%	30.00%	70.00%	100.00%		
		% of Total	142.90%			28.60%	114.30%	142.90%		42.90%	100.00%	42.90%	100.00%	142.90%		
		Count	1				1	1			1		1	1		
	Electricity	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
DASHTADEM		% of Total	14.30%				14.30%	14.30%			14.30%		14.30%	14.30%		
DASITIADEIVI		Count	4			2	2	4		3	1	3	1	4		
	Wood	% within	100.00%			50.00%	50.00%	100.00%		75.00%	25.00%	75.00%	25.00%	100.00%		
		% of Total	57.10%			28.60%	28.60%	57.10%		42.90%	14.30%	42.90%	14.30%	57.10%		
		Count	3				3	3			3		3	3		
	Dung	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	42.90%				42.90%	42.90%			42.90%		42.90%	42.90%		

					PURCHA	ASE OF TI	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1			1		1	1		
	Market	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	20.00%				20.00%	20.00%			20.00%		20.00%	20.00%		
		Count	1				1	1			1		1	1		
DASHTADEM	Collection from forest	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	20.00%				20.00%	20.00%			20.00%		20.00%	20.00%		
		Count	3			1	2	3		2	1	2	1	3		
	Liquid gas	% within	100.00%			33.30%	66.70%	100.00%		66.70%	33.30%	66.70%	33.30%	100.00%		
		% of Total	60.00%			20.00%	40.00%	60.00%	·	40.00%	20.00%	40.00%	20.00%	60.00%		

						TIMBE	R OR NO	I-TIMBER	PRODUC	Т							
					RAINFALL		DROU	IGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within		100.00%			100.00%	100.00%			100.00%		100.00%		100.00%	
	WOOD TIMBER PRODUCT	_	% of Total		14.30%			14.30%	14.30%			14.30%		14.30%		14.30%	
	WOOD HIVIBER PRODUCT	NO	% within		100.00%		16.70%	83.30%	100.00%		33.30%	66.70%	33.30%	66.70%		100.00%	
DASHTADEM			% of Total		85.70%		14.30%	71.40%	85.70%		28.60%	57.10%	28.60%	57.10%		85.70%	
DASHTADEW		VEC	% within		100.00%			100.00%	100.00%			100.00%		100.00%		100.00%	
	NON TIMBER PRODUCT	_	% of Total		14.30%			14.30%	14.30%			14.30%		14.30%		14.30%	
	NON HIVIDER PRODUCT	NO	% within		100.00%		16.70%	83.30%	100.00%		33.30%	66.70%	33.30%	66.70%		100.00%	
	NON TIMBER PRODUCT	_	% of Total		85.70%		14.30%	71.40%	85.70%		28.60%	57.10%	28.60%	57.10%		85.70%	

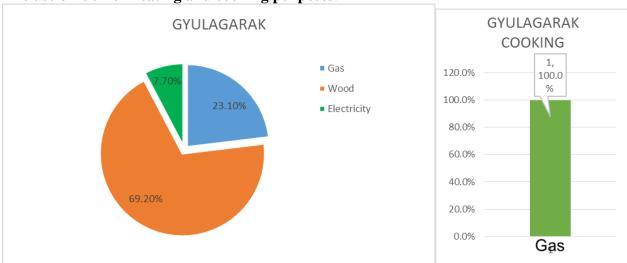
#### **Observation**

### **Dashtadem**

A community in Lori Province. The nearest town is Tashir, which is 10 km away from the community. The community is abandoned. The houses are destroyed, many of them are abandoned. As the community is located in a completely flat area, strong winds are common phenomena. Besides the destroyed and abandoned houses, there are also abandoned lands and gardens that are not cultivated, but serve as pastures. Lands lose their quality for lack of irrigation. At some distance from the village, there is also a small forest area, which is used by villagers in case they need fuel. However, it is a peculiar danger for sheep keeping. During the conversation with the villagers, they told us that last year almost all the sheep of one family were killed by the wolves, and the villagers no longer knew how to repay the loan which helped them to buy those sheep. During winter or abundant precipitation, the community is completely isolated because the only way to connect it with the city is impassable to cars, and sometimes to people.

# 12.9 Lori Province, Stepanavan Forest Enterprise, Community close to the forest- Gyulagarak

The use of fuel for heating and cooking purposes.



The impact of			<del></del>	<u>-</u>												
							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1		1	1	1	2		1	1	1	1	1	1	
	Gas	% within	50.00%		50.00%	50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	
GYULAGARAK		% of Total	16.70%		16.70%	16.70%	16.70%	33.30%		16.70%	16.70%	16.70%	16.70%	16.70%	16.70%	
GIOLAGARAK		Count	4		1	1	4	5		2	3		5	4	1	
	Wood	% within	80.00%		20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	·	100.00%	80.00%	20.00%	
		% of Total	66.70%		16.70%	16.70%	66.70%	83.30%		33.30%	50.00%		83.30%	66.70%	16.70%	

							For	cooking								
	Coc	king		RAINFALL	-	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE		_	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	8		4	4	8	12		6	6	2	10	8	4	
GYULAGARAK	Gas	% within	66.70%		33.30%	33.30%	66.70%	100.00%		50.00%	50.00%	16.70%	83.30%	66.70%	33.30%	
		% of Total	133.30%		66.70%	66.70%	133.30%	200.00%		100.00%	100.00%	33.30%	166.70%	133.30%	66.70%	

					PURCHA	ASE OF TIM	/IBER									ļ
				RAINFALL		DROL	IGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1		1	1	1	2		1	1		2	2		
	Market	% within	50.00%		50.00%	50.00%	50.00%	100.00%		50.00%	50.00%		100.00%	100.00%		
		% of Total	16.70%		16.70%	16.70%	16.70%	33.30%		16.70%	16.70%		33.30%	33.30%		
		Count	1		1	1	1	2		2		1	1	1	1	
	Collection from forest	% within	50.00%		50.00%	50.00%	50.00%	100.00%		100.00%		50.00%	50.00%	50.00%	50.00%	
GYULAGARAK		% of Total	16.70%		16.70%	16.70%	16.70%	33.30%		33.30%		16.70%	16.70%	16.70%	16.70%	
GIOLAGANAN		Count	1				1	1		1			1	1		
	Bought in leskhozes	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
	<u>%</u>	% of Total	16.70%				16.70%	16.70%		16.70%			16.70%	16.70%		
		Count	2				2	2			2		2	1	1	
	Liquid gas	% within	100.00%			·	100.00%	100.00%			100.00%		100.00%	50.00%	50.00%	
		% of Total	33.30%				33.30%	33.30%			33.30%		33.30%	16.70%	16.70%	

						TIMBE	R OR NON	I-TIMBER	PRODUC	Т							
					RAINFALL		DROL	IGHTS	FLO	DDS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within	50.00%	50.00%		50.00%	50.00%	100.00%		100.00%		50.00%	50.00%	50.00%	50.00%	
	WOOD TIMBER RRODUCT	_	% of Total	16.70%	16.70%		16.70%	16.70%	33.30%		33.30%		16.70%	16.70%	16.70%	16.70%	
CYLLLAGABAK	WOOD TIMBER PRODUCT	NO	% within	25.00%	75.00%		25.00%	75.00%	100.00%		25.00%	75.00%		100.00%	25.00%	75.00%	
GTOLAGARAK	ILAGARAK	NO	% of Total	16.70%	50.00%		16.70%	50.00%	66.70%		16.70%	50.00%		66.70%	16.70%	50.00%	
	NON TIMBER PRODUCT	NO	% within	33.30%	66.70%		33.30%	66.70%	100.00%		50.00%	50.00%	16.70%	83.30%	33.30%	66.70%	
	NON THUBER PRODUCT	INO	% of Total	33.30%	66.70%		33.30%	66.70%	100.00%		50.00%	50.00%	16.70%	83.30%	33.30%	66.70%	

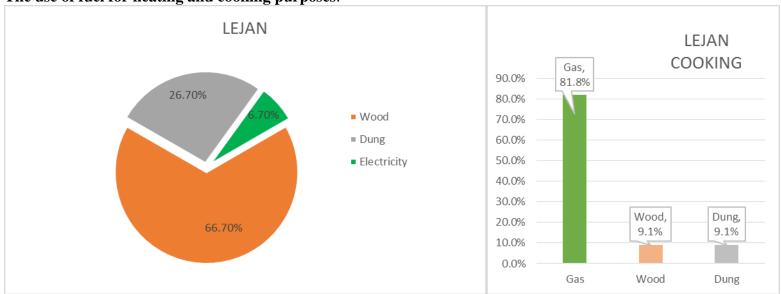
### **Observation**

## **Gyulagarak**

A community in Lori Province. The main road of this community is well-maintained but the intra community roads are still earth roads. The people here are mainly engaged in cultivation of potato and cereal crops. There are a large number of young people in the village. Talking to the villagers, it became clear that the desire to work overseas is not so great. Many people have a desire to remain in the community and cultivate their lands.

# 12.10 Lori Province, Stepanavan Forest Enterprise Community far from the forest-Lejan

The use of fuel for heating and cooking purposes.



							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	7			1	6	7		5	2	3	4	6	1	
	Wood	% within	100.00%			14.30%	85.70%	100.00%		71.40%	28.60%	42.90%	57.10%	85.70%	14.30%	
LEJAN		% of Total	100.00%			14.30%	85.70%	100.00%		71.40%	28.60%	42.90%	57.10%	85.70%	14.30%	
LEJAN		Count	3				3	3		2	1	1	2	2	1	
	Dung	% within	100.00%				100.00%	100.00%		66.70%	33.30%	33.30%	66.70%	66.70%	33.30%	
		% of Total	42.90%				42.90%	42.90%		28.60%	14.30%	14.30%	28.60%	28.60%	14.30%	

							For	cooking								
	Coc	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	14			2	12	14		10	4	6	8	12	2	
	Gas	% within	100.00%			14.30%	85.70%	100.00%		71.40%	28.60%	42.90%	57.10%	85.70%	14.30%	
LEJAN		% of Total	200.00%			28.60%	171.40%	200.00%		142.90%	57.10%	85.70%	114.30%	171.40%	28.60%	
LEJAN		Count	2			1	1	2		1	1	1	1	2		
	Wood	% within	100.00%			50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	28.60%			14.30%	14.30%	28.60%		14.30%	14.30%	14.30%	14.30%	28.60%		

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3			1	2	3		1	2	1	2	3		
	Market	% within	100.00%			33.30%	66.70%	100.00%		33.30%	66.70%	33.30%	66.70%	100.00%		
		% of Total	42.90%			14.30%	28.60%	42.90%		14.30%	28.60%	14.30%	28.60%	42.90%		
		Count	2				2	2		2		1	1	2		
LEJAN	Collection from forest	% within	100.00%				100.00%	100.00%		100.00%		50.00%	50.00%	100.00%		
		% of Total	28.60%				28.60%	28.60%		28.60%		14.30%	14.30%	28.60%		
		Count	3				3	3		3		2	1	2	1	
	Liquid gas	% within	100.00%				100.00%	100.00%		100.00%		66.70%	33.30%	66.70%	33.30%	
		% of Total	42.90%				42.90%	42.90%		42.90%		28.60%	14.30%	28.60%	14.30%	

						TIMBEI	R OR NO	N-TIMBER	PRODUC	т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		VEC	% within		100.00%			100.00%	100.00%		100.00%		50.00%	50.00%		100.00%	
	WOOD TIMBER PRODUCT		% of Total		28.60%			28.60%	28.60%		28.60%		14.30%	14.30%		28.60%	
	WOOD HIVIBER PRODUCT	NO	% within		100.00%		20.00%	80.00%	100.00%		60.00%	40.00%	40.00%	60.00%	20.00%	80.00%	
LEJAN			% of Total		71.40%		14.30%	57.10%	71.40%		42.90%	28.60%	28.60%	42.90%	14.30%	57.10%	
LEJAN		YES	% within		100.00%		25.00%	75.00%	100.00%		75.00%	25.00%	25.00%	75.00%		100.00%	
	NON TIMBER PRODUCT	_	% of Total		57.10%		14.30%	42.90%	57.10%		42.90%	14.30%	14.30%	42.90%		57.10%	
	INOIN HIVIBER PRODUCT	NO	% within		100.00%	•		100.00%	100.00%		66.70%	33.30%	66.70%	33.30%	33.30%	66.70%	
	NO	% of Total		42.90%			42.90%	42.90%	·	28.60%	14.30%	28.60%	14.30%	14.30%	28.60%		

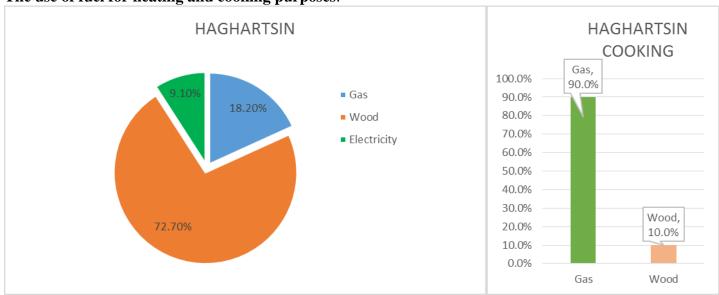
### **Observation**

## Lejan

This community of Lori Province is surrounded by forests, arable lands and pastures. During the survey, we also learned that droughts had been frequent here. The villagers are mainly engaged in agriculture and cattle-breeding. During the interview, we also found out that due to the last year's drought, farmers had lost almost half of the harvest. That is why part of the land is not cultivated. There is a culture of collecting teas and herbs. Drinking water is supplied for 4 hours a day. The water supply system is old, the roads need repair. The social state of people is not good. Here, women are quite independent, they are not afraid to make independent decisions, even if there is a man in the house. Most young people either study, work, or earn money in the city. Therefore, in the spring and autumn seasons, only the elderly parents and schoolchildren stay in the community.

# 12.11 Tavush Province, Dilijan National Park, Community close to the forest- Haghartsin

The use of fuel for heating and cooking purposes.



							For h	eating								
				RAINFALL	-	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1			1		1		1		1		1	0	
	Electricity	% within	100.00%			100.00%		100.00%		100.00%		100.00%		100.00%	0.00%	
HAGHARTSIN		% of Total	20.00%			20.00%		20.00%		20.00%		20.00%		20.00%	0.00%	
HAGHARISIN		Count	4	1		3	2	5		5		3	2	3	2	
	Wood	% within	80.00%	20.00%		60.00%	40.00%	100.00%		100.00%		60.00%	40.00%	60.00%	40.00%	
		% of Total	80.00%	20.00%		60.00%	40.00%	100.00%		100.00%		60.00%	40.00%	60.00%	40.00%	

							For	cooking								
	Coc	king		RAINFALI	L	DROL	IGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	7	2		5	4	9		9		5	4	5	4	
	Gas	% within	77.80%	22.20%		55.60%	44.40%	100.00%		100.00%		55.60%	44.40%	55.60%	44.40%	
HAGHARTSIN		% of Total	140.00%	40.00%		100.00%	80.00%	180.00%		180.00%		100.00%	80.00%	100.00%	80.00%	
HAGHARISIN		Count	1			1		1		1		1		1		
	Wood	% within	100.00%			100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total	20.00%			20.00%		20.00%		20.00%		20.00%		20.00%		

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1			1		1		1		1		1		
	Market	% within	100.00%			100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total	20.00%			20.00%		20.00%		20.00%		20.00%		20.00%		
		Count	2	1		1	2	3		3		1	2	1	2	
HAGHARTSIN	Collection from forest	% within	66.70%	33.30%		33.30%	66.70%	100.00%		100.00%		33.30%	66.70%	33.30%	66.70%	
		% of Total	40.00%	20.00%		20.00%	40.00%	60.00%		60.00%		20.00%	40.00%	20.00%	40.00%	
		Count	2			2		2		2		2		2		
	Liquid gas	% within	100.00%			100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total	40.00%			40.00%		40.00%		40.00%		40.00%		40.00%		

						TIMBE	R OR NO		PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within		66.70%	33.30%	33.30%	66.70%	100.00%		100.00%		33.30%	66.70%	66.70%	33.30%	
	WOOD TIMBER PRODUCT	_	% of Total		40.00%	20.00%	20.00%	40.00%	60.00%		60.00%		20.00%	40.00%	40.00%	20.00%	
	WOOD HIVIBER PRODUCT	NO	% within		100.00%		100.00%		100.00%		100.00%		100.00%			100.00%	
HAGHARTSIN		NO	% of Total		40.00%		40.00%		40.00%		40.00%		40.00%			40.00%	
HAGHARISIN		VEC	% within		50.00%	50.00%	50.00%	50.00%	100.00%		100.00%		50.00%	50.00%	50.00%	50.00%	
	NON TIMBER PRODUCT	_	% of Total		20.00%	20.00%	20.00%	20.00%	40.00%		40.00%		20.00%	20.00%	20.00%	20.00%	
		NO	% within		100.00%		66.70%	33.30%	100.00%		100.00%		66.70%	33.30%	33.30%	66.70%	
	NO	NO	% of Total		60.00%		40.00%	20.00%	60.00%		60.00%		40.00%	20.00%	20.00%	40.00%	

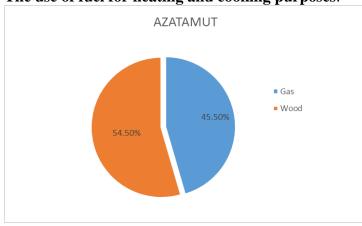
### **Observation**

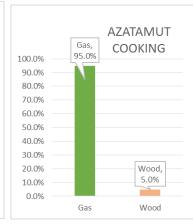
## Haghartsin

A community in Tavush Province. There is a forest area in front of the city. Wild animals often enter the community from that area. But this is not the only concern. As the community is located on the hill, the roads are not smooth, as well as the community administration is not able to improve the roads. The unemployment rate is also high, and families hardly meet their minimum needs. The forest area is a major part of livelihoods due to mushrooms, berries and wild fruits.

# 12.12 Tavush Province, Dilijan National Park, Community far from the forest- Azatamut

The use of fuel for heating and cooking purposes.





		<u> </u>	8				For h	neating								
				RAINFALI	_	DRO	JGHTS	FLO	ODS	DELA	Y RAINS	END	RAINS		HOT DAYS	
VILLAGE	RESI	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			1	1		1			1		1	1		
	Gas	% within			100.00%	100.00%		100.00%			100.00%	5	100.00%	100.00%		
AZATAMUT		% of Total			16.70%	16.70%		16.70%			16.70%		16.70%	16.70%		
AZATAMUT		Count	1	1	3		5	5		5		3	2	3	2	
	Wood	% within	20.00%	20.00%	60.00%		100.00%	100.00%		100.00%	,	60.00%	40.00%	60.00%	40.00%	
		% of Total	16.70%	16.70%	50.00%		83.30%	83.30%		83.30%		50.00%	33.30%	50.00%	33.30%	
							For c	ooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLOC	DDS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	2	8	2	10	12		10	2	6	6	8	4	
AZATAMUT	Gas	% within	16.70%	16.70%	66.70%	16.70%	83.30%	100.00%		83.30%	16.70%	50.00%	50.00%	66.70%	33.30%	
		% of Total	33.30%	33.30%	133.30%	33.30%	166.70%	200.00%		166.70%	33.30%	100.00%	100.00%	133.30%	66.70%	

					PURCHA	SE OF TI	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1	3		4	4		4		2	2	2	2	
	Market	% within		25.00%	75.00%		100.00%	100.00%		100.00%		50.00%	50.00%	50.00%	50.00%	
		% of Total		20.00%	60.00%		80.00%	80.00%		80.00%		40.00%	40.00%	40.00%	40.00%	
		Count			1		1	1		1		1		1		
AZATAMUT	Collection on own land	% within			100.00%		100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total			20.00%		20.00%	20.00%		20.00%		20.00%		20.00%		
		Count	1				1	1		1		1		1		
	Liquid gas	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total	20.00%				20.00%	20.00%		20.00%		20.00%		20.00%		

The use of timber and non - timber forest products as a factor influencing climate change

	imper una non uni		Torest pro				- U U B	02222000	<del> </del>	•							
						TIMBEI	R OR NON	I-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No	Less rain	More	NO	YES	NO	YES	NO	YES	NO	YES	No	Increase in	Decline in
				change	LESS Faili	rain	NO	ILJ	NO	ILS	NO	TLS	NO	ILS	change	hot days	hot days
	ZATAMUT  NON TIMBER PRODUCT  NO	МО	% within	66.70%	16.70%	16.70%	16.70%	83.30%	100.00%		83.30%	16.70%	50.00%	50.00%	33.30%	66.70%	
AZATAMILIT		_	% of Total	66.70%	16.70%	16.70%	16.70%	83.30%	100.00%		83.30%	16.70%	50.00%	50.00%	33.30%	66.70%	
AZATAWOT		NO	% within	66.70%	16.70%	16.70%	16.70%	83.30%	100.00%		83.30%	16.70%	50.00%	50.00%	33.30%	66.70%	
		NO	% of Total	66.70%	16.70%	16.70%	16.70%	83.30%	100.00%		83.30%	16.70%	50.00%	50.00%	33.30%	66.70%	

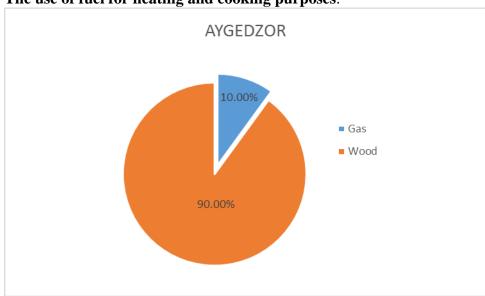
### **Observation**

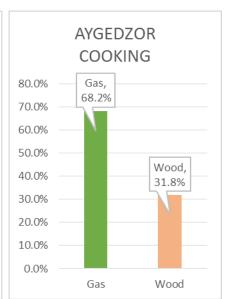
### Azatamut

This community in Tavush Province has been a working settlement in the past. According to the respondents, people are unable to deal with cattle-breeding and agriculture because of the lack of or inadequate provision of homestead lands. As the community lands are under fire and the forest is located far from their houses, the people use the lands and pastures of the adjacent communities. This is perhaps one of the reasons why livestock breeding is not developed here. A small part of the population is engaged in poultry farming. The community is gasified, drinking and irrigation water is insufficient. The community has a school and a kindergarten. According to the respondents, the main source of their income is the job abroad.

# 12.13 Tavush Province, Artsvaberd Forest Enterprise, Community close to the forest, Aygedzor

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			1	1		1		1		1		1		
	Gas	% within			100.00%	100.00%		100.00%		100.00%		100.00%		100.00%		
AYGEDZOR		% of Total			14.30%	14.30%		14.30%		14.30%		14.30%		14.30%		
ATGLDZOK		Count	5	1			6	6		1	5	1	5	6		
	Wood	% within	83.30%	16.70%			100.00%	100.00%		16.70%	83.30%	16.70%	83.30%	100.00%		
		% of Total	71.40%	14.30%			85.70%	85.70%		14.30%	71.40%	14.30%	71.40%	85.70%		

							For	cooking								
	Coc	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	7	1	2	2	8	10		4	6	4	6	10		
	Gas	% within	70.00%	10.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	40.00%	60.00%	100.00%		
AYGEDZOR		% of Total	100.00%	14.30%	28.60%	28.60%	114.30%	142.90%		57.10%	85.70%	57.10%	85.70%	142.90%		
ATGEDZOK		Count	4	1			5	5		1	4		5	5		
	Wood	% within	80.00%	20.00%			100.00%	100.00%		20.00%	80.00%		100.00%	100.00%		
		% of Total	57.10%	14.30%			71.40%	71.40%		14.30%	57.10%		71.40%	71.40%		

					PURCHA	SE OF TIP	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days		Decline in hot days
		Count	1	1			2	2			2	1	1	2		
	Market	% within	50.00%	50.00%			100.00%	100.00%			100.00%	50.00%	50.00%	100.00%		
		% of Total	16.70%	16.70%			33.30%	33.30%			33.30%	16.70%	16.70%	33.30%		
		Count	3				3	3		1	2	1	2	3		
AYGEDZOR	Collection from forest	% within	100.00%				100.00%	100.00%		33.30%	66.70%	33.30%	66.70%	100.00%		
		% of Total	50.00%				50.00%	50.00%		16.70%	33.30%	16.70%	33.30%	50.00%		
		Count	2				2	2			2		2	2		
	Bought in leskhozes	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	33.30%				33.30%	33.30%			33.30%		33.30%	33.30%		

						TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES -	% within		100.00%			100.00%	100.00%		20.00%	80.00%	20.00%	80.00%		100.00%	
		TIMBER PRODUCT YES	% of Total		71.40%			71.40%	71.40%		14.30%	57.10%	14.30%	57.10%		71.40%	
	WOOD HIVIBER PRODUCT	NO	% within	50.00%		50.00%	50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
AYGEDZOR		NOF	% of Total	14.30%		14.30%	14.30%	14.30%	28.60%		14.30%	14.30%	14.30%	14.30%		28.60%	
ATGEDZOK		VEC	% within		100.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
	NON TIMBER PRODUCT	% of Total		28.60%			28.60%	28.60%		14.30%	14.30%	14.30%	14.30%		28.60%		
		% within	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		20.00%	80.00%	20.00%	80.00%		100.00%		
			% of Total	14.30%	42.90%	14.30%	14.30%	57.10%	71.40%		14.30%	57.10%	14.30%	57.10%		71.40%	

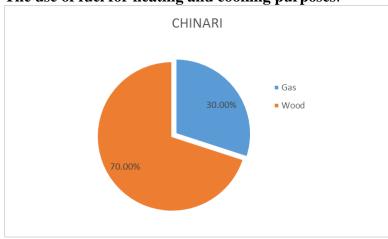
### **Observation**

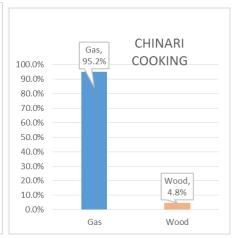
## **Aygedzor**

A very beautiful borderline community in Tavush Province. The social conditions of the residents depend on the male residents' job abroad. The agriculture and livestock breeding are not developed. It is conditioned by the fact that the fertile lands and pastures of the village are under fire. They do not use the forest because the forest lands are mined. Water supply is performed according to a schedule. The community has no sewage system. Irrigation water is almost inaccessible to most of the people. The community is gasified. There is a school and an outpatient clinic.

# 12.14 Tavush Province, Artsvaberd Forest Enterprise, Community far from the forest, Chinari

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	-	DRO	UGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3				3	3			3		3	3		
	Gas	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
CHINARI		% of Total	33.30%				33.30%	33.30%			33.30%		33.30%	33.30%		
CHINAKI		Count	2	1	3	1	5	6		3	3	2	4	3	3	
	Wood	% within	33.30%	16.70%	50.00%	16.70%	83.30%	100.00%		50.00%	50.00%	33.30%	66.70%	50.00%	50.00%	
		% of Total	22.20%	11.10%	33.30%	11.10%	55.60%	66.70%		33.30%	33.30%	22.20%	44.40%	33.30%	33.30%	

							For	cooking								
	Cooking						JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE	warm & cold seaso		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	10	2	6	2	16	18		6	12	4	14	12	6	
CHINARI	Gas	% within	55.60%	11.10%	33.30%	11.10%	88.90%	100.00%		33.30%	66.70%	22.20%	77.80%	66.70%	33.30%	
		% of Total	111.10%	22.20%	66.70%	22.20%	177.80%	200.00%		66.70%	133.30%	44.40%	155.60%	133.30%	66.70%	

					PURCHA	ASE OF TIE	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			2	1	1	2		2		2			2	
	Market	% within			100.00%	50.00%	50.00%	100.00%		100.00%		100.00%			100.00%	
		% of Total			28.60%	14.30%	14.30%	28.60%		28.60%		28.60%			28.60%	
		Count	2				2	2		1	1		2	2		
CHINARI	Bought in leskhozes	% within	100.00%				100.00%	100.00%		50.00%	50.00%		100.00%	100.00%		
		% of Total	28.60%				28.60%	28.60%		14.30%	14.30%		28.60%	28.60%		
		Count	1	1	1		3	3			3		3	2	1	
	Liquid gas	% within	33.30%	33.30%	33.30%		100.00%	100.00%			100.00%		100.00%	66.70%	33.30%	
		% of Total	14.30%	14.30%	14.30%		42.90%	42.90%			42.90%		42.90%	28.60%	14.30%	

The use of timber and non - timber forest products as a factor influencing climate change

						TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	DDS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		VEC	% within		100.00%			100.00%	100.00%		50.00%	50.00%		100.00%		100.00%	
	WOOD TIMBER PRODUCT	YES 9	% of Total		22.20%			22.20%	22.20%		11.10%	11.10%		22.20%		22.20%	
	WOOD HIVIBER PRODUCT		% within	42.90%	42.90%	14.30%	14.30%	85.70%	100.00%		28.60%	71.40%	28.60%	71.40%	42.90%	57.10%	
CHINARI		NO -	% of Total	33.30%	33.30%	11.10%	11.10%	66.70%	77.80%		22.20%	55.60%	22.20%	55.60%	33.30%	44.40%	
CHINAKI		VEC	% within	50.00%	50.00%		50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	
		% of Total	11.10%	11.10%		11.10%	11.10%	22.20%		11.10%	11.10%	11.10%	11.10%	11.10%	11.10%		
	NON HIVIBER PRODUCT	ION TIMBER PRODUCT	% within	28.60%	57.10%	14.30%		100.00%	100.00%		28.60%	71.40%	14.30%	85.70%	28.60%	71.40%	
	N	_	% of Total	22.20%	44.40%	11.10%		77.80%	77.80%		22.20%	55.60%	11.10%	66.70%	22.20%	55.60%	

## **Observation**

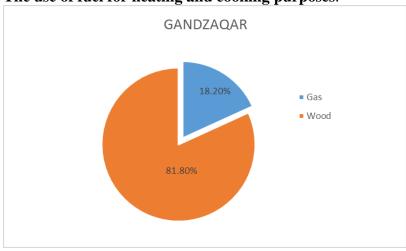
### Chinari

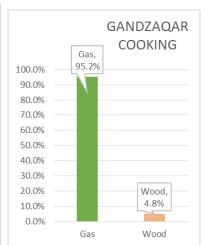
This community is adjacent to the border, and entirely under Azeri observation points. The lives of community residents are endangered, as their homes are constantly subject to shooting. They warned us not to stand or walk in the open space, and be sheltered somewhere. The use of pastures and forests is dangerous, as they are mined. There have been cases of mine explosion when grazing livestock. In the opinion of the respondents, only a small part of the community land is used. Despite all of this, residents are engaged in cattle-breeding and land cultivation for their survival. The residents do not want to leave their homes in order to protect the borders, and apart from other communities, they are rather isolated and have no other means of subsistence. The community is gasified. There is a kindergarten and a school.

Most residents have emigrated to other communities or other countries in search of a job.

# 12.15 Tavush Province, Ijevan Forest Enterprise, Community close to the forest, Gandzaqar

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	_	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count			1	1		1			1	1			1	
	Gas	% within			100.00%	100.00%		100.00%			100.00%	100.00%			100.00%	
GANDZAGAR	DZAQAR	% of Total			14.30%	14.30%		14.30%			14.30%	14.30%			14.30%	
GANDZAQAK		Count	3	3			6	6		3	3	4	2	4		2
	Wood	% within	50.00%	50.00%			100.00%	100.00%		50.00%	50.00%	66.70%	33.30%	66.70%		33.30%
		% of Total	42.90%	42.90%			85.70%	85.70%		42.90%	42.90%	57.10%	28.60%	57.10%		28.60%

							For	cooking								
	Coc	oking		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		old season	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	6	6	2	2	12	14		6	8	10	4	8	2	4
GANDZAQAR	Gas	% within	42.90%	42.90%	14.30%	14.30%	85.70%	100.00%		42.90%	57.10%	71.40%	28.60%	57.10%	14.30%	28.60%
		% of Total	85.70%	85.70%	28.60%	28.60%	171.40%	200.00%		85.70%	114.30%	142.90%	57.10%	114.30%	28.60%	57.10%

					PURCHA	SE OF TI	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	3			5	5		2	3	3	2	3		2
	Collection from forest	% within	40.00%	60.00%			100.00%	100.00%		40.00%	60.00%	60.00%	40.00%	60.00%		40.00%
		% of Total	33.30%	50.00%			83.30%	83.30%		33.30%	50.00%	50.00%	33.30%	50.00%		33.30%
		Count	1				1	1		1		1				1
GANDZAQAR	Bought in leskhozes	% within	100.00%				100.00%	100.00%		100.00%		100.00%				100.00%
		% of Total	16.70%				16.70%	16.70%		16.70%		16.70%				16.70%
		Count	1	1			2	2		1	1	1	1	2		
		% within	50.00%	50.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	16.70%	16.70%			33.30%	33.30%		16.70%	16.70%	16.70%	16.70%	33.30%		

The use of timber and non - timber forest products as a factor influencing climate change

						TIMBE	R OR NO	I-TIMBER	PRODUC	Т							
					RAINFALL		DROL	JGHTS	FLO	DDS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within		50.00%	50.00%		100.00%	100.00%		50.00%	50.00%	66.70%	33.30%		66.70%	33.30%
	WOOD TIMBER PRODUCT	_	% of Total		42.90%	42.90%		85.70%	85.70%		42.90%	42.90%	57.10%	28.60%		57.10%	28.60%
	WOOD HIVIBER PRODUCT	T -	% within	100.00%			100.00%		100.00%			100.00%	100.00%		100.00%		
GANDZAQAR		NO	% of Total	14.30%			14.30%		14.30%			14.30%	14.30%		14.30%		
GANDZAQAN			% within		66.70%	33.30%		100.00%	100.00%		66.70%	33.30%	66.70%	33.30%		66.70%	33.30%
	NON TIMBER PRODUCT		% of Total		28.60%	14.30%		42.90%	42.90%		28.60%	14.30%	28.60%	14.30%		28.60%	14.30%
	NON HIVIBER PRODUCT	MBER PRODUCT -	% within	25.00%	25.00%	50.00%	25.00%	75.00%	100.00%		25.00%	75.00%	75.00%	25.00%	25.00%	50.00%	25.00%
	NC	NO	% of Total	14.30%	14.30%	28.60%	14.30%	42.90%	57.10%		14.30%	42.90%	42.90%	14.30%	14.30%	28.60%	14.30%

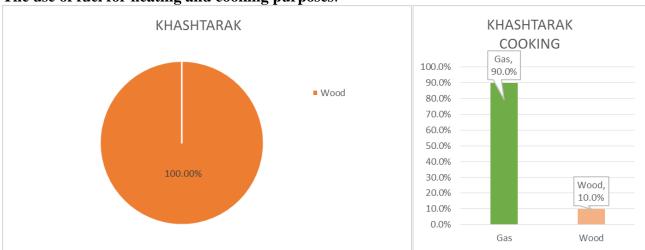
### **Observation**

## Gandzaqar

A community in Tavush Province. The location of this community creates a number of inconveniences for the residents. Only one street of the community is provided with lighting, it is difficult to move around at night. There is also a forest near the community, which is considered the main source of subsistence for the farmers. They gather berries, wild crops, wild fruits and mushrooms. We also found out that there are no problems with obtaining wood from the forest area and people use only the 8 cubic meters of wood provided by the state. The basic occupation is either the state work or cattle breeding. They have drinking water. Irrigation system is not installed, but due to the nearby river and abundant precipitation, people do not need it much.

# 12.16 Tavush Province, Ijevan Forest Enterprise, Community far from the forest, Khashtarak

The use of fuel for heating and cooking purposes.



The impact of			, c c													
							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	VILLAGE RESULTS		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	1	1	1	4	5		2	3	3	2	5		
KHASHTARAK		% within	60.00%	20.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%	100.00%		
		% of Total	60.00%	20.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%	100.00%		

							For	cooking								
	Coc	oking		RAINFALI	_	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5	2	2	2	7	9		4	5	5	4	9		
	Gas	% within	55.60%	22.20%	22.20%	22.20%	77.80%	100.00%		44.40%	55.60%	55.60%	44.40%	100.00%		
KHASHTARAK		% of Total	100.00%	40.00%	40.00%	40.00%	140.00%	180.00%		80.00%	100.00%	100.00%	80.00%	180.00%		
KHASHTAKAK		Count	1				1	1			1	1		1		
	Wood	% within	100.00%				100.00%	100.00%			100.00%	100.00%		100.00%		
		% of Total	20.00%				20.00%	20.00%			20.00%	20.00%		20.00%		

	TIMBER OR NON-TIMBER PRODUCT																
	FOREST PRODUCT			RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE			RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
KHASHTARAK	WOOD TIMBER PRODUCT	YES	% within	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%	Change	100.00%	not days
			% of Total	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%		100.00%	
	NON TIMBER PRODUCT	NO	% within	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%		100.00%	
			% of Total	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%		100.00%	

					PURCHA	ASE OF TIM	√IBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	6
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1			1		1	1		
	Market	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	20.00%				20.00%	20.00%			20.00%		20.00%	20.00%		
		Count	3	1	1	1	4	5		2	3	3	2	5		
	Collection from forest	% within	60.00%	20.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%	100.00%		
KHASHTARAK		% of Total	60.00%	20.00%	20.00%	20.00%	80.00%	100.00%		40.00%	60.00%	60.00%	40.00%	100.00%		
KHASHTAKAK		Count	1		1		2	2		1	1	2		2		
	Bought in leskhozes	% within	50.00%		50.00%		100.00%	100.00%		50.00%	50.00%	100.00%		100.00%		
	% C	% of Total	20.00%		20.00%		40.00%	40.00%		20.00%	20.00%	40.00%		40.00%		
		Count		1		1		1			1	1		1		
	Liquid gas	% within		100.00%		100.00%		100.00%			100.00%	100.00%		100.00%		
		% of Total		20.00%		20.00%		20.00%			20.00%	20.00%		20.00%		

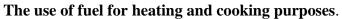
### **Observation**

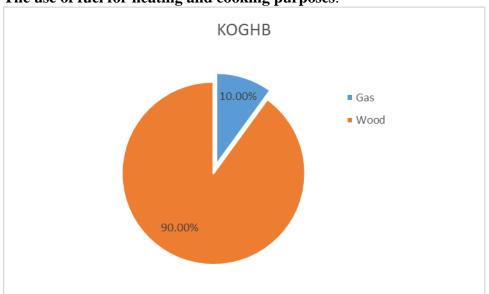
### Khashtarak

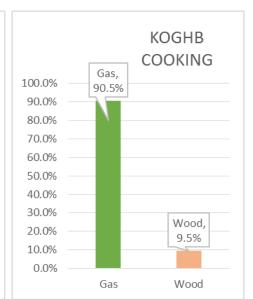
A community in Tavush Province. Population is engaged in horticulture, farming and cattle-breeding.

The kindergarten is in poor condition. There is no street lighting. In the opinion of the respondents, the community lands are favorable for cattle-breeding and farming. Residents use the forest products: they collect brushwood for fuel. The community has a school and a church. According to respondents, the main source of subsistence is either the job abroad or work at a state institution.

# 12.17 Tavush Province, Noyemberyan Forest Enterprise, Community close to the forest, Kogb







							For h	eating								
				RAINFALI	_	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1		1		1	0	
	Gas	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%	0.00%	
КОСНВ		% of Total	12.50%				12.50%	12.50%		12.50%		12.50%		12.50%	0.00%	
KOOHB		Count	5	1	1	2	5	7		7		5	2	6	1	
	Wood	% within	71.40%	14.30%	14.30%	28.60%	71.40%	100.00%		100.00%		71.40%	28.60%	85.70%	14.30%	
		% of Total	62.50%	12.50%	12.50%	25.00%	62.50%	87.50%		87.50%		62.50%	25.00%	75.00%	12.50%	

							For	cooking								
	Coo	king		RAINFAL	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	12	1	2	3	12	15		15		11	4	13	2	
	Gas	% within	80.00%	6.70%	13.30%	20.00%	80.00%	100.00%		100.00%		73.30%	26.70%	86.70%	13.30%	
КОСНВ		% of Total	150.00%	12.50%	25.00%	37.50%	150.00%	187.50%		187.50%		137.50%	50.00%	162.50%	25.00%	
ROGITB		Count	1	1		2		2		2		2		2		
	Wood	% within	50.00%	50.00%		100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total	12.50%	12.50%		25.00%		25.00%		25.00%		25.00%		25.00%		

					PURCHA	ASE OF TII	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1		1		1		
	Market	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total	14.30%				14.30%	14.30%		14.30%		14.30%		14.30%		
		Count			1		1	1		1			1	1		
	Collection on own land	% within			100.00%		100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total			14.30%		14.30%	14.30%		14.30%			14.30%	14.30%		
		Count	4	1		2	3	5		5		4	1	4	1	
KOGHB	Collection from forest	% within	80.00%	20.00%		40.00%	60.00%	100.00%		100.00%		80.00%	20.00%	80.00%	20.00%	
		% of Total	57.10%	14.30%		28.60%	42.90%	71.40%		71.40%		57.10%	14.30%	57.10%	14.30%	
		Count	1				1	1		1		1		1		
	Bought in leskhozes % % Cc Liquid gas %	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total	14.30%				14.30%	14.30%		14.30%		14.30%		14.30%		
		Count	1			1		1		1		1		1		
		% within	100.00%			100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total	14.30%			14.30%		14.30%		14.30%		14.30%		14.30%		

						TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within		80.00%	20.00%	40.00%	60.00%	100.00%		100.00%		80.00%	20.00%	20.00%	80.00%	
	WOOD TIMBER PRODUCT		% of Total		50.00%	12.50%	25.00%	37.50%	62.50%		62.50%		50.00%	12.50%	12.50%	50.00%	
	WOOD HIVIBER PRODUCT	NO	% within	33.30%	66.70%			100.00%	100.00%		100.00%		66.70%	33.30%		100.00%	
коднв			% of Total	12.50%	25.00%			37.50%	37.50%		37.50%		25.00%	12.50%		37.50%	
КОСПВ			% within		50.00%	50.00%	50.00%	50.00%	100.00%		100.00%		100.00%		50.00%	50.00%	
	NON TIMBER PRODUCT NO		% of Total		12.50%	12.50%	12.50%	12.50%	25.00%		25.00%		25.00%		12.50%	12.50%	
		% within	16.70%	83.30%		16.70%	83.30%	100.00%		100.00%		66.70%	33.30%		100.00%		
			% of Total	12.50%	62.50%		12.50%	62.50%	75.00%		75.00%		50.00%	25.00%		75.00%	

### **Observation**

## **Koghb**

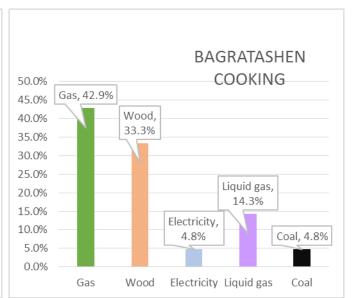
It is the largest community in Tavush Province. In the opinion of the respondents, the majority of the residents are engaged in cattle-breeding and farming, but the main source of income is the job abroad. Irrigation water is sufficient. The respondents stated that they used forest products mainly for their own needs. The residents, whose homes are closer to the forest, enjoy forest benefits more than the others.

Drinking water is available at home, but not suitable for drinking. The community is gasified. Firewood is used for heating, which is mainly obtained from the Forest Enterprise. According to the respondents, the residents mostly work in non-agricultural areas.

## 12.18 Tavush Province, Noyemberyan Forest Enterprise, Community far from the forest, Bagratashen

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	=	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	4	1	1	2	4	6		3	3	3	3	5	1	
BAGRATASHEN	Wood	% within	66.70%	16.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	83.30%	16.70%	
		% of Total	66.70%	16.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	83.30%	16.70%	

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5		2	2	5	7		4	3	3	4	5	2	
	Gas	% within	71.40%		28.60%	28.60%	71.40%	100.00%		57.10%	42.90%	42.90%	57.10%	71.40%	28.60%	
		% of Total	83.30%		33.30%	33.30%	83.30%	116.70%		66.70%	50.00%	50.00%	66.70%	83.30%	33.30%	
		Count		1		1		1		1		1		1		
	Electricity	% within		100.00%		100.00%		100.00%		100.00%		100.00%		100.00%		
BAGRATASHEN		% of Total		16.70%		16.70%		16.70%		16.70%		16.70%		16.70%		
BAGNATASTILIN		Count	2	1		1	2	3		1	2	2	1	3		
	Wood	% within	66.70%	33.30%		33.30%	66.70%	100.00%		33.30%	66.70%	66.70%	33.30%	100.00%		
		% of Total	33.30%	16.70%		16.70%	33.30%	50.00%		16.70%	33.30%	33.30%	16.70%	50.00%		
		Count	1				1	1			1		1	1		
	Liquid gas	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	16.70%				16.70%	16.70%			16.70%		16.70%	16.70%		

					PURCHA	ASE OF TI	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	1	1	2	3	5		3	2	3	2	4	1	
	Market	% within	60.00%	20.00%	20.00%	40.00%	60.00%	100.00%		60.00%	40.00%	60.00%	40.00%	80.00%	20.00%	
DACDATACHEN		% of Total	50.00%	16.70%	16.70%	33.30%	50.00%	83.30%		50.00%	33.30%	50.00%	33.30%	66.70%	16.70%	
BAGRATASTILIN	AGRATASHEN Cc Liquid gas %	Count	1				1	1			1		1	1		
		% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	16.70%				16.70%	16.70%			16.70%		16.70%	16.70%		

			_			TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No	Less rain	More	NO	YES	NO	YES	NO	YES	NO	YES	No	Increase in	Decline in
				change	LC33 Tall1	rain	140	11.5	110	11.5	NO	11.5	110	123	change	hot days	hot days
	WOOD TIMBER REODUCT	NO	% within	16.70%	66.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	16.70%	83.30%	
BAGRATASHEN	WOOD TIMBER PRODUCT		% of Total	16.70%	66.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	16.70%	83.30%	
BAGRATASHEN		NO	% within	16.70%	66.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	16.70%	83.30%	
	NON TIMBER PRODUCT NO		% of Total	16.70%	66.70%	16.70%	33.30%	66.70%	100.00%		50.00%	50.00%	50.00%	50.00%	16.70%	83.30%	

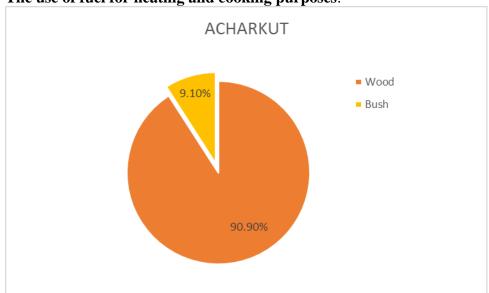
### **Observation**

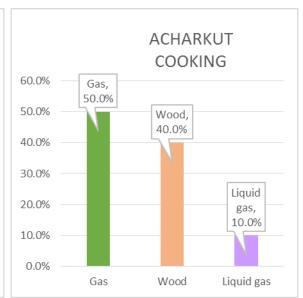
### **Bagratashen**

Bagratashen is a border community, formerly known with its Armenian-Georgian border market. For years, the main source of income for community members was trade, after the border dislocation, the community's social conditions deteriorated sharply. The residents of Bagratashen are mainly engaged in cattle-breeding and farming, but these are not effective due to the lack of pastures and irrigation problem, despites its location on the Debed River. Also they have no opportunity to use forest products as they have to cross the Georgian border to go to the forest. The community has a school and an outpatient clinic. The community is gasified, although people here mainly use firewood and manure for heating. Drinking water is also a problem in the community. It is supplied according to a schedule and not suitable for drinking. Therefore most residents take water from the street tap water point.

# 12.19 Tavush Province, Sevkar Forest Enterprise, Community close to the forest, Atcharkut

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALI	_	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESI	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	4	2	2	1	7	7	1	4	4	2	6	7	1	
	Wood	% within	50.00%	25.00%	25.00%	12.50%	87.50%	87.50%	12.50%	50.00%	50.00%	25.00%	75.00%	87.50%	12.50%	
ACHARKUT		% of Total	50.00%	25.00%	25.00%	12.50%	87.50%	87.50%	12.50%	50.00%	50.00%	25.00%	75.00%	87.50%	12.50%	
ACHARROT		Count		1			1		1		1		1	1		
	Bush	% within		100.00%			100.00%		100.00%		100.00%		100.00%	100.00%		
		% of Total		12.50%			12.50%		12.50%		12.50%		12.50%	12.50%		

							For	cooking								
	Coo	king		RAINFALL	-	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	4	3	2	8	8	2	5	5	3	7	10		
	Gas	% within	30.00%	40.00%	30.00%	20.00%	80.00%	80.00%	20.00%	50.00%	50.00%	30.00%	70.00%	100.00%		
		% of Total	37.50%	50.00%	37.50%	25.00%	100.00%	100.00%	25.00%	62.50%	62.50%	37.50%	87.50%	125.00%		
		Count	5				5	5		2	3		5	3	2	
ACHARKUT	Wood	% within	100.00%				100.00%	100.00%		40.00%	60.00%		100.00%	60.00%	40.00%	
		% of Total	62.50%				62.50%	62.50%		25.00%	37.50%		62.50%	37.50%	25.00%	
		Count			1		1	1		1		1		1		
	Liquid gas	% within			100.00%		100.00%	100.00%		100.00%		100.00%		100.00%		
		% of Total			12.50%		12.50%	12.50%		12.50%		12.50%		12.50%		

				<u> 6 </u>	PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1			1		1	1		
	Market	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	12.50%				12.50%	12.50%			12.50%		12.50%	12.50%		
		Count	2	2			4	3	1	2	2		4	3	1	
	Collection from forest	% within	50.00%	50.00%			100.00%	75.00%	25.00%	50.00%	50.00%		100.00%	75.00%	25.00%	
ACHARKUT	9	% of Total	25.00%	25.00%			50.00%	37.50%	12.50%	25.00%	25.00%		50.00%	37.50%	12.50%	
ACHARROI		Count	1		1		2	2		1	1	1	1	2		
	Bought in leskhozes	% within	50.00%		50.00%		100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	12.50%		12.50%		25.00%	25.00%		12.50%	12.50%	12.50%	12.50%	25.00%		
		Count		·	1	1		1	·	1		1		1		
	Liquid gas	% within		·	100.00%	100.00%		100.00%		100.00%		100.00%		100.00%		
		% of Total		·	12.50%	12.50%		12.50%	·	12.50%		12.50%		12.50%		

						TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		VEC	% within	16.70%	50.00%	33.30%		100.00%	83.30%	16.70%	50.00%	50.00%	16.70%	83.30%	16.70%	83.30%	
	WOOD TIMBER PRODUCT		% of Total	12.50%	37.50%	25.00%		75.00%	62.50%	12.50%	37.50%	37.50%	12.50%	62.50%	12.50%	62.50%	
	WOOD HIVIBER PRODUCT	NO	% within	50.00%	50.00%		50.00%	50.00%	100.00%		50.00%	50.00%	50.00%	50.00%		100.00%	
ACHARKUT		NO	% of Total	12.50%	12.50%		12.50%	12.50%	25.00%		12.50%	12.50%	12.50%	12.50%		25.00%	
ACHARROT		VEC	% within	28.60%	42.90%	28.60%	14.30%	85.70%	85.70%	14.30%	57.10%	42.90%	28.60%	71.40%	14.30%	85.70%	
	NON TIMBER PRODUCT	YES	% of Total	25.00%	37.50%	25.00%	12.50%	75.00%	75.00%	12.50%	50.00%	37.50%	25.00%	62.50%	12.50%	75.00%	
	INOIN HIVIDER PRODUCT	NO	% within		100.00%			100.00%	100.00%			100.00%		100.00%		100.00%	
	NO	% of Total		12.50%			12.50%	12.50%			12.50%		12.50%		12.50%		

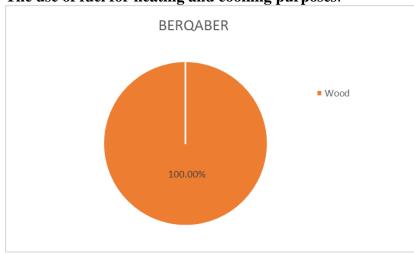
#### **Observation**

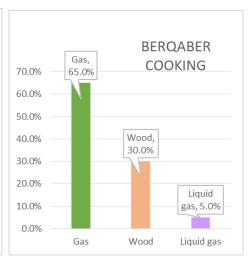
#### Atcharkut

It is a small community in Tavush Province, surrounded by a forest. According to the respondents, the majority of the residents are engaged in cattle-breeding and beekeeping. Homestead lands are very small. The community has no own land, which is conditioned by the fact that it was formerly a working settlement adjacent to Forest Enterprise. There are problems with irrigation water. The residents gather wild berries for their own needs, and in very few cases they sell it. For heating purpose they use wood and manure. Wood is obtained free of charge by permit of the Forest Enterprise. The community is not gasified. It is provided with drinking and irrigation water. The school is small, therefore many children attend school in a neighboring community. There is no kindergarten. The outpatient clinic and the village administration are in a deplorable state.

# 12.20 Tavush Province, Sevkar Forest Enterprise, Community far from the forest, Berkaber

The use of fuel for heating and cooking purposes.





				<u> </u>												
							For h	eating								
				RAINFALL	_	DRO	UGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	1	1		5	5		2	3	1	4	5		
BERQABER	Wood	% within	60.00%	20.00%	20.00%		100.00%	100.00%		40.00%	60.00%	20.00%	80.00%	100.00%		
		% of Total	60.00%	20.00%	20.00%		100.00%	100.00%		40.00%	60.00%	20.00%	80.00%	100.00%		

							For	cooking								
	Coc	king		RAINFALI	L	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END	RAINS		HOT DAYS	
VILLAGE		•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	5	1	2		8	8		3	5	1	7	8		
	Gas	% within	62.50%	12.50%	25.00%		100.00%	100.00%		37.50%	62.50%	12.50%	87.50%	100.00%		
BERQABER		% of Total	100.00%	20.00%	40.00%		160.00%	160.00%		60.00%	100.00%	20.00%	140.00%	160.00%		
BENQABEN		Count	1	1			2	2		1	1	1	1	2		
	Wood	% within	50.00%	50.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		
		% of Total	20.00%	20.00%			40.00%	40.00%		20.00%	20.00%	20.00%	20.00%	40.00%		

					PURCHA	SE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1			1	1		
	Market	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total	20.00%				20.00%	20.00%		20.00%			20.00%	20.00%		
		Count		1			1	1		1		1		1		
	Collection from forest	% within		100.00%			100.00%	100.00%		100.00%		100.00%		100.00%		
BERQABER		% of Total		20.00%			20.00%	20.00%		20.00%		20.00%		20.00%		
BENGABEN		Count	1				1	1			1		1	1		
	Bought in leskhozes	% within	100.00%				100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	20.00%				20.00%	20.00%			20.00%		20.00%	20.00%		
	Cc	Count	1		1		2	2			2		2	2		
		% within	50.00%		50.00%		100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total	20.00%		20.00%		40.00%	40.00%			40.00%		40.00%	40.00%		

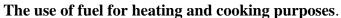
			_			TIMBER	OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	DDS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		VEC	% within		100.00%			100.00%	100.00%			100.00%		100.00%	_	100.00%	_
		_	% of Total		20.00%			20.00%	20.00%			20.00%		20.00%		20.00%	
REPOARED		NO	% within	25.00%	50.00%	25.00%		100.00%	100.00%		50.00%	50.00%	25.00%	75.00%		100.00%	
BENQABEN			% of Total	20.00%	40.00%	20.00%		80.00%	80.00%		40.00%	40.00%	20.00%	60.00%		80.00%	
		NO	% within	20.00%	60.00%	20.00%		100.00%	100.00%		40.00%	60.00%	20.00%	80.00%		100.00%	
NO	NON HIVIDER PRODUCT		% of Total	20.00%	60.00%	20.00%		100.00%	100.00%		40.00%	60.00%	20.00%	80.00%		100.00%	

### **Observation**

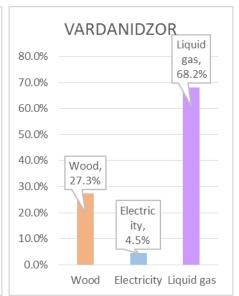
### Berkaber

A border village in Tavush Province. It borders on Azerbaijan. Cattle-breeding and farming have become extremely dangerous and not profitable. Most of the grasslands and pastures in the community, as well as the intercommunity roads are in a danger zone and the residents are almost unable to use them. Their lives are also at risk: on the day before our departure, the houses of the residents were fired by the Azerbaijanis. In the opinion of the respondents, not everyone is grazing their animals due to remoteness of pastures. The nearby pastures are dangerous because they are located close to the border. Residents have to risk their lives in order to do farming and deal with bee-keeping in their backyards. The other problem is the lack of irrigation water. The residents take dinking water from the only street tap water point. There is also a lack of sewage in the community. The community is gasified, but in winter they mostly use wood to heat the house. The community has a school. The main means of subsistence is the job abroad.

# 12.21 Syunik Province, Arevik National Park, Community close to the forest-Vardanidzor







							For h	eating								
				RAINFALI	-	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	3	1	2	4	5	1	4	2	5	1	3	1	2
	Wood	% within	33.30%	50.00%	16.70%	33.30%	66.70%	83.30%	16.70%	66.70%	33.30%	83.30%	16.70%	50.00%	16.70%	33.30%
VARDANIDZOR		% of Total	28.60%	42.90%	14.30%	28.60%	57.10%	71.40%	14.30%	57.10%	28.60%	71.40%	14.30%	42.90%	14.30%	28.60%
VARDANIDZOR	RDANIDZOR % of Tot Count	Count		1		1		1		1			1	1		
	Bush	% within		100.00%		100.00%		100.00%		100.00%			100.00%	100.00%		
		% of Total		14.30%		14.30%		14.30%		14.30%			14.30%	14.30%		

							For	cooking								
	Coo	king		RAINFALL	-	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	warm & co	ld sooson	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1		1		1		1			1	1		
	Electricity	% within		100.00%		100.00%		100.00%		100.00%			100.00%	100.00%		
		% of Total		14.30%		14.30%		14.30%		14.30%			14.30%	14.30%		
		Count	2	3		2	3	4	1	3	2	3	2	3		2
VARDANIDZOR	Wood	% within	40.00%	60.00%		40.00%	60.00%	80.00%	20.00%	60.00%	40.00%	60.00%	40.00%	60.00%		40.00%
		% of Total	28.60%	42.90%		28.60%	42.90%	57.10%	14.30%	42.90%	28.60%	42.90%	28.60%	42.90%		28.60%
		Count	2	6	2	4	6	8	2	7	3	8	2	4	2	4
Liq	Liquid gas	% within	20.00%	60.00%	20.00%	40.00%	60.00%	80.00%	20.00%	70.00%	30.00%	80.00%	20.00%	40.00%	20.00%	40.00%
		% of Total	28.60%	85.70%	28.60%	57.10%	85.70%	114.30%	28.60%	100.00%	42.90%	114.30%	28.60%	57.10%	28.60%	57.10%

					PURCHA	ASE OF TIM	∕IBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	I	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1		1		1		1		1				1
	Market			100.00%		100.00%		100.00%		100.00%		100.00%				100.00%
		% of Total		14.30%		14.30%		14.30%		14.30%		14.30%				14.30%
		Count		1		1		1		1			1	1		
	Collection on own land	% within		100.00%		100.00%		100.00%		100.00%			100.00%	100.00%		
VARDANIDZOR		% of Total		14.30%		14.30%		14.30%		14.30%			14.30%	14.30%		
VANDAMIDZON		Count	2				2	2		1	1	2		2		
	Collection from forest	% within	100.00%				100.00%	100.00%		50.00%	50.00%	100.00%		100.00%		
		% of Total	28.60%				28.60%	28.60%		14.30%	14.30%	28.60%		28.60%		
	Liquid gas Cou	Count		2	1	1	2	2	1	2	1	2	1	1	1	1
		% within		66.70%	33.30%	33.30%	66.70%	66.70%	33.30%	66.70%	33.30%	66.70%	33.30%	33.30%	33.30%	33.30%
		% of Total		28.60%	14.30%	14.30%	28.60%	28.60%	14.30%	28.60%	14.30%	28.60%	14.30%	14.30%	14.30%	14.30%

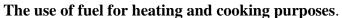
						TIMBEI	R OR NO	N-TIMBER	PRODUC								
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	~		100.00%			100.00%	100.00%		50.00%	50.00%	100.00%			100.00%	
	WOOD TIMBER PRODUCT		% of Total		28.60%			28.60%	28.60%		14.30%	14.30%	28.60%			28.60%	
	WOOD HIVIBER PRODUCT	NO	% of Total % within	20.00%		80.00%	60.00%	40.00%	80.00%	20.00%	80.00%	20.00%	60.00%	40.00%	20.00%	40.00%	40.00%
VARDANIDZOR		INO	% of Total	14.30%		57.10%	42.90%	28.60%	57.10%	14.30%	57.10%	14.30%	42.90%	28.60%	14.30%	28.60%	28.60%
VARDANIDZOR		YES	% within	20.00%	40.00%	40.00%	40.00%	60.00%	100.00%		80.00%	20.00%	80.00%	20.00%	20.00%	80.00%	
	NON TIMBER PRODUCT		% of Total	14.30%	28.60%	28.60%	28.60%	42.90%	71.40%		57.10%	14.30%	57.10%	14.30%	14.30%	57.10%	
	NON HIVIDER PRODUCT	NO	% within			100.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%			100.00%
		NO	% of Total			28.60%	14.30%	14.30%	14.30%	14.30%	14.30%	14.30%	14.30%	14.30%			28.60%

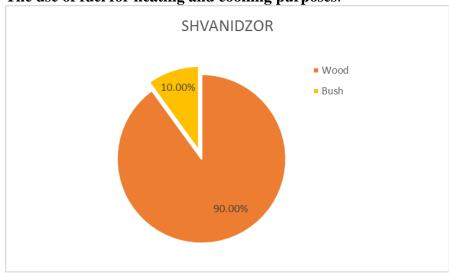
### Observation

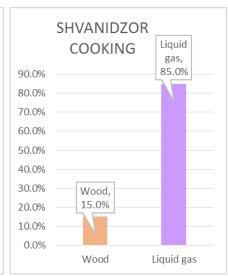
### Vardanidzor

This community in Syunik Province has almost no problems with irrigation water. The main areas of agricultural activity are cattle breeding and farming. A number of agricultural farms are engaged in agriculture. Part of the population is engaged in animal husbandry, mostly in keeping of cows and pigs. Some of them keep bees. The community is in poor condition, roads need improvement. Since the village is considered a liberated area, many people live in homes left by Azerbaijanis. They have poor living conditions and no opportunity to improve them. There is a school in the community. There are areas in the community that have been affected by a landslide.

# 12.22 Syunik Province, Arevik National Park, Community far from the forest- Shvanidzor







							For h	eating								
				RAINFALL	-	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	5
VILLAGE	RESULTS		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	2	4	2	6	6	2	4	4	6	2	6	2	
SHVANIDZOR	Wood	% within	25.00%	25.00%	50.00%	25.00%	75.00%	75.00%	25.00%	50.00%	50.00%	75.00%	25.00%	75.00%	25.00%	
		% of Total	25.00%	25.00%	50.00%	25.00%	75.00%	75.00%	25.00%	50.00%	50.00%	75.00%	25.00%	75.00%	25.00%	

							For	cooking								
	Coo	king		RAINFALI	_	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		1.1	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	1		1	2	3		1	2	1	2	3		
	Wood	% within	66.70%	33.30%		33.30%	66.70%	100.00%		33.30%	66.70%	33.30%	66.70%	100.00%		
SHVANIDZOR		% of Total	25.00%	12.50%		12.50%	25.00%	37.50%		12.50%	25.00%	12.50%	25.00%	37.50%		
SHVANIDZOK		Count	2	3	8	3	10	9	4	7	6	11	2	9	4	
	Liquid gas	% within	15.40%	23.10%	61.50%	23.10%	76.90%	69.20%	30.80%	53.80%	46.20%	84.60%	15.40%	69.20%	30.80%	
		% of Total	25.00%	37.50%	100.00%	37.50%	125.00%	112.50%	50.00%	87.50%	75.00%	137.50%	25.00%	112.50%	50.00%	

					PURCHA	SE OF TIP	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	1	1	1	3	4		2	2	2	2	3	1	
	Market	% within	50.00%	25.00%	25.00%	25.00%	75.00%	100.00%		50.00%	50.00%	50.00%	50.00%	75.00%	0.25	
		% of Total	25.00%	12.50%	12.50%	12.50%	37.50%	50.00%		25.00%	25.00%	25.00%	25.00%	37.50%	0.125	
		Count			2		2		2		2	2		2		
SHVANIDZOR	Bought in leskhozes	% within			100.00%		100.00%		1		100.00%	100.00%		100.00%		
		% of Total			25.00%		25.00%		0.25		25.00%	25.00%		25.00%		
		Count		1	1	1	1	2		2		2		1	1	
	Liquid gas	% within		50.00%	50.00%	0.5	50.00%	100.00%		100.00%		100.00%		50.00%	50.00%	
		% of Total		12.50%	12.50%	0.125	12.50%	25.00%		25.00%		25.00%		12.50%	12.50%	

						TIMBE	R OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within	100.00%				100.00%	100.00%		100.00%		100.00%		100.00%		
	WOOD TIMBER PRODUCT	_	% of Total	12.50%				12.50%	12.50%		12.50%		12.50%		12.50%		
	WOOD HIVIBLE PRODUCT	NO	% within	42.90%	28.60%	28.60%	28.60%	71.40%	71.40%	28.60%	42.90%	57.10%	71.40%	28.60%	14.30%	85.70%	
SH//ANIDZOB		NO	% of Total	37.50%	25.00%	25.00%	25.00%	62.50%	62.50%	25.00%	37.50%	50.00%	62.50%	25.00%	12.50%	75.00%	
SHVANIDZOK	/ANIDZOR	YES	% within	75.00%		25.00%	25.00%	75.00%	50.00%	50.00%	50.00%	50.00%	100.00%		25.00%	75.00%	
	NON TIMBER PRODUCT	_	% of Total	37.50%		12.50%	12.50%	37.50%	25.00%	25.00%	25.00%	25.00%	50.00%		12.50%	37.50%	
	NON HIVIDER PRODUCT	NO	% within	25.00%	50.00%	25.00%	25.00%	75.00%	100.00%		50.00%	50.00%	50.00%	50.00%	25.00%	75.00%	
		NO	% of Total	12.50%	25.00%	12.50%	12.50%	37.50%	50.00%		25.00%	25.00%	25.00%	25.00%	12.50%	37.50%	

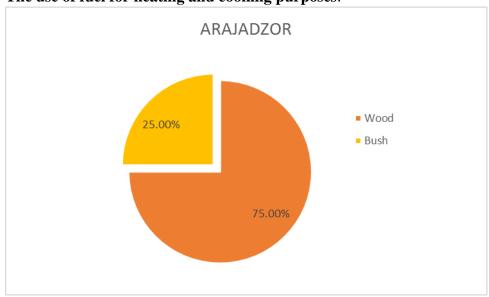
## **Observation**

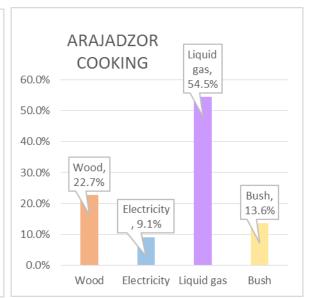
## **Shvanidzor**

This community in Syunik province is full of historic sites. It has difficulties with irrigation water. Very small part of the population is engaged in cattle breeding. Small farms deal with beekeeping. People are engaged in gardening (pomegranate, blood orange, fig and vineyard) and cattle-breeding. The "Arevik" National Park is located near the community. There is a school. The community borders the Islamic Republic of Iran.

# 12.23 Syunik Province, Kapan Forest Enterprise, Community close to the forest-Arajadzor

The use of fuel for heating and cooking purposes.





For	heating
L OI	neading

				RAINFAL	L	DROU	JGHTS	FLO	ODS	DELAY I	RAINS	END I	RAINS	]	HOT DAY	S
VILLAGE	RE	SULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	]
		Count		4		2	2	2	2	4		2	2		1	
	Wood	% within		100.00%		50.00%	50.00%	50.00%	50.00%	100.00%		50.00%	50.00%		25.00%	
ARAJADZOR	,,,,,,,	% of Total		80.00%		40.00%	40.00%	40.00%	40.00%	80.00%		40.00%	40.00%		20.00%	
AKAJADZOK		Count		3		1	2	2	1	3		1	2		1	
	Bush	% within		100.00%		33.30%	66.70%	66.70%	33.30%	100.00%		33.30%	66.70%		33.30%	
	24011	% of Total		60.00%		20.00%	40.00%	40.00%	20.00%	60.00%		20.00%	40.00%		20.00%	

							For	cooking								
	Coo	king		RAINFALI	-	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	warm & co	. 1 . 1	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		2			2	1	1	2			2			2
	Wood	% within		100.00%			100.00%	50.00%	50.00%	100.00%			100.00%			100.00%
		% of Total		40.00%			40.00%	20.00%	20.00%	40.00%			40.00%			40.00%
		Count		3		2	1	2	1	3		2	1		2	1
ARAJADZOR	Bush	% within		100.00%		66.70%	33.30%	66.70%	33.30%	100.00%		66.70%	33.30%		66.70%	33.30%
		% of Total		60.00%		40.00%	20.00%	40.00%	20.00%	60.00%		40.00%	20.00%		40.00%	20.00%
		Count		6		4	2	3	3	6		4	2		2	4
	Liquid gas	% within		100.00%		66.70%	33.30%	50.00%	50.00%	100.00%		66.70%	33.30%		33.30%	66.70%
		% of Total		120.00%		80.00%	40.00%	60.00%	60.00%	120.00%		80.00%	40.00%		40.00%	80.00%

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1		1		1		1		1				1
	Market	% within		100.00%		100.00%		100.00%		100.00%		100.00%				100.00%
		% of Total		20.00%		20.00%		20.00%		20.00%		20.00%				20.00%
		Count		3		2	1	2	1	3		2	1		2	1
ARAJADZOR	Collection on own land	% within		100.00%		66.70%	33.30%	66.70%	33.30%	100.00%		66.70%	33.30%		66.70%	33.30%
		% of Total		60.00%		40.00%	20.00%	40.00%	20.00%	60.00%		40.00%	20.00%		40.00%	20.00%
		Count		1			1		1	1			1			1
	Collection from forest	% within		100.00%			100.00%		100.00%	100.00%			100.00%			100.00%
		% of Total		20.00%			20.00%		20.00%	20.00%			20.00%			20.00%

						TIMBER	R OR NO	I-TIMBER	PRODUC	Т							
					RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within			100.00%		100.00%		100.00%	100.00%			100.00%			100.00%
	WOOD TIMBER PRODUCT		% of Total			20.00%		20.00%		20.00%	20.00%			20.00%			20.00%
	WOOD HIVIBER PRODUCT	ΝО	% within			100.00%	75.00%	25.00%	75.00%	25.00%	100.00%		75.00%	25.00%	50.00%		50.00%
ARAJADZOR		NO	% of Total			80.00%	60.00%	20.00%	60.00%	20.00%	80.00%		60.00%	20.00%	40.00%		40.00%
ANAJADZON		YES	% within			100.00%	66.70%	33.30%	33.30%	66.70%	100.00%		66.70%	33.30%	33.30%		66.70%
	NON TIMBER PRODUCT		% of Total			60.00%	40.00%	20.00%	20.00%	40.00%	60.00%		40.00%	20.00%	20.00%		40.00%
	NON HIVIBER PRODUCT	NO	% within			100.00%	50.00%	50.00%	100.00%		100.00%		50.00%	50.00%	50.00%		50.00%
			% of Total			40.00%	20.00%	20.00%	40.00%		40.00%		20.00%	20.00%	20.00%		20.00%

#### **Observation**

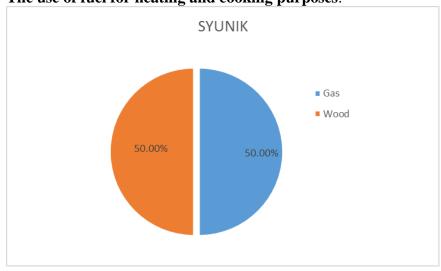
## Arajadzor

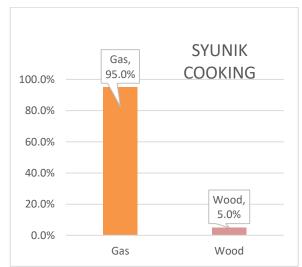
This beautiful community in Syunik Province is located just in the forest. The population is very small, as most have emigrated to other regions of Armenia or abroad, and most of the elderly remain.

The village has difficulties with irrigation water. People grow mainly potatoes, vegetables, wheat and barley. Only two families of the village are engaged in livestock breeding. A small number of households are keeping chickens and bees. The school, kindergarten, village administration and outpatient clinic do not operate in this community. To meet their needs, residents have to go to the neighboring community. Just a few families are engaged in cattle-breeding and farming. It is possible to develop tourism in the village due to its location and historical and cultural sites.

# 12.24 Syunik Province, Kapan Forest Enterprise, Community far from the forest- Syunik

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALI	-	DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		2		1	1	2		2		2		2		
	Gas	% within		100.00%		50.00%	50.00%	100.00%		100.00%		100.00%		100.00%		
SYUNIK		% of Total		33.30%		16.70%	16.70%	33.30%		33.30%		33.30%		33.30%		
STOINIK		Count		4		3	1	4		4		3	1	1	1	2
	Wood	% within		100.00%		75.00%	25.00%	100.00%		100.00%		75.00%	25.00%	25.00%	25.00%	50.00%
		% of Total		66.70%		50.00%	16.70%	66.70%		66.70%		50.00%	16.70%	16.70%	16.70%	33.30%

							For	cooking								
	Coc	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		old season	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		12		8	4	12		12		10	2	6	2	4
SYUNIK	Gas	% within		100.00%		66.70%	33.30%	100.00%		100.00%		83.30%	16.70%	50.00%	16.70%	33.30%
		% of Total		200.00%		133.30%	66.70%	200.00%		200.00%		166.70%	33.30%	100.00%	33.30%	66.70%

		_			PURCHA	ASE OF TII	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	ŝ
VILLAGE	RES	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days	
	Count			4		3	1	4		4		3	1	1	1	2
SYUNIK	JNIK Liquid gas % within			100.00%		75.00%	25.00%	100.00%	·	100.00%		75.00%	25.00%	25.00%	25.00%	50.00%
		% of Total		100.00%		75.00%	25.00%	100.00%		100.00%		75.00%	25.00%	25.00%	25.00%	50.00%

The use of timber and non - timber forest products as a factor influencing climate change

			-			TIMBE	R OR NON	I-TIMBER	PRODUC	Т							
					RAINFALL		DROU	IGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No	Less rain	More	NO	YES	NO	YES	NO	YES	NO	YES	No	Increase in	Decline in
				change	2000 1 4111	rain	110	. 23	110		1.0	. 23			change	hot days	hot days
		YES	% within			100.00%	100.00%		100.00%		100.00%		100.00%			100.00%	
	WOOD TIMBER PRODUCT		% of Total			16.70%	16.70%		16.70%		16.70%		16.70%			16.70%	
SYUNIK	WOOD HIVIDER PRODUCT	NO	% within			100.00%	60.00%	40.00%	100.00%		100.00%		80.00%	20.00%	20.00%	40.00%	40.00%
STONIK		_	% of Total			83.30%	50.00%	33.30%	83.30%		83.30%		66.70%	16.70%	16.70%	33.30%	33.30%
	NON TIMBER PRODUCT	NO	% within			100.00%	66.70%	33.30%	100.00%		100.00%		83.30%	16.70%	16.70%	50.00%	33.30%
	NON HINDLE PRODUCT	INO	% of Total			100.00%	66.70%	33.30%	100.00%		100.00%		83.30%	16.70%	16.70%	50.00%	33.30%

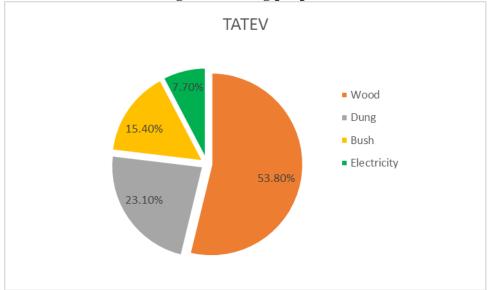
### **Observation**

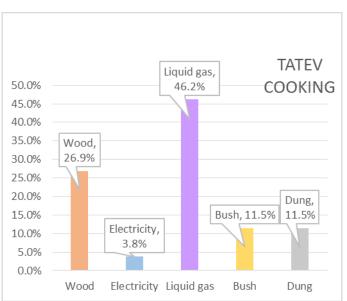
### **Syunik**

Syunik community of Syunik province is bordering with Artsakh. It was strange for us to learn, that the community leader had sold community lands to mining contractors and now most of the villagers have no opportunity to engage in cattle-breeding and farming. They also do not use forest areas. The village has almost no problems with irrigation water. The main source of people's income is non-agricultural work. They bring drinking water from the neighboring village as water is not suitable for drinking because of the tailing dump existing in the community. There is a school and a kindergarten in the village. There are state multi-storey apartment buildings.

# 12.25 Syunik Province, Syunik Forest Enterprise, Community close to the forest-Tatev

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1		1		1		1		1				1
	Electricity	% within		100.00%		100.00%		100.00%		100.00%		100.00%				100.00%
		% of Total		12.50%		12.50%		12.50%		12.50%		12.50%				12.50%
		Count	3	1	1	1	4	5		5		2	3	3	2	
	Wood	% within	60.00%	20.00%	20.00%	20.00%	80.00%	100.00%		100.00%		40.00%	60.00%	60.00%	40.00%	
TATEV		% of Total	37.50%	12.50%	12.50%	12.50%	50.00%	62.50%		62.50%		25.00%	37.50%	37.50%	25.00%	
IAIEV		Count		2		1	1	1	1	1	1	2			1	1
	Bush	% within		100.00%		50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	100.00%			50.00%	50.00%
		% of Total		25.00%		12.50%	12.50%	12.50%	12.50%	12.50%	12.50%	25.00%			12.50%	12.50%
		Count		3		2	1	2	1	2	1	3			1	2
	Dung	% within		100.00%		66.70%	33.30%	66.70%	33.30%	66.70%	33.30%	100.00%			33.30%	66.70%
		% of Total		37.50%		25.00%	12.50%	25.00%	12.50%	25.00%	12.50%	37.50%			12.50%	25.00%

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	warm & co		Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	1				1	1		1			1	1		
	Electricity	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total	12.50%				12.50%	12.50%		12.50%			12.50%	12.50%		
		Count	2	2	1	2	3	5		5		2	3	2	3	
	Wood	% within	40.00%	40.00%	20.00%	40.00%	60.00%	100.00%		100.00%		40.00%	60.00%	40.00%	60.00%	
		% of Total	25.00%	25.00%	12.50%	25.00%	37.50%	62.50%		62.50%		25.00%	37.50%	25.00%	37.50%	
		Count		3		2	1	2	1	2	1	3			1	2
TATEV	Bush	% within		100.00%		66.70%	33.30%	66.70%	33.30%	66.70%	33.30%	100.00%			33.30%	66.70%
		% of Total		37.50%		25.00%	12.50%	25.00%	12.50%	25.00%	12.50%	37.50%			12.50%	25.00%
		Count		3		2	1	2	1	2	1	3			1	2
	Dung	% within		100.00%		66.70%	33.30%	66.70%	33.30%	66.70%	33.30%	100.00%			33.30%	66.70%
		% of Total		37.50%		25.00%	12.50%	25.00%	12.50%	25.00%	12.50%	37.50%			12.50%	25.00%
		Count	5	3	1	2	7	8	1	8	1	5	4	5	2	2
	Liquid gas	% within	55.60%	33.30%	11.10%	22.20%	77.80%	88.90%	11.10%	88.90%	11.10%	55.60%	44.40%	55.60%	22.20%	22.20%
		% of Total	62.50%	37.50%	12.50%	25.00%	87.50%	100.00%	12.50%	100.00%	12.50%	62.50%	50.00%	62.50%	25.00%	25.00%

					PURCHA	ASE OF TIM	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ŀ	HOT DAYS	5
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2				2	2		2			2	2		
	Market	% within	100.00%				100.00%	100.00%		100.00%			100.00%	100.00%		
		% of Total	25.00%				25.00%	25.00%		25.00%			25.00%	25.00%		
		Count		1		1		1		1		1				1
TATEV	Collection on own land	% within		100.00%		100.00%		100.00%		100.00%		100.00%				100.00%
		% of Total		12.50%		12.50%		12.50%		12.50%		12.50%				12.50%
	Collection from forest % v	Count	1	3	1	2	3	4	1	4	1	4	1	1	3	1
		% within	20.00%	60.00%	20.00%	40.00%	60.00%	80.00%	20.00%	80.00%	20.00%	80.00%	20.00%	20.00%	60.00%	20.00%
		% of Total	12.50%	37.50%	12.50%	25.00%	37.50%	50.00%	12.50%	50.00%	12.50%	50.00%	12.50%	12.50%	37.50%	12.50%

						TIMBE	R OR NON		PRODUC	Т							
					RAINFALL		DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
			% within	20.00%	20.00%	60.00%	40.00%	60.00%	80.00%	20.00%	80.00%	20.00%	80.00%	20.00%	60.00%	20.00%	20.00%
	WOOD TIMBER PRODUCT		% of Total	12.50%	12.50%	37.50%	25.00%	37.50%	50.00%	12.50%	50.00%	12.50%	50.00%	12.50%	37.50%	12.50%	12.50%
		NO	% within		66.70%	33.30%	33.30%	66.70%	100.00%		100.00%		33.30%	66.70%		66.70%	33.30%
TATEV	N	NO	% of Total		25.00%	12.50%	12.50%	25.00%	37.50%		37.50%		12.50%	25.00%		25.00%	12.50%
IAIEV		YES	% within	20.00%	60.00%	20.00%	20.00%	80.00%	100.00%		100.00%		40.00%	60.00%	40.00%	60.00%	
		_	% of Total	12.50%	37.50%	12.50%	12.50%	50.00%	62.50%		62.50%		25.00%	37.50%	25.00%	37.50%	
	NON TIMBER PRODUCT	NO	% within			100.00%	66.70%	33.30%	66.70%	33.30%	66.70%	33.30%	100.00%		33.30%		66.70%
	NO	INU	% of Total			37.50%	25.00%	12.50%	25.00%	12.50%	25.00%	12.50%	37.50%		12.50%		25.00%

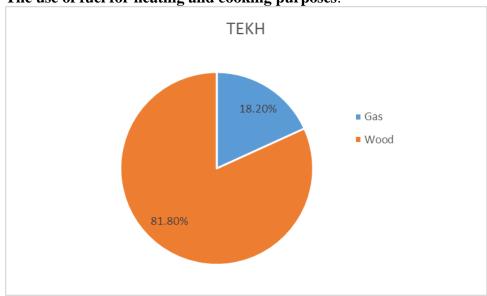
#### **Observation**

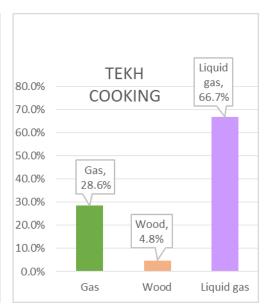
#### **Tatev**

Tatev Monastery is one of the oldest sacred places in Syunik. The main problems in Tatev community are the remoteness of pastures and community lands, as well as the lack of finances due to which many people are looking for other activities and other sources of income. They collect berries and herbs for their own use. There are almost no problems with irrigation water. Population is engaged in cattle breeding, vegetable growing, horticulture, grain, cigarette and fodder cultivation. People keep cows, pigs, and goats. Most of them breed chicken. Some are also engaged in beekeeping. Although Tatev is a famous tourism center, it is in a very bad state. It has a great potential for tourism development. The community roads need improvement.

# 12.26 Syunik Province, Syunik Forest Enterprise, Community far from the forest- Tegh

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALL	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END R	RAINS		HOT DAY	S
VILLAGE	RESI	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1			1		1	1		1				1
	Gas	% within		100.00%			100.00%		100.00%	100.00%		100.00%				100.00%
TEKH		% of Total		14.30%			14.30%		14.30%	14.30%		14.30%				14.30%
ILKII		Count	1	2	3	3	3	5	1	5	1	6		2	1	3
	Wood	% within	16.70%	33.30%	50.00%	50.00%	50.00%	83.30%	16.70%	83.30%	16.70%	100.00%		33.30%	16.70%	50.00%
		% of Total	14.30%	28.60%	42.90%	42.90%	42.90%	71.40%	14.30%	71.40%	14.30%	85.70%		28.60%	14.30%	42.90%

							For	cooking								
	Cool	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	I .	•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		4			4		4	4		4				4
	Gas	% within		100.00%			100.00%		100.00%	100.00%		100.00%				100.00%
		% of Total		57.10%			57.10%		57.10%	57.10%		57.10%				57.10%
		Count		1			1		1	1		1				1
TEKH	Wood	% within		100.00%			100.00%		100.00%	100.00%		100.00%				100.00%
		% of Total		14.30%			14.30%		14.30%	14.30%		14.30%				14.30%
		Count	2	2	6	6	4	10		8	2	10		4	2	4
	Liquid gas	% within	20.00%	20.00%	60.00%	60.00%	40.00%	100.00%		80.00%	20.00%	100.00%		40.00%	20.00%	40.00%
		% of Total	28.60%	28.60%	85.70%	85.70%	57.10%	142.90%		114.30%	28.60%	142.90%		57.10%	28.60%	57.10%

		g		- 0	PURCHA	ASE OF TIM	<b>MBER</b>									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	AINS	I	HOT DAYS	;
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1	2	2	1	3		3		3		2		1
	Market	% within		33.30%	66.70%	66.70%	33.30%	100.00%		100.00%		100.00%		66.70%		33.30%
TEKH		% of Total		16.70%	33.30%	33.30%	16.70%	50.00%		50.00%		50.00%		33.30%		16.70%
IENT		Count	1	1	1	1	2	2	1	2	1	3			1	2
	Liquid gas %	% within	33.30%	33.30%	33.30%	33.30%	66.70%	66.70%	33.30%	66.70%	33.30%	100.00%			33.30%	66.70%
		% of Total	16.70%	16.70%	16.70%	16.70%	33.30%	33.30%	16.70%	33.30%	16.70%	50.00%			16.70%	33.30%

The use of timber and non - timber forest products as a factor influencing climate change

_	110 050 01 01	mber and non - tim		r rorest pr	ouucib t	as a race	, , , , , , , , , , , , , , , , , , ,	<u> </u>		<del>ciiaii</del> g								
							TIMBEI	R OR NON	I-TIMBER	PRODUC	T							
						RAINFALL		DROU	IGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
	VILLAGE	FOREST PRODUCT		RESULTS	No	Less rain	More	NO	YES	NO	YES	NO	YES	NO	YES	No	Increase in	Decline in
L				1	change	LC33 Talli	rain	110	123	140	11.5	110	11.5	110	123	change	hot days	hot days
		WOOD TIMBER PRODUCT	NΟ	% within	42.90%	14.30%	42.90%	42.90%	57.10%	71.40%	28.60%	85.70%	14.30%	100.00%		14.30%	28.60%	57.10%
	TEKH	WOOD HIVIBER PRODUCT	NO -	% of Total	42.90%	14.30%	42.90%	42.90%	57.10%	71.40%	28.60%	85.70%	14.30%	100.00%		14.30%	28.60%	57.10%
	IENH	NON TIMBER PRODUCT NO	% within	42.90%	14.30%	42.90%	42.90%	57.10%	71.40%	28.60%	85.70%	14.30%	100.00%	·	14.30%	28.60%	57.10%	
		NON TIMBER PRODUCT N	NO	% of Total	42.90%	14.30%	42.90%	42.90%	57.10%	71.40%	28.60%	85.70%	14.30%	100.00%		14.30%	28.60%	57.10%

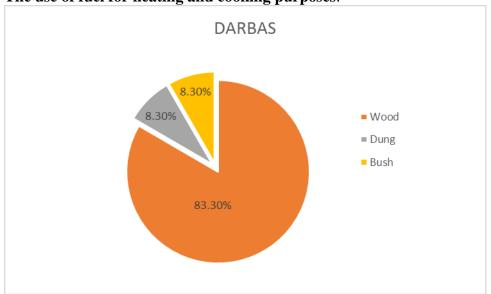
## **Observation**

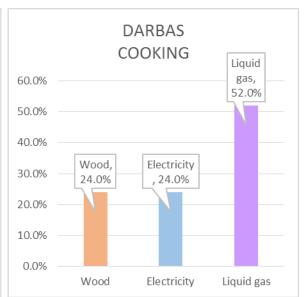
## **Tegh**

This is the largest community in the Syunik province, consisting of 7 communities. The community has little difficulty with irrigation water. In the local community, the survey respondents emphasized the absence of pasture, which led to the fact that cattle-breeding has become inefficient in recent years. Population is mainly engaged in field crop cultivation, fruit growing, potato and fodder cultivation. A small part of the population is engaged in poultry farming. The community is partly gasified. The social conditions of the people are bad. The community has a school. They are mainly engaged in cattle-breeding and farming. As far as the forest guard is from another community and the forest area is far from Tegh, the residents of this community almost do not use forest products.

# 12.27 Syunik Province, SisianForest Enterprise, Community close to the forest-Darbas

The use of fuel for heating and cooking purposes.





							For h	eating								
				RAINFALI	L	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAY	S
VILLAGE	RES	ULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	4		2	5	7		5	2	3	4	2	4	1
	Wood	% within	42.90%	57.10%		28.60%	71.40%	100.00%		71.40%	28.60%	42.90%	57.10%	28.60%	57.10%	14.30%
DARBAS		% of Total	42.90%	57.10%		28.60%	71.40%	100.00%		71.40%	28.60%	42.90%	57.10%	28.60%	57.10%	14.30%
DANBAS		Count		1			1	1		1			1		1	
	Dung	% within		100.00%			100.00%	100.00%		100.00%			100.00%		100.00%	
		% of Total		14.30%			14.30%	14.30%		14.30%			14.30%		14.30%	

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE	I .	•	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	4		4	2	6		6		4	2		4	2
	Electricity	% within	33.30%	66.70%		66.70%	33.30%	100.00%		100.00%		66.70%	33.30%		66.70%	33.30%
		% of Total	28.60%	57.10%		57.10%	28.60%	85.70%		85.70%		57.10%	28.60%		57.10%	28.60%
		Count	2	2			4	4		2	2	2	2	2	1	1
DARBAS	Wood	% within	50.00%	50.00%			100.00%	100.00%		50.00%	50.00%	50.00%	50.00%	50.00%	25.00%	25.00%
		% of Total	28.60%	28.60%			57.10%	57.10%		28.60%	28.60%	28.60%	28.60%	28.60%	14.30%	14.30%
		Count	2	7		2	7	9		7	2	5	4	2	6	1
	Liquid gas	% within	22.20%	77.80%		22.20%	77.80%	100.00%		77.80%	22.20%	55.60%	44.40%	22.20%	66.70%	11.10%
		% of Total	28.60%	100.00%		28.60%	100.00%	128.60%		100.00%	28.60%	71.40%	57.10%	28.60%	85.70%	14.30%

					PURCHA	SE OF TIP	MBER									
				RAINFALL		DROU	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS	ı	HOT DAYS	5
VILLAGE	RES	SULTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count		1			1	1		1		1			1	
	DARBAS Liquid gas	% within		100.00%			100.00%	100.00%		100.00%		100.00%			100.00%	
DARRAC		% of Total		14.30%			14.30%	14.30%		14.30%		14.30%			14.30%	
DANDAS		Count	3	3		2	4	6		4	2	2	4	2	3	1
		% within	50.00%	50.00%	_	33.30%	66.70%	100.00%		66.70%	33.30%	33.30%	66.70%	33.30%	50.00%	16.70%
		% of Total	42.90%	42.90%		28.60%	57.10%	85.70%		57.10%	28.60%	28.60%	57.10%	28.60%	42.90%	14.30%

						TIMBER	OR NO	N-TIMBER	PRODUC	Т							
					RAINFALL		DROL	JGHTS	FLO	ODS	DELAY	RAINS	END I	RAINS		HOT DAYS	
VILLAGE	FOREST PRODUCT		RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
		YES	% within			100.00%		100.00%	100.00%		100.00%		100.00%		100.00%		
	WOOD TIMBER PRODUCT		% of Total			14.30%		14.30%	14.30%		14.30%		14.30%		14.30%		
		NO	% within		50.00%	50.00%	33.30%	66.70%	100.00%		66.70%	33.30%	33.30%	66.70%	50.00%	33.30%	16.70%
DARBAS			% of Total		42.90%	42.90%	28.60%	57.10%	85.70%		57.10%	28.60%	28.60%	57.10%	42.90%	28.60%	14.30%
DANDAS	W	VEC	% within			100.00%		100.00%	100.00%		100.00%		100.00%		100.00%		
	NON TIMBER PRODUCT NO	_	% of Total			14.30%		14.30%	14.30%		14.30%		14.30%		14.30%		
		NO	% within		50.00%	50.00%	33.30%	66.70%	100.00%		66.70%	33.30%	33.30%	66.70%	50.00%	33.30%	16.70%
		_	% of Total		42.90%	42.90%	28.60%	57.10%	85.70%		57.10%	28.60%	28.60%	57.10%	42.90%	28.60%	14.30%

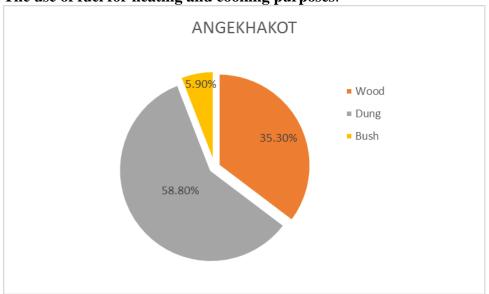
## **Observation**

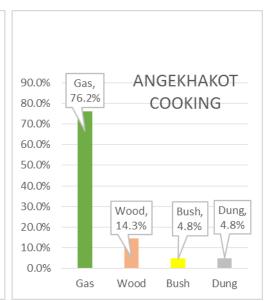
### **Darbas**

This community in Syunik has almost no problems with irrigation water. The residents grow mainly potatoes and vegetables. Part of the population is involved in cattle breeding. They keep cows and pigs. They are also engaged in poultry and bee-keeping. The community has sponsors who often carry out construction work and provide local people with jobs. There is also a factory in the community where local residents work. There is a school, kindergarten, church, museum, culture house, and no sewage disposal network. As a result of enlargement, the community of Darbas currently includes the villages of Darbas and Shamb.

# 12.28 Syunik Province, SisianForest Enterprise, Community far from the forest- Angeghakot

The use of fuel for heating and cooking purposes.





			8				For h	eating								
				RAINFALI	-	DRO	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAY	S
VILLAGE	RESU	JLTS	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	2	4			6	6		2	4	2	4	3	1	2
	Wood	% within	33.30%	66.70%			100.00%	100.00%		33.30%	66.70%	33.30%	66.70%	50.00%	16.70%	33.30%
		% of Total	22.20%	44.40%			66.70%	66.70%		22.20%	44.40%	22.20%	44.40%	33.30%	11.10%	22.20%
		Count	1				1	1		1		1				1
ANGEKHAKOT	Bush	% within	100.00%				100.00%	100.00%		100.00%		100.00%				100.00%
		% of Total	11.10%				11.10%	11.10%		11.10%		11.10%				11.10%
		Count	3	6		1	8	9		4	5	4	5	3	2	4
	Dung	% within	33.30%	66.70%		11.10%	88.90%	100.00%		44.40%	55.60%	44.40%	55.60%	33.30%	22.20%	44.40%
		% of Total	33.30%	66.70%		11.10%	88.90%	100.00%		44.40%	55.60%	44.40%	55.60%	33.30%	22.20%	44.40%

							For	cooking								
	Coo	king		RAINFALI	L	DROL	JGHTS	FLO	ODS	DELAY	RAINS	END F	RAINS		HOT DAYS	
VILLAGE		_	Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
		Count	3	11		2	12	14		7	7	6	8	5	4	5
	Gas	% within	21.40%	78.60%		14.30%	85.70%	100.00%		50.00%	50.00%	42.90%	57.10%	35.70%	28.60%	35.70%
		% of Total	33.30%	122.20%		22.20%	133.30%	155.60%		77.80%	77.80%	66.70%	88.90%	55.60%	44.40%	55.60%
		Count	2	1			3	3			3	1	2	1		2
	Wood	% within	66.70%	33.30%			100.00%	100.00%			100.00%	33.30%	66.70%	33.30%		66.70%
ANGEKHAKOT		% of Total	22.20%	11.10%			33.30%	33.30%			33.30%	11.10%	22.20%	11.10%		22.20%
ANGERHAROT		Count	1				1	1		1		1				1
	Bush	% within	100.00%				100.00%	100.00%		100.00%		100.00%				100.00%
		% of Total	11.10%				11.10%	11.10%		11.10%		11.10%				11.10%
		Count	1				1	1		1		1				1
	Dung	% within	100.00%				100.00%	100.00%		100.00%		100.00%				100.00%
		% of Total	11.10%				11.10%	11.10%		11.10%		11.10%				11.10%

PURCHASE OF TIMBER																
	RESULTS		RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE			Less rain	More rain	No change	NO	YES	NO	YES	NO	YES	NO	YES	Increase in hot days	No change	Decline in hot days
ANGEKHAKOT ·	Market	Count	1	1			2	2		1	1		2	1	1	
		% within	50.00%	50.00%			100.00%	100.00%		50.00%	50.00%		100.00%	50.00%	50.00%	
		% of Total	16.70%	16.70%			33.30%	33.30%		16.70%	16.70%		33.30%	16.70%	16.70%	
	Collection on own land	Count	1				1	1		1		1				1
		% within	100.00%				100.00%	100.00%		100.00%		100.00%				100.00%
		% of Total	16.70%				16.70%	16.70%		16.70%		16.70%				16.70%
	Collection from forest	Count		1			1	1			1		1	1		
		% within		100.00%			100.00%	100.00%			100.00%		100.00%	100.00%		
		% of Total		16.70%			16.70%	16.70%			16.70%		16.70%	16.70%		
	, ,	Count	1	1		_	2	2			2	1	1			2
		% within	50.00%	50.00%			100.00%	100.00%			100.00%	50.00%	50.00%			100.00%
		% of Total	16.70%	16.70%			33.30%	33.30%			33.30%	16.70%	16.70%			33.30%

TIMBER OR NON-TIMBER PRODUCT																	
	FOREST PRODUCT			RAINFALL			DROUGHTS		FLOODS		DELAY RAINS		END RAINS		HOT DAYS		
VILLAGE			RESULTS	No change	Less rain	More rain	NO	YES	NO	YES	NO	YES	NO	YES	No change	Increase in hot days	Decline in hot days
ANGEKHAKOT	WOOD TIMBER PRODUCT	YES	% within			100.00%		100.00%	100.00%			100.00%		100.00%		100.00%	
			% of Total			11.10%		11.10%	11.10%			11.10%		11.10%		11.10%	
		NO	% within		37.50%	62.50%	12.50%	87.50%	100.00%		50.00%	50.00%	50.00%	50.00%	25.00%	25.00%	50.00%
			% of Total		33.30%	55.60%	11.10%	77.80%	88.90%		44.40%	44.40%	44.40%	44.40%	22.20%	22.20%	44.40%
	NON TIMBER PRODUCT	YES	% within			100.00%	100.00%		100.00%		100.00%		100.00%		100.00%		
			% of Total			11.10%	11.10%		11.10%		11.10%		11.10%		11.10%		
		NO	% within		37.50%	62.50%		100.00%	100.00%		37.50%	62.50%	37.50%	62.50%	12.50%	37.50%	50.00%
			% of Total		33.30%	55.60%		88.90%	88.90%		33.30%	55.60%	33.30%	55.60%	11.10%	33.30%	44.40%

## **Observation**

## Angeghakot

Although there are no pastures and there is a lack of irrigation water in this community, most residents have to be engaged in cattle-breeding and farming to meet the needs of their families. They grow mainly potatoes, vegetables, wheat and barley. Part of the population is engaged in animal husbandry. Separate farms deal with beekeeping. There is no irrigation network, and the drinking water network is in poor condition. There is no forest area. The community has a kindergarten, an outpatient clinic and a school. The community is rich with historical and cultural monuments.