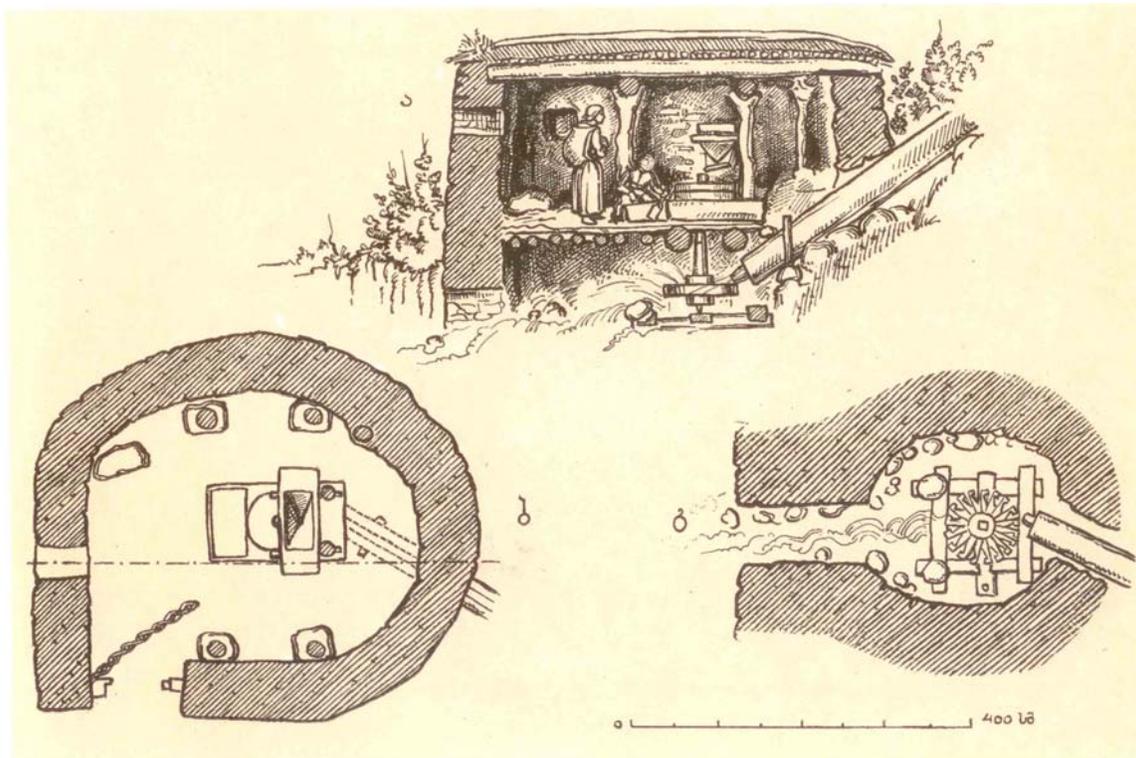




**USAID**  
FROM THE AMERICAN PEOPLE

# Gender and Energy a Case Study: Georgia

ADVISORY ASSISTANCE TO THE MINISTRY OF ENERGY OF GEORGIA



Energy related gender roles are a part of traditional Georgian culture. Illustration of women in a hydro power driven flower mill, 1946, by Nino Brailashvili, from "Ethnographic Sketches", Khelovneba Publishers, Tbilisi, 1990.

**October 2005**

This publication was produced for review by the United States Agency for International Development. It was prepared by CORE International, Inc.

**Gender and Energy a Case Study: Georgia**

# **Gender and Energy a Case Study: Georgia**

**Analysis prepared for Core International, Inc.  
Representative Office in Georgia  
By: Tamar Sabedashvili and Nino Durglishvili**

**August 2005**

**DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

# Contents

<b>I. Introduction .....</b>	<b>3</b>
<b>II. Methodology.....</b>	<b>5</b>
<b>III. Gender Dimensions of Access, Affordability and Utilization of Energy.....</b>	<b>7</b>
<b>III.I. Access.....</b>	<b>9</b>
<b>III.II. Affordability .....</b>	<b>15</b>
<b>III.IV. Utilization of energy .....</b>	<b>19</b>
<b>IV. Gender in Energy Sector Decision-Making .....</b>	<b>22</b>
<b>V. Conclusions and Recommendations for Gender Sensitive and Demand Responsive Service .....</b>	<b>26</b>
<b>VI. References .....</b>	<b>29</b>
<b>VII. Annexes.....</b>	<b>30</b>
<b>Annex 1: Fact Sheet of Focus Group Participants</b>	
<b>Annex 2: Priorities Assigned by the Researched Communities</b>	
<b>Annex #3: Photos of “Commercial” and “non commercial” electricity wires in the town of Zugdidi.</b>	
<b>Annex 4: Legal and Institutional Environment</b>	
<b>Annex 5: Questionnaire Used For Data Collection</b>	
<b>Annex 6: Focus Group: Gurjaani Region. Velistsikhe Sakrebulo</b>	
<b>Annex 7: Focus Group: Kvemo Kartli Region. Marneuli Region. Tamarisi Sakrebulo.</b>	
<b>Annex 8: Focus Group: Zugdidi Region</b>	
<b>Annex 9: Focus Group: Ambrolauri Regional Center</b>	
<b>Annex 10: Guide for Conduct of the Focus Groups</b>	

## I. Introduction

The purpose of this study is to listen to women's and men's experiences with energy policy in Georgia and provide respective decision-makers with analysis and recommendations for elaboration of a gender sensitive demand-oriented energy policy in Georgia, a policy that understands and meets diversified needs of women and men.

In summary, thus the report, consistently with international experience, shows that energy policy has tremendous influence on gender equality. The lack or instable supply of electricity and gas results in decreased benefits from modern energy applications, prolonged hours of complicated domestic labor, fewer self-development and entertainment opportunities has direct and significant impact on women, causing their health deterioration and disempowerment. Along with women, also men, school children, students and elderly are impacted by insufficient and ineffective energy policy. Instances of electricity supply after midnight or during noon through schedules that are inconsistent and unreflective of consumers' choices; instances of absence of electricity for days and weeks; abnormal voltages destroying citizens' electric appliances; lack of information on what to expect and how to participate in the energy system's improved operation along with unemployment and poverty alienate citizens and degrade their willingness to contribute to the development of the system through honest and regular tariff-paying.

The introduction is followed by a brief methodology description, with information about the researched communities, their selection criteria, methods used during the research and data analysis.

The next, third and the largest part of the paper attempts to substantively analyze the interrelation between energy sector and conditions of women and men in the society, i.e. the impact of energy sector on gender roles and relations in the selected regions of Georgia. The analysis is carried out from the viewpoint of the following criteria: **access** (*information about the service, schedule of the access to service, choice in services, appliances, equipment*), **affordability** (*installation and connection costs, fees, costs of appliances*), and **Utilization of energy** (*conditions of the infrastructure*).<sup>1</sup>

The lack of energy, although caused by the deterioration of economy of the country, has come to contribute and symbolize the underdevelopment and low quality of life in Georgia. Failing to supply the population with sufficient energy has become Heel of Achilles for a number of policy makers and administrations. In Georgia, as in general, around the world, women participate less in energy policy development and decision-making processes than do men; the fourth part of the paper reveals this by looking at

---

<sup>1</sup> These indicators are modified and adjusted to the Georgian environment from the original EnPoGen (2003) project, which was set up to support efforts of the Asia Alternative Energy Program of the World Bank and is described by Margaret M. Skutsch in "Tooling up for Gender and Energy", Technology for Sustainable Development, University of Twente, p.17.

gender equality aspects within the main policy making body in the field of energy the Ministry of Energy and Fuel of Georgia and Georgian Energy Regulatory National Commission. In the chapter the balance in number and rank of women and men employed and patterns of decision-making within the Ministry and Commission are examined.

This research does not look at energy sector only from the households needs' perspective, but looks at it also, as a potential source for women's emancipation and empowerment, through improved and gender aware energy sector policies. Based on the analysis the recommendations are offered in the fifth part of the paper for development of a **demand responsive service** that takes user voice in planning and user satisfaction seriously into consideration. The output of the study are the recommendations for policy-makers on: (i) how to satisfy household needs of women and men, (ii) how to plan and implement gender aware policy that will result in greater emancipation and empowerment of women and (iii) how can gender aware policy-making increase the overall efficiency of energy policy in the country.

## II. Methodology

Since 1991, after the fall of the Soviet Union the deterioration and final breakdown of infrastructure left citizens of Georgia, most of the times, barehanded with the environment and climate of their places of residence. Scarcity or lack of affordability of developed technologies and services cause the prevalence of traditional forms of existence and dealing with diverse agricultural or household needs. In Georgia's context apart from the capital Tbilisi, there exist four significant rural and urban sub-cultures that can be informative and representative from the viewpoint of gender and energy interrelations.

For the interests of the study there have been selected locations that fall under these four categories: Western Georgia (Zugdidi region),<sup>2</sup> Eastern Georgia (Gurjaani region),<sup>3</sup> Northern mountainous parts of Georgia (Ambrolauri region of Racha-Lechkhumi),<sup>4</sup> and Southern Georgia (Marneuli region of Qvemo Qartli)<sup>5</sup>. Due to geographical, cultural, and ethnic diversity the populations of these regions have different needs, priorities and access to services (water, gas, electricity, healthcare, education). Western Georgia, city of Zugdidi and villages of Zugdidi region have been selected as spots that preserve traditions and traditional division of gender roles strongly. However, the research team supposed that extreme poverty and vulnerability of population might have resulted in challenging the traditional gender roles; thus it was decided that it would be interesting to analyze gender relations in the environment of huge lack of electric energy supply that persists in this region. In Kakhetia, Eastern Georgia, there can be found villages that have 24-hour energy supply, due to the development of local enterprises. Therefore, the research team decided to examine what is the impact of such a full scale energy supply on gender division of labor, public and private lives of women and men, and what are the tensions related to the affordability of the electric energy. The mountainous regions of Georgia have also poor and un-organized energy supply. Moreover, among the population of Racha-Lechkhumi there dominate older age groups, with the characteristic gender and energy issues. The Southern Georgia is informative from the ethnic diversity viewpoint; as in Qvemo Qartli along with ethnically Georgian population there reside Azeri ethnic minorities that might practice different gender division of labor and use of energy. Due to such diversity, the example and analysis of selected regions in terms of gender relations and impact of energy policy on gender is representative also for the other parts of Georgia.

In all four locations focus groups have been held in an administrative center (urban and semi-urban setting) and two or three villages (rural setting). In these locations the focus-groups took place with the communities that experience (i) huge lack of energy supply (both electricity and gas), (ii) un-organized electricity supply, (iii) fixed energy

<sup>2</sup> In Zugdidi region four focus groups have been held: one in the town of Zugdidi and three in the villages: Tsaishi, Urta, Ingiri.

<sup>3</sup> In Gurjaani region three focus groups have been held: one in the town of Gurjaani and two in the villages: Akhasheni, Velistsikhe.

<sup>4</sup> In Ambrolauri region three focus groups have been held: one in the town of Abrolauri and two in the villages: Sadmeli and Khvanchkara.

<sup>5</sup> In Marneuli region four focus groups have been held: one in the town of Marneuli and three in the villages: Tamarisi, Algeti.

supply and (iv) full (24-hour) energy supply.

The methodology used in the analysis comprised mostly of qualitative methods, after initial desk research, dedicated to the collection of relevant laws, policy documents and previous researches there has been developed a set of questions for the focus group discussions in four regions of Georgia (14 focus-group discussions altogether), in each focus group there participated 7-8 community members. The absolute majority of focus groups were mixed sex with 50/50 gender balance, only in the village of Algeti of Marneuli region there were held two single sex focus groups one for women and the other for men, the research team has consulted with the representatives of the local community and it was decided that due to the specificity of Azeri ethnic minority residing in this village both women and men would feel more comfortable speaking about their concerns in single sex, rather than mixed sex groups. The focus groups in all locations included housewives, small entrepreneurial farmers, women and men community leaders, young couples beginning to establish their own homes, professional women and men (both single and married). Please view annex #1 for the detailed list of focus-group locations and demographic data of focus group participants.

Along with questions the research team also developed a brief questionnaire for the focus group participants in order to receive data that could be presented in quantitative terms. Method of subject-based interviews (5 altogether) has been used only with energy sector employees and donors supporting energy sector development in Georgia. The method of contents analysis of the focus groups and interviews' transcripts was used throughout the processing and analyzing of the data and prior to the writing of the analysis.

In the 14 focus groups there have participated 108 individuals 50% of which have been women and 50% have been men. The majority of the respondents are married (57,41%), 32.41% are single, 2.78% are divorced and 7.41% widowed. The dominant majority of respondents of both sexes are farmers 24.07%, 19.44% are unemployed, 17.59% are working in the education sector, and 8.33% are representatives of the local self-governance. For detailed sex disaggregated data of the focus group participants please view Annex #1.

### III. Gender Dimensions of Access, Affordability and Utilization of Energy

The key question that this section of the research aims to answer is related to the impact of the energy sector on gender roles and relations in the selected representative communities both in relation to household functions and responsibilities as well as to broader emancipation and empowerment processes of women, viewing fuel and energy not only as a commodity but also as means for improvement of life quality and personal development. The gender relations in the section are also unfolded through the information and analysis of the conditions of energy system.

The deficit of energy resources is an acute problem for the population of all the four researched regions. Both women and men name lack of energy resources (electricity and natural gas) unanimously among the top four problematic areas contributing to the deterioration of their life quality. However, the lack of electricity is prioritized by the majority of the 108 questioned individuals (65% of women and 46% of men) over the lack of water supply, abysmal conditions of roads and gas deficit, the other three key problematic areas listed by the respondents.

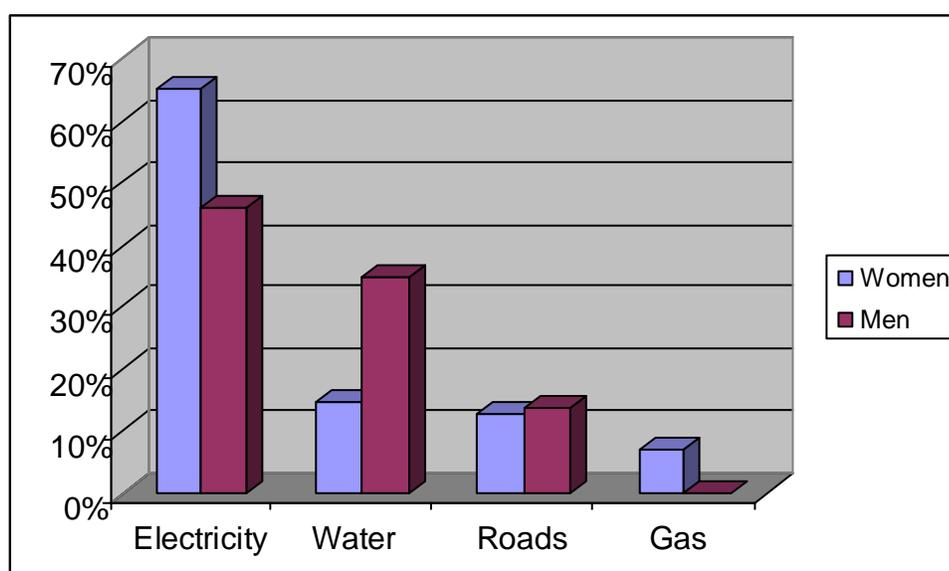
The lack of the energy resources negatively affects daily life of women and men both in the private as well as in the public domains; the complicated household work (cooking, ironing, washing, cleaning) that has traditionally come to be sole responsibility of women in Georgia negatively affect their health, time-budgets i.e. self-development and leisure opportunities. Unstable and abnormal voltage of the electric energy destroys or prevents from the utilization of household electronic appliances that makes the housework even harder for many women. The research has shown that 48% of the questioned 54 women in all four regions of Georgia have started to regularly use steam iron along with electric iron. Steam iron as women have mentioned is heavier and causes them headaches and aches of arms and eyes. Women are responsible also for tutoring their school-age children on candlelight damaging eyesight and nerves.

The research has shown that due to the lack in energy supply firewood is used as the primary heating resource. Many respondents admit that they are involved in massive woodcutting that causes diverse environmental hazards. It is mostly men and boys who are responsible for wood supply that expose them to violence from the side of criminal groupings and animals (i.e. wolves), while in the female-headed households women have to either ask male relatives or friends or pay someone to help them with fire-wood supply or if they cannot arrange/afford it then they tend to subjugate themselves to heavy physical labor linked with diverse healthcare and wellbeing risks mentioned above or even to the cases of quid pro quo sexual harassment.

The electric energy system is in abysmal conditions in all the four researched regions. Frequently the system brakes down and male community members repair high voltage transformers, pillars or counters. Lacking professional skills they endanger their lives through such activities. Due to unavailability of electric energy service from the side of energy suppliers in a situation of qualified assistance need female-headed households

(especially single women) are left at a mercy of their male neighbors or relatives. The lack of electricity prevents both women and men from regular access to information, making the learning and leisure opportunities a scarce luxury. Due to irregular and limited energy supply people have less time and opportunities to actively participate in community initiatives and overall public life. Although the majority of both women and men tend to name lack of electricity as the most acute issue worsening their life conditions, still more women than men assign to this problem first place:

Chart #1: The most acute problem affecting the life quality of the researched population. Please see annex # 2 for detailed information about the priorities assigned to the problematic areas disaggregated by region and sex.



Along with the above-mentioned communal and infrastructure problems respondents in all four regions have named unemployment, increased external migration and decrease in the birth rate as other key problems challenging the development and well-being of their communities.

The interrelation between energy sector and conditions of women and men in the society will be analyzed below from the viewpoint of the following criteria: **access** (*information about the service, schedule of the access to service, choice in services, appliances, equipment*), **affordability** (*installation and connection costs, fees, costs of appliances*), and **Utilization of energy** (*conditions of the infrastructure*).<sup>6</sup>

<sup>6</sup> These indicators are modified and adjusted to the Georgian environment from the original EnPoGen (2003) project, which was set up to support efforts of the Asia Alternative Energy Program of the World Bank and is described by Margaret M. Skutsch in "Tooling up for Gender and Energy", Technology for Sustainable Development, University of Twente, p.17.

### **III.I. Access**

#### ***Information about the service***

The overall lack of information with regard to electric energy system can be noticed in all four regions. People have information neither on the schedule (until it is practiced for a period of time, and it tends not to persist for long periods), nor with regard to the owners and providers of the energy. Men are more active in the discussions with regard to the owners of the electric energy sources, but they are never certain of the information they provide. In Marneuli region for example Americans, Russians, Armenians, and Irish have been named as the owners of electric energy supplying companies along with the government of Georgia. Since 1998, in Ambrolauri region the electricity was supplied from a privately owned hydro-electric station locally, in 2004 it got connected to the central distribution system and since then the population started to have problems with energy supply. For the moment the inhabitants of Ambrolauri region are not sure if the energy they consume is of private or public ownership.

During the focus group discussion in the village of Sadmeli of Ambrolauri region male respondents could not decide between themselves whether an Irish company that is located in Kutaisi has bought energy supplying for their village or it was still owned by Georgian side. In Velistsikhe village of Gurjaani region majority of male respondents named Joint Stock Company "Sinatle" ("Light") as a provider of electric energy but they were not sure if it was privately or publicly owned. In the same village men were stressing the presence of Turkish and Armenian energy companies instead of "Sinatle". In Tsaishi village of Zugdidi region male respondents mentioned company "Eleqtro servisi" ("Electric Service") as the electric energy supplier but they were uncertain whether the company was privately or publicly owned. In Zugdidi region respondents also had heard that their primary electricity supplier was an Irish company.

People in general have no clear information about their rights and responsibilities toward energy suppliers and distributors, they are often asked to collect money for the repair of transformers, for fixing transformers oil, or for the wires and cables that connect their district with common transformers. Citizens do not think that the fact that they pay for the repair materials and even themselves repair transformers and pillars is right. During the focus groups respondents could not agree what is the portion if any that the owner pays for such repair works and what are the guarantees for citizens that such costs will not become permanent.

It turned out that men are better informed about the tariff of electric energy and gas and only some women have accurate information about the tariff. As the research has shown women express more dissatisfaction because of the lack of energy resources than men, as their daily work is highly complicated because of the lack of energy. Therefore, if energy suppliers make more efforts to inform female consumers about

the exact tariff of energy resources it might appear a good precondition for economic usage and increased repay scales. Both women and men named problematic the fact that in some villages of Zugdidi region citizens could not see their individual counters, because they are placed in iron boxes and it is the collector alone who has accurate numbers and villagers have no chance for cross checking. The overall lack of information about the competencies and procedure while dealing with collector was also named as a problem, especially by women from female-headed households, as they suspected that either collector was lying to them making them pay for more electricity than they have consumed or other families were connected to their electricity line that was increasing their bill.

The findings of the focus group discussions revealed that men are better informed with regard to the state of energy system and gas pipelines in their communities. Male respondents mention that they discuss these things among each other and share information on village “birzhas” or get to know these things when they actually have to repair the system. However, in the village of Tamarisi, of Marenuli region women possessed more accurate information derived directly from the head and employees of Marneuli region Electric Station; According to the focus-group participants they know all these because in this village there lives one socially very active woman, who has also participated in the focus group discussion and was named by her villagers (both women and men) as the initiator of community mobilization on diverse issues. It appeared that she was personally contacting the head of Marneuli Electric Station to learn the details with regard to electric energy supply in their village. Even in this case, community was not receiving organized information through a well functioning information sharing mechanism, but rather fragmented information that was based on personal communication skills of their community member.

Neither women nor men are certain with regard to any policy decisions in energy supply patterns. They explain the lack of electricity from what they hear informally; sometimes it is absent because of winter, wind, or because of the frequent break down of transformers. In Zugdidi region villages if there occurs an immediate need (for example a wedding or a funeral) a family has to pay GEL 30 daily and in such days the whole village will have electricity. In the villages of Zugdidi region people unite in small village blocks (ubani) and pay for their portion of consumed electricity based on the data of a common counter allocated to them on a transformer. If anyone refuses or cannot pay than this family is disconnected from the network.

“Two weeks ago was a funeral of my mother. Because our block did not have electricity my neighbors collected money to ensure full-time energy supply for the day, but the energy company told them that they should collect money also from the block next to our as it is using our feeder<sup>7</sup> and only then we would receive electricity” – said a male respondent from the village of Sadmeli of Ambrolauri region.<sup>8</sup>

The lack of information with regard to electric energy supply has been stressed both

<sup>7</sup> This fact signifies that electric companies have no capacity to provide differentiated energy supply.

<sup>8</sup> Abstract from the focus group discussion carried out in the village of Sadmeli in Ambrolauri region on June 30<sup>th</sup> 2005.

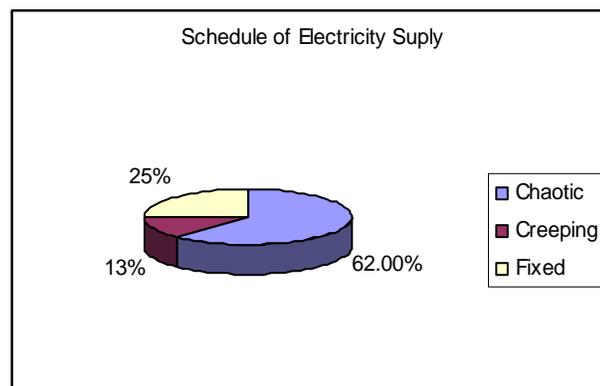
by men and women. The lack of well-functioning communication mechanisms is a reason why citizens have violated and ungrounded information and suffer from the feeling of insecurity in relation to energy supply. In many villages women appeared more active while inquiring about the reasons for absence of gas and electric energy supply or break down of the system, while men have been more instrumental in repairing the breakdowns of the system.

### ***Schedule of the access to service***

In retrospect of last five years the respondents did not seem to see significant improvements with regard to electricity or natural gas supply. The focus groups in all the four regions have shown that no matter what is the schedule of electric supply the respondents have never been involved in the setting of this schedule. And if by any chance a village has 24 hour energy supply villagers are not informed what has caused this change. The inhabitants of Tamarisi village in Marneuli region have mentioned the attempt to set a schedule that would be handy for them with local energy authorities but it did not work. According to the villagers the electricity at that time was from 20:00 till 22:00 and from 1:00 till 3:00 for 4 hours. No one could explain why did they had such a schedule, women mobilized and started to negotiate more handy schedule with the dispatch authorities and also they did not manage to achieve progress they have gained better understanding of the energy system in their village. In the summer of 2004, village of Tamarisi did not receive electric energy at all, but this year since the end of April till early May, when the focus group was conducted Tamarisi inhabitants had a 24 hour electric energy supply. According to them the 24 hour supply was caused by the overload of Armenian Atomic Energy Station, villagers had no idea how long will such full-time supply last and in astonishment mentioned that since the fall of the Soviet Union they have not experienced a 24 hour energy supply.

In other researched communities electric energy was supplied with huge intermissions for 5 hours per day and night in average. The schedule of electric energy supply is mostly chaotic or unstable and only in few instances fixed. The electric energy supply pattern in the researched 4 administrative centres and 9 villages is the following:

Chart #2: The pattern of electric energy supply:



Gas is available in two out of four administrative centers (Marneuli and Gurjaani) and only in one village (Velistsikhe of Gurjaani region) out of nine villages of four regions researched. Even in the mentioned two towns and the village the majority of population cannot afford to pay for re-examination of the old gas pipes or installation of new ones, but the minority that can pay for gas receives it for 24 hours and only rarely experiences shortages in supply.

### ***Choice in Services, Appliances, Equipment***

For over a decade the population of Georgia is suffering the deficit in energy supply. Due to frequent break downs of the system, irregular voltages of the supplied electricity, the majority of the respondents appeared to be deprived of electric appliances of primary usage i.e. the equipment, domestic devices that have potential to ease the household work given the full time supply of the energy resources.

The participants of almost all focus groups unanimously agreed that the lack in natural gas and electricity supply affects women more than men. Men as well as women outline that women are primarily responsible for household work - cleaning, washing, ironing, cooking, women tutor their school-age children making sure that they go to school prepared, and as a result women have less and less time to rest, read and take care of themselves. The unstable voltage of the electricity destroyed refrigerators, washing machines, electric irons, vacuum cleaners, TV sets or audio players. Without refrigerator it is impossible to store food for more than a day thus women have to cook for their families on a daily basis. 48% of the questioned women have started to regularly use steam irons along with electric irons. Steam irons as they have mentioned are heavier and causes them headaches and aches of arms and eyes. Lack of electricity supply in many locations is interlinked with poor water supply, the problem is not only that the washing machines are out of order due to unstable voltages of the electricity but also that women have to carry heavy buckets of water and wash linens and cloths manually. In many communities men help their wives,

mothers, sisters with water supply but this is not a rule for all the researched communities. The only clear gender division of responsibilities with regard to water supply appears in relation to water used for agricultural purposes (watering) that is primarily men's responsibility.

Men stress that because of the lack of electricity they cannot watch TV broadcasts, receive information and entertain. Both women and men stressed that longtime absence of electricity especially during the night creates suitable environment for burglars and thieves. 72% of women and 28% of men refrain from going out in the evening or during the night due to absence of streetlights. The majority of men do not go out in the evening or at night because their family members are worried about their safety. This is the case also with small portion of women but the majority of women themselves refrain from going out in the dark due to fear of darkness and vulnerability in face of criminals. This is a clear indication that electricity deficit hinders men and especially women from extensive participation in the public life, in rural setting where most of the population is busy with agricultural and cattle-rearing responsibilities during the day evening is the time that should be available for socialization and community activities. Respondents thought that also children and especially youngsters are badly affected by the lack of electricity as they have to read and prepare written tasks for their classes on candlelight. The citations from the focus groups below reflect the finding elaborated above:

"We cannot store any food due to absence of refrigerators for more than a day [in summertime]; in fact we have to cook every day." – Said a woman from the village of Velistsikhe in Gurjaani region.<sup>9</sup>

"Those of us who have cows need to boil milk regularly, this means that we have to set fire in the stove in such heat, plus we have to store cheese and milk how can we do this without refrigerators?"- Said a woman from town of Ambrolauri in Ambrolauri region.<sup>10</sup>

"I am finishing the secondary school this year, therefore I have to study a lot getting ready for entry exams to university and have to read and write on candlelight, this makes my eyes hurt." – Said a girl from the village of Velistsikhe in Gurjaani region.<sup>11</sup>

"Of course lack of electricity affects women more than men, we need electricity primarily to watch TV and receive information, entertain. We might sometimes help women to get water out of well, but that's it, otherwise of course women are responsible for housework that is directly linked with the access to energy resources."- said a men from the village of Urta in Zugdidi region.<sup>12</sup>

"There are very few men in our village, their majority went to Russia to look for employment, and thus women are responsible for all the household activities including

<sup>9</sup> Abstract from the focus group discussion carried out in the village of Velistsikhe in Gurjaani region on June 15<sup>th</sup> 2005.

<sup>10</sup> Abstract from the focus group discussion carried out in the town of Ambrolauri in Ambrolauri region on June 30<sup>th</sup> 2005.

<sup>11</sup> Abstract from the focus group discussion carried out in the village of Velistsikhe in Gurjaani region on June 15<sup>th</sup> 2005

<sup>12</sup> Abstract from the focus group discussion carried out in the village of Urta in Zugdidi region on June 3<sup>rd</sup> 2005.

work in orchards. ... Even in those families where there are men, still women have to toil all the hard work. Husband and wife are of the same age but he looks young and she looks old because of her heavy work. ”- said a woman from the village of Algeti in Marneuli region.<sup>13</sup>

It is dramatic that only 62% of the respondents possess a functioning refrigerator. 52% possess functioning washing machine and 50% possess water heater, in the four researched regions there is the following situation with regard to conditions of diverse electric appliances:

Chart #3: The availability and conditions of the electric devices in the researched communities.

<b>Appliance</b>	<b>Posses</b>	<b>Temporarily out of order</b>	<b>Do not possess</b>
Refrigerator	62%	28%	10%
Washing machine	52%	19%	29%
Electric iron	93%	2%	6%
TV set	95%	3%	2%
Radio	69%	6%	25%
Audio player	34%	7%	59%
Video player	49%	2%	49%
Kitchen appliances	52%	1%	47%
Electric oven	52%	2%	46%
Electric stove	49%	1%	50%
Water heater	50%	1%	50%
Water pump	51%	1%	48%
Generator	42%	2%	56%

The analysis of the data derived from the questionnaire has shown that women spent long hours on the traditional female occupations of housework (such as cooking, washing, ironing, cleaning). The table below shows hours spent by men and women on domestic occupation per week in average:

<sup>13</sup> Abstract from the focus group discussion carried out in the village of Algeti in Marneuli region on May 11<sup>th</sup> 2005.

Chart #4: Hours spent by women and men on following activities per week in average.

	Hours Spent by Women	Hours Spent by Men	Hours Spent by Women and Men in Average
Washing linens and cloths	8		8
Washing dishes	7		7
Washing automobile	4	5	5
Ironing	6	2	6
Cooking	11		11
Cleaning house	11	1	11
Watering yard and orchard nearby house	6	13	10
Watering agricultural lot	9	13	12
Grinding corn	2	13	7
Watching TV	19	22	21
Reading/learning	15	13	14
Telephone conversation	6	7	6
Night sleep	50	51	50

Due to the lack of electric energy women's domestic labor has become complicated and prolonged, still men do not seem to support their wives through entering traditional female occupations. Women on the contrary seem to be involved in traditional male occupations such as washing of cars and watering of agricultural plot, yard and orchard nearby house. Men are primarily responsible for grinding corn in the researched communities, historically this occupation has not been gendered much, but due to tensed criminal situation it seems that men have taken up this responsibility.

### III.II. Affordability

#### *Installation and connection costs, fees, costs of appliances*

According to the State Department of Statistics in 2003 the proportion of the population below the poverty line was 54.5%, the proportion of the population in extreme poverty was 16.6%<sup>14</sup> and the share of women among the poorest groups of population was very high. In Tbilisi, the capital, which is the most populous place in the country, the official subsistence minimum as of 2002 per adult per month was \$60.5 (133.1 GEL). For a three-member family, the subsistence minimum equaled to \$98.5 (215.8 Gel) per month. While the minimal salary of an individual employed in

<sup>14</sup> For the year 2002 the poverty rate estimated at the official subsistence level amounted to 52%. The poverty rate at the extreme poverty line was 15%.

public sector was \$9 (20 GEL), making only 37.7% of the minimal normative salary. The situation has slightly improved for 2004 but it still remains dramatic especially in the regions of Georgia as the percentage of people in extreme poverty has increased with one and a half percent in rural areas.

Chart # 5: Poverty data for rural and urban population through 2000-2004<sup>15</sup>

Year	2000	2001	2002	2003	2004
Proportion of population below the poverty line	51,8	51,1	52,1	54,5	52,7
<i>urban</i>	57,0	54,4	55,4	52,7	51,0
<i>rural</i>	46,1	47,6	48,5	56,2	54,4
Proportion of population in extreme poverty	14,3	13,8	15,1	16,6	16,9
<i>urban</i>	14,4	14,2	15,3	15,2	14,2
<i>rural</i>	14,1	13,4	15,0	18,0	19,5

The gender gap is visible even in the described low remuneration rates, according to the State Department of Statistics; in 2002 the average nominal monthly salary of men was twice as much than that of women.<sup>16</sup>

There are 619 066 officially registered unemployed persons in Georgia making 14% of the whole population. The independent experts believe this data to accede 20% but due to the inefficacy of the state registration services the big part of the unemployed population is not documented. Among the officially registered unemployed, men make 44.7% and women comprise 55.3%.<sup>17</sup> Predominantly low remuneration rates in public as well as private sectors of economy; vulnerability and instability of income for the self-employed negatively affect financial standing of the population. Our research has shown that majority of citizens, especially men know the exact tariff/fees for natural gas and electricity. As our research was focused on the regions of Georgian rather than capital Tbilisi, the researched population also knew that the fees that they pay are lower than the fees in Tbilisi, but still almost each respondent complained admitting that paying both electricity and natural gas fees are hardly affordable for them.

“There are families in our community who do not pay the electricity fee regularly, because their jobs and respectively incomes are seasonal [work in vineyards]. Almost all of us can pay in the harvesting period but in between it is hard to cover communal

<sup>15</sup> Sourced of the table: Government of Georgia, *Millennium Development Goals in Georgia, Progress Report for 2004-2005*, Tbilisi.

<sup>16</sup> State Department of Statistics of Georgia, *Men and Women in Georgia*, Tbilisi, 2002, 27.

<sup>17</sup> State Department of Statistics of Georgia, *Results of the 2002 First National Census of Georgia*, volume III, Tbilisi, 2004, pp. 236-241.

expenses. Had we had jobs and salaries had we paid, but this is not the case” – said a female focus group participant in Velistsikhe village of Gurjaani region.<sup>18</sup>

The situation is further complicated by the fact that almost in all four regions population has to bear the cost for installation of individual counters, cables as well as for the repair and maintenance of the transformers. The fee for the installation of individual counter varies from 5 to 30 GEL that is more affordable for citizens if they pay it gradually together with the electricity fee rather than at once. In most of the cases the electricity suppliers use old counters, which they examine, if necessary repair and put in usage again. “Many people have doubts that during the examination process, they changed something in the mechanism of our counters so that it shows much more consumed electricity than we actually do. I personally think that I usually pay more than I consume”. – said a male respondent from Akhasheni village of Gurjaani region.<sup>19</sup> Such conclusions can be drawn only in the environment of absolute lack of communication with the energy actors in the field and community representatives on one hand and low willingness to become a honest tax-payer on the other, still if efforts were made to explain what the re-examination of counters meant, why was it necessary, less people would have such doubts.

In each large block of big villages there is one general counter placed on the transformer that provides whole block with electric energy. The controller or the assigned individual from the village usually divides the monthly sum calculated from the general counter on number of households in the block and each of them has to pay an equal portion. However, this creates tensions and dissatisfaction among the population; “We have neighbors who are at home only 2-3 days a month, they consume at most electricity of GEL 1 value, why should they pay GEL10-15 like others? Some people use woodworkers, welders, heaters, why should we all pay similar amount? We should have individual counters with strict oversight from the side of a company, unexpected examinations, and high fines for violations.” said a man from the village of Sadmeli, Ambrolauri region.<sup>20</sup> Although the majority of population is for the setting of individual counters they would rather pay the amount of the counters gradually, however there are segments of vulnerable population who would need a fee wavier; “I am a single woman and I do not consume much electricity but I pay as much as my neighbors who use electric heaters and pumps. This is a source of irritation for me. When I cannot pay I ask controller to disconnect my house from the transformer, so that my neighbors are not disconnected because of me. Now they have told me [the suppliers of electricity] to pay GEL28 and they will place my counter outside the house, but GEL 28 is my monthly pension how can I give it all to them?”- said a woman from the village of Sadmeli of Ambrolauri region.<sup>21</sup>

Women seem very sensitive to the pay of the electric energy, they think that because the electric energy supply system is very unorganized their families have to pay more

<sup>18</sup> Abstract from the focus group discussion carried out in the village of Velistsikhe in Gurjaani region on June 15<sup>th</sup> 2005.

<sup>19</sup> Abstract from the focus group discussion carried out in the village of Akhasheni in Gurjaani region on June 16<sup>th</sup> 2005.

<sup>20</sup> Abstract from the focus group discussion carried out in the village of Sadmeli in Ambrolauri region on June 30<sup>th</sup> 2005.

<sup>21</sup> Abstract from the focus group discussion carried out in the village of Sadmeli in Ambrolauri region on June 30<sup>th</sup> 2005.

than they consume; In the city of Zugdidi there exist two formal sources of electric energy supply – “the city line” – which supplies the electricity of bad quality and is unstably supplied and “a commercial line” that usually supplied electric energy for 24 hours but the voltage tends to be below the norm. Citizens usually pay about GEL 300 for installation of “commercial line” depending how far they live from the source of the electricity as they are responsible for buying cables, hiring technicians and bearing other costs related to the installation of the line. One women from the City of Zugdidi mentioned that many families bribe the employee of the electric company usually controller with 30 GEL at once payment and GEL 10 monthly payment and get access to somebody else’s “commercial line”. This practice in Zugdidi is called “10 Lari Energy” if such a family is caught in stealing, they usually refuse and say they did not know which line did a controller connect them to, and in fact they do not know, it is only the controller who knows from whom he steals the “10 Lari Energy”.

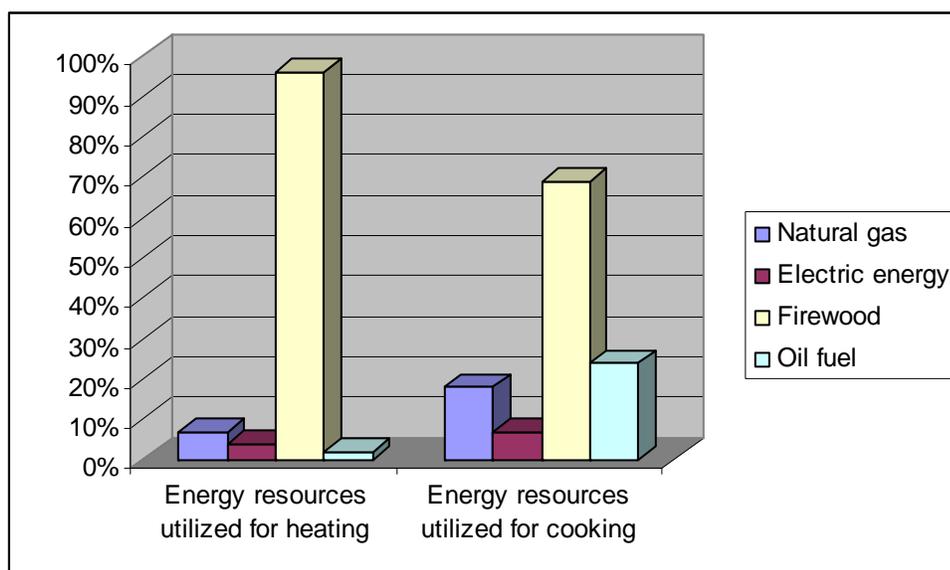
Women describe a more dramatic picture with regard to the affordability of the “commercial” electric energy to the population. In the city of Zugdidi, for instance women participants of the focus group claimed that only 30% of Zugdidi population at most has access to “commercial line” while male participants of the group opposed and claimed this portion to be 50% of the population. The 30% data was raised again later on in the same discussion and nobody objected, thus it seems that this more dramatic version is closer to the reality. In Tamarisi village of Marneuli region again the picture depicted by women was more dramatic but realistic than the picture depicted by men; men claimed that 95% of the population has individual counters in their village, while women opposed and said that it is about 70% of the population that has individual electric energy counters, which hinders the supply of electric energy, because of low scales of repay for the consumed electricity. This tendency can be explained with established gender roles in the society that expect men to be less small-minded and grumbling, while women can afford to complain, stress details and demand improvement of their living-conditions. As a result some of the most problematic issues of the household such as lack of water and electricity supply are in most of the cases publicly debated and demanded by women with passive support of their men who think it is below their dignity to publicly complain about a shortage of domestic commodities.

The installation of natural gas costs GEL140 for a household in the Village of Velistsikhe of Gurjaani region, because of the price villagers say that only 25-30% of population can afford it. In town of Gurjaani the price of gasification was GEL 170, as one woman explained she paid GEL 75 for counter, GEL 40 for examination of old pipes and GEL 55 for assembling. Still those having access to natural gas use firewood for heating in the winter time as it is cheaper, respondents stressed that they would start using natural gas for heating if its price would be reduced three times making 10 Tetri for a square meter instead of 29.4 Tetris.

The participants of the focus groups in the locations where natural gas is not installed or reinstalled repeatedly stressed that access to natural gas would by all means result in use of less and less firewood for heating and cooking purposes thus preserving

forests and decreasing the risks for environmental hazards. However, the analysis of the questionnaire data depict different picture. In all four regions and among those the two regions were gasification is physically accessible firewood still represents the primary energy resource for heating and cooking needs. Firewood is used as sole or complementing energy resource by 96% of the respondents for heating and by 69% for cooking purposes. Below is a detailed breakdown of all the utilized energy resources for heating and cooking needs in all the researched regions.

Chart #6: Primary and complementing energy resources used for heating and cooking purposes.



Poverty and economic vulnerability is the reason for such a mismatch in the desires expressed by the citizens and actual conditions with regard to the utilization of the firewood. The majority of the citizens afford firewood easier than installation of the natural gas because the former is cheaper than the latter even for the communities where natural gas is available.

### III.IV. Utilization of energy

#### ***Conditions of the system***

Both electricity and natural gas supply systems are in bad shape. They have been installed without proper care and maintenance for over three decades by now. The companies owning distribution and supply do not have enough spare materials and finances to ensure timely and quality repair of the cables, transformers, pipes, pillars,

etc. The number of electricity wires literary prevents one from seeing sky in the town of Zugdidi (please see annex # 3 for photos), also in other regions cables are not tight enough that increases the likelihood of breakdown of the system especially during the wind. The pillars are also amortized; there have been cases in the town of Zugdidi when pillars would simply fell dawn.

In almost all the researched communities except for the town of Gurjaani in Gurjaani region, the citizens themselves collect money for the repair of the damaged components of the electricity system and in some communities male inhabitants repair damaged wires risking their lives (for example in the village of Urta in Zugdidi region, village of Akhasheni in Gurjaani region). This situation is gender and age sensitive, female-headed households and old people are dependent on and vulnerable to the good will of their mature male neighbours and/or relatives to ensure access to electricity if something breaks down, as they have to rely on personal relations and social nets rather than electricity companies. “Without any services provided from the side of the energy company what can single pensioners do?” – admitted a women from town of Ambrolauri in Ambrolauri region.<sup>22</sup>

Because of the lack of professional assistance the quality of the repair works is very low and the risks of repeated break downs high, plus it takes the villagers days and even weeks to mobilize and fix the problem, and thus for this period of time they lack electricity 24 hours. Another side effect of this situation is related to the impoverishment of the population due to high unforeseen and permanent costs.

In the village of Tamarisi of Marneuli region the 21 kilometres long electricity cables were stolen and the population is forced to use the supplementary line of Qolagiri electric sub-station (instead of their primary Marneuli 1 and Marneuli 2 sub-stations), which is absolutely amortized and breaks down every now and then. As it is mentioned above, in this community there is one very active woman who has mobilized community demanding the improvement of the situation, but so far they have not achieved success. In some districts of the town of Marneuli, electricity wires are twisted around the natural gas pipes, “during short circuits the pipes got heated, we were afraid of explosion, therefore we got in touch with the electrician responsible for the installation of the wires and he inserted rubber material between the wires and the pipe. Still we are afraid that this primitive protection measure is enough” – said a woman focus group participant.<sup>23</sup> In the same town on one street each household paid GEL 120 and completely renewed the electricity cables on their street.

In the village of Ingiri there was a case of a house being burnt due to electricity system installed with violations. The voltage of the supplied electricity does not always equal 220, due to short circuits it can be much higher but usually tends to be lower; “there are evenings when the wire of the bulb is visibly red incapable of illumination, everything that can be plugged in has burnt out in my house” – said a men in the focus

<sup>22</sup> Abstract from the focus group discussion carried out in the town of Ambrolauri in Ambrolauri region on June 30<sup>th</sup> 2005.

<sup>23</sup> Abstract from the focus group discussion carried out in the town of Marneuli in Marneuli region on May 12<sup>th</sup> 2005.

group discussion in the town of Gurjaani.<sup>24</sup> The respondents do not unanimously blame the electric company for this but also themselves: “People are also to blame for the low voltage I think, when we have electricity people turn everything on, regardless of need” – stressed a woman member of the focus group discussion in Tamarisi village of Marneuli region.<sup>25</sup>

Not in every community the electricity fee is collected by a controller, sometimes these are community members, representatives of local-self governance who collect money from their neighbours. For instance in Abrolauri region the collected money is brought to the regional centre town of Ambrolauri to the electricity company, but the representatives of local-self governance do not get any receipt for the amounts paid. This practice, according to them is damaging their reputation as they cannot ensure the transparency of the process neither for villagers nor for electric company employers. In the same region according to the respondents the system is so amortized that along with special electricity pillars the wires lean also on trees, as a result villagers believe that some of the electricity is wasted but no one can calculate the damage: “If the common counter on transformer shows GEL 120 expenditure for the village block per month, the sum of the data derived from individual counters of the same block equals to GEL 100. This GEL 20 is a waste of cables because they lean on trees, and the company has no right to make population pay for it.” Said a representative of local self governance in the town of Ambrolauri<sup>26</sup>

In the frames of the research respondents awareness regarding renewable energy was examined and it appeared that not only they have heard about alternative sources of energy, but some of them actually had concrete suggestions on what can be done in their communities to support the utilization of renewable energy resources; “I am a geologist and often as a part of my job I do description of different locations and discuss possibilities of renewable energy with my colleagues. For instance by Sartichala and Gombori turn it is always windy and we can use it, as even small breeze is enough for wind generators. [...] Such places are many in Georgia. We should use solar generators there is no need in destroying the ecosystem with such huge water reservoirs” – said a man from Akhasheni village in the Gurjaani region.<sup>27</sup>

In all the four regions of Georgia both women and men expressed big interest and desire in participation of renewable energy projects.

<sup>24</sup> Abstract from the focus group discussion carried out in the town of Gurjaani in Gurjaani region on June 16<sup>th</sup> 2005.

<sup>25</sup> Abstract from the focus group discussion carried out in the village of Tamarisi in Marneuli region on May 12<sup>th</sup> 2005.

<sup>26</sup> Abstract from the focus group discussion carried out in the town of Ambrolauri in Ambrolauri region on June 30, 2005.

<sup>27</sup> Abstract from the focus group discussion carried out in the village of Akhasheni in Gurjaani region on June 16<sup>th</sup> 2005.

#### IV. Gender in Energy Sector Decision-Making

The energy sector is complex in Georgia, consisting of multiple players and actors involved at generation, transmission, dispatch, distribution, import, export and consumption stages of electricity and supply, transportation and distribution stages of natural gas. The common characteristic of these stakeholders is on-going reforms and restructuring with accompanied constant alterations of human resources. For the purposes of this study there has been selected two key decision-making structures The Ministry of Fuel and Energy and Georgian Energy Regulatory National Commission. Both the Ministry and the Commission are governmental structures and possess strategic leverages for making changes that can result in gender-sensitive and demand oriented policy-making; The Ministry of Fuel and Energy is the primary body responsible for energy policy making in the country: “The Ministry elaborates the main directions of the State Electricity Policy and upon approval by the Parliament of Georgia coordinates the implementation of the policy”.<sup>28</sup> The Georgian Energy Regulatory National Commission is responsible for granting diverse operational licenses and among them distribution licenses that is of interest for the research. The license granting function of the commission allows it to ask both privately and publicly owned dispatch companies to improve distribution service through improved information dissemination and increased participation of consumers in the elaboration of schedules, tariff collection system, etc. The Commission is responsible also for “[s]etting and regulation of wholesale and retail tariffs for electricity generation, transmission, dispatch, distribution, import, export and consumption”,<sup>29</sup> therefore, it is a direct addressee of the recommendations elaborated by the end of this paper regarding the tariff. The Ministry in compliance to its elaborated policy decisions attracts investments for the development of energy sector in the country, along with the Ministry for Economic Development leads privatization processes and monitors technical and economic conditions of the sector. For increased gender sensitivity throughout such strategic processes it is crucial that professional women are included on decision-making positions within the Ministry.

Apart from the two key players there are other publicly and privately owned stakeholders in the energy sector in the country, however, they are of more technical rather than strategic importance and/or their rights and responsibilities are regulated either by the Commission or Ministry. Taking into consideration also the instability of these actors based on on-going reorganization, privatization and reforms, the researchers did not consider cost effective to engage in their analysis from the viewpoint of gender equality in the decision-making.

In the Ministry and Commission the state of gender equality principle is measured through the number and rank of women employed in these institutions and their participation level in the decision-making processes.

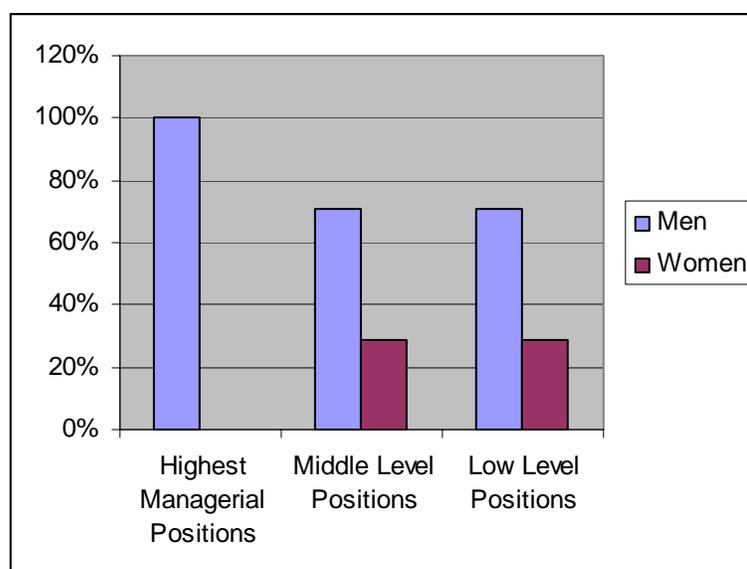
The Ministry of Fuel and Energy Employees 81 individuals 22 of whom (27%) are

<sup>28</sup> Government of Georgia, *Georgian Law on Electricity and Natural Gas*, Article 2, Clause 3; See also Article 1, Clause 1;

<sup>29</sup> Government of Georgia, *Georgian Law on Electricity and Natural Gas*, Article 4, Clause 3.

women. All the highest managerial positions are occupied by men – Minister, Deputy Ministers and Heads of all the four Departments are men, one Deputy Department Head is a woman and 4 out of 15 Division Heads are women. It can be concluded that within the Ministry 100% of the highest managerial and decision-making positions are occupied by men (Minister, Deputy Ministers, and Department Heads). Women appear on middle-level managerial positions and occupy only 29% of these, while men occupy 71% (Deputy Department Heads, Division Heads). 29% lower level positions are occupied by women and 71% of these positions are occupied by men (Main Specialists, Leading Specialists, Specialists).

Chart #7: Ratio of women and men's employment in the Ministry of Fuel and Energy of Georgia. (Source: Appendix #1 to the #27 Order of the Minister of Fuel and Energy of April 6, 2005).



According to the Georgian legislation the Ministry for Fuel and Energy is responsible for the sectors' policies in the country along with the major policy making body of the country the Parliament.<sup>30</sup> Low level of women's presence and participation in both of these bodies has resulted in complete absence of gender sensitivity in the diverse fields of the Georgian society's life and energy and fuel sector is no exception. The group has interviewed one of the few women on middle level managerial position in the Ministry. According to her women are less present in energy sector because they tend not to choose to receive higher education in this field as it is considered a men's

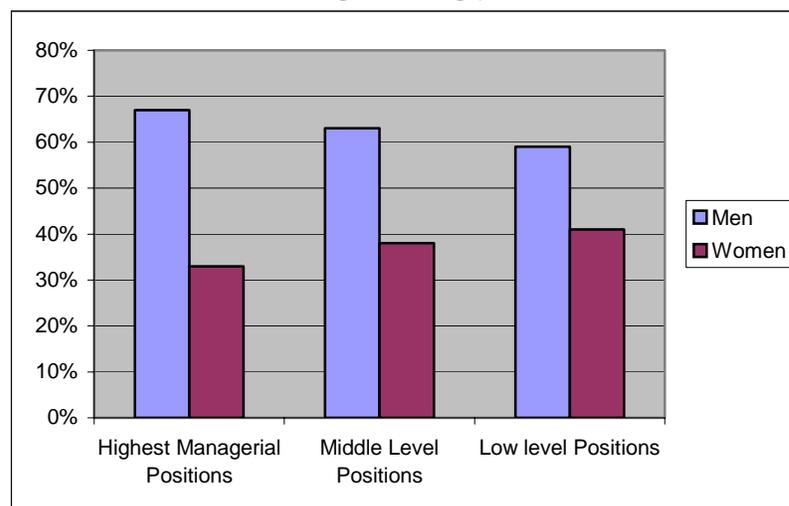
<sup>30</sup> According to the article 48 of the Constitution the Parliament of Georgia is the key policy-making body in the country. After Parliamentary elections of March 2004, 22 women were elected to the Parliament, resulting in a 2% increase in the proportion of seats held by women (from 7.4% to 9.4%). The majority of female MPs (19) were elected by party lists and only 3 were elected through plurality majority elections. Winning in plurality majority single mandate electoral districts is often seen as more challenging for female candidates, as it requires a great deal of financial resources for campaigning and requires significant support and backing from a party/voting block which predominates the ridings – support which is often challenging for a female candidate to obtain, due to gender stereotypes. As such, in Georgia, political parties rarely put forward female candidates for plurality majority elections in the single mandate electoral districts. Thus, as a rule more women enter Georgian Parliament by party lists system.

sphere of activities. Even if women choose to receive higher education in the energy sector, the education process and then consequent career development in the field is hard as women represent a minority in the work/educational environment that is designed and well-suited for male workers/students.

Due to such gender balance women have fewer chances than men to participate in the decision-making process of the Ministry. There are few opportunities for horizontal sharing of information between the Departments and Divisions as well as few instances of organized vertical information sharing between the Department Heads, Division Heads and the staff. Along with weekly meetings and even biweekly, late night or early morning meetings of the Minister and Deputy-Ministers there should be a formalized information sharing mechanism with the rest of the employees, to support improved coordination and team-building, this will allow women employed on middle and lower positions to engage better in the on-going processes of the Ministry and might even provide them along with the men of similar ranks with promotion opportunities if they manage to demonstrate professionalism, ingenuity and intuition.

Apart from the Ministry an important player in the energy system of Georgia is the Georgian Energy Regulatory National Commission. The Commission consists of three members: a chairman and two members one of which is a woman who has been appointed as a member of the Commission already for the second term. Since 1997 when the Commission was created there has been only this one female member. The Chair and Executive Director of the Commission are men. Women are in charge of three out of eight staff units of the Commission; among them there are five Departments, two of which are lead by women. The women headed Departments are Electro Energy Department and Department for Public and International Relations. These are both important Departments lead by professional women, one of whom has admitted that although there are few women in the energy sector she has witnessed some of the most fascinating work related to the development of the sector coming from these few women both nationally and internationally.

Chart #8: Ratio of women and men's employment in the Georgian Energy regulatory Commission. (Source: Official web page of the Commission available at: [www.gnerc.org](http://www.gnerc.org).)



Commission is a decisive player in the energy sector as it regulates and sets tariffs and issues licenses. The law grants the Commission rights to stand for consumers rights, avoid monopolization of energy supply and distribution and in theory it can also recommend while issuing distribution licenses to the distribution companies to do their best to make user voice heard during planning of schedules, installation of individual counters, etc. For the moment the Commission is not *de facto* strong enough to implement the mentioned *de jure* rights, but these legal mechanisms are in place.

Donors working with energy sector stakeholders in the country along with sector specific technical work have started to pay increased attention to the stakeholders' public relations and information dissemination strategies, along with consumer satisfaction and participation in the planning and evaluation of energy policies. The research has shown that for the benefit of both consumers and energy sector agencies it is absolutely necessary to inform public about who is who in energy system, what are their roles and responsibilities. Along with general awareness raising more attention should be paid also to intra-sector gender dynamics both by donors and by the sector decision-makers. Of course inclusion of women in the energy-sector decision-making will not solve all its problems, but will definitely make the system more democratic and just, contributing to its development processes through women's experiences and knowledge a resource that is under explored and under used so far.

## V. Conclusions and Recommendations for Gender Sensitive and Demand Responsive Service

The research has shown that in Marneuli, Gurjaani, Ambrolauri and Zugdidi regions of Georgia level of electric energy consumption is low, because it is supplied with big intermissions and without fixed schedules. Natural gas is available only in two out of four administrative centers (Marneuli and Gurjaani) and only in one village (Velistsikhe of Gurjaani region) out of nine villages of four regions researched. However, the main finding of the research is related not to the energy consumption level but to the level or quality of energy services, which tends to be underdeveloped and ineffective. Lack of information about the service provider and its rights and responsibilities to the consumer, lack of consumers' participation in identification of workable and optimal supply schedules, lack of overall communication on what is tangible and what should consumers' expect from their energy suppliers causes further deterioration of energy system on one hand and deterioration of life quality of the population on the other.

“By taking energy consumption as the measure of development, energy planners are often simply concerned with increasing fuel and electricity supplies based on existing patterns of energy use, rather than with identifying and sustaining the level of energy services that would be required to satisfy basic human needs. For while energy itself is not a basic human need, it is an essential input for the fulfillment of all basic needs.”<sup>31</sup> We think energy planners should take the conceptual turn, to focus more on the improved service with user voice heard and user satisfaction paid attention to during policy planning process rather than being focused on increase in energy supplies that will not automatically result in alteration of consumers' behavior patterns; And thus the risks of low repay and uneconomic utilization of energy resources will remain. Policies can be easily sustainable if they are well suited to the needs of women and men in the communities, and as long as women are affected the most by the lack of electricity and natural gas, policy makers should make special efforts on informing women about the service and rights and responsibilities of both suppliers and consumers as well as include women in decision-making processes on community level and in the energy sector decision making at large that is not the case for the moment in Georgia.

Georgian government has taken part in the UN Fourth World Conference on Women and has joined the Beijing Declaration and Platform for Action that acknowledges the important role that women can play in the sustainable development of their communities and calls states parties to the UN to “promote knowledge of [...] new and renewable sources of energy, focusing particularly on indigenous women's knowledge and experience”;<sup>32</sup> The research has shown that in the communities neither women nor men have taken part in the renewable energy projects, while there is a potential for it as people seem motivated and interested. Moreover, the world experience shows

<sup>31</sup> United Nations Development Program, *Sustainable Energy Strategies: Materials for Decision-Makers*, 2000, 4.

<sup>32</sup> United Nations, *Beijing Declaration and Platform for Action*, “K. Women and the environment”, 1995, 143.

that promotion of renewable energy sources can contribute to increased gender equality, as they lighten women's domestic work and provide them with more time for self-development and leisure opportunities.<sup>33</sup>

Georgia has a great potential for renewable energy development. It appears that renewable energy can make an important contribution not only in overall energy balance of the country but also have a positive impact on social issues. Renewable energy can play an important role in reducing women's work by providing improved access to energy services for lighting, cooking, and other household activities. Lessons learned worldwide demonstrate practical cases where women have taken the lead in implementing and operating renewable energy projects at the community level with great success. The same considerations apply to the small and middle size energy efficiency projects that can be implemented by women in the home and community. However, to ensure an active role of women in energy efficiency and renewable energy development, appropriate policy decisions and changes have to be made.

The recommendations derived from the research are deliberately few and realistic, the authors have taken the existing situation in the energy sector into consideration and decided to come up with recommendations that are doable and can make difference from gender and energy viewpoint.

In order to satisfy household needs of women and men, to plan and implement gender aware policy that will result in greater emancipation and empowerment of women and to increase the overall efficiency of energy policy in the country following needs to be done:

1. The energy policy-makers should consider elaboration of effective information strategy to ensure transparency and create fertile soil for demand oriented energy policy in the country. The information regarding the tariff of electricity should target especially women as the research has shown that they are less informed about the tariff but mostly affected by the lack of electricity. Informing more women about the tariff of electricity and natural gas can serve as a precondition for economic usage and increased repay scale of the consumed energy resources;
2. Respective energy policy-makers should elaborate comprehensive system of participation of citizens in the planning of the energy policy especially with regards to the electricity schedule and graded tariff. And provide equal space for women's participation in the energy policy-making process as both women and men can offer insights and suggestions derived from their experience. The participatory component is absolutely lacking in the current energy policy-making in Georgia;
3. In order to make the user voice heard in the process of energy-policy planning it is important to elaborate mechanism of community members' (both women

---

<sup>33</sup> Joy Clancy, Sheila Oparaocha, Ulrike Roehr, *Gender Equality and Renewable Energies*, Thematic Background Paper, International Conference for Renewable Energies, Bonn, 2004.

and men) participation (be it committees, initiative groups, supervisory councils) in the setting of the electricity schedule for their village, block, or street. If due to technical problems it is not possible to ensure individual schedule of electricity supply to villages, blocks or streets the affected community needs to know about the technical limitations of the supplier and cooperate with the latter to find acceptable solutions;

4. While setting the graded tariff for the low-income segments of population in compliance with the Georgian Law on Electricity and Natural Gas, Article 7 Clause 43 the Georgian Energy Regulatory National Commission should ensure consideration of women headed households and coordination with the welfare work carried out by the Ministry of Labor, Health and Social Welfare and Social Welfare and Employment Agency as they will soon have database of the most vulnerable regions and households in Georgia;
5. Provide consumers by all means with affordable individual counters, users prefer to pay for the installation of individual counter gradually along with the electricity fee rather than at once. The research has shown that through such policy citizens pay better and the tension caused by only having communal counters are neutralized;
6. Improve energy service to the communities so that they are not forced to repair the damages parts of the systems with its own financial and human resources;
7. Involve community members, especially women in renewable energy projects;
8. Include more professional women in energy sector decision-making as along with professional insights they will bring knowledge and experience derived from their gender roles and responsibilities.

## VI. References

Clancy, Joy, Sheila Oparaocha, Urlike Roehr, *Gender Equality and Renewable Energies*, Thematic Background Paper, International Conference for Renewable Energies, Bonn, 2004

Government of Georgia, *Millennium Development Goals in Georgia, Progress Report for 2004-2005*, Tbilisi.

Government of Georgia, *Georgian Law on Electricity and Natural Gas*.

State Department of Statistics of Georgia, *Men and Women in Georgia*, Tbilisi, 2002.

State Department of Statistics of Georgia, *Results of the 2002 First National Census of Georgia*, volume III, Tbilisi, 2004.

Skutsch, Margaret M. *Tooling up for Gender and Energy*, Technology for Sustainable Development, University of Twente, 2003.

United Nations Development Program, *Sustainable Energy Strategies: Materials for Decision-Makers*, 2000.

United Nations, *Beijing Declaration and Platform for Action*, 1995.

### Other sources:

14 focus group discussion in administrative centres and villages of Marneuli, Zugdidi, Ambrolauri and Gurjaani regions of Georgia.

5 subject based interviews with employees of the Ministry for Fuel and Energy of Georgia, Georgian Energy Regulatory National Commission, Core International.

## VII. Annexes

Annex #1: Fact-sheet of the focus group participants;

Table #1: Sex disaggregated data of the focus group participants by locations

#	Focus groups location	Female Participants	Male Participants	Participants total
<b>I</b>	<b>Gurjaani region</b>	<b>12</b>	<b>12</b>	<b>24</b>
1	Gurjaani	4	4	8
2	Velistikhe	4	4	8
3	Akhasheni	4	4	8
<b>II</b>	<b>Ambrolauri region</b>	<b>10</b>	<b>11</b>	<b>21</b>
4	Ambrolauri	4	4	8
5	Sadmeli	3	3	6
6	Khvanchkara	3	4	7
<b>III</b>	<b>Marneuli region</b>	<b>16</b>	<b>15</b>	<b>31</b>
7	Marneuli	4	3	7
8	Tamarisi	4	4	8
9	Algeti	8	0	8
10	Algeti	0	8	8
<b>IV</b>	<b>Zugdidi region</b>	<b>16</b>	<b>16</b>	<b>32</b>
11	Zugdidi	4	4	8
12	Urta	4	4	8
13	Tsaishi	4	4	8
14	Ingiri	4	4	8
<b>Participants Total</b>		<b>54</b>	<b>54</b>	<b>108</b>

Table #2: General Demographic Data of the Population

<b>Sex</b>	%
Female	50,00
Male	50,00
<b>Marital Status</b>	
Married	32,41
Single	57,41
Divorced	2,78
Widowed	7,41
<b>Major economic activity</b>	
Household work	24,07
Unemployed	19,44
Teacher	17,59
Student	5,56
Representative of local self-governance	8,33
Health worker	3,70
Small entrepreneur	3,70
Other	17,59
<b>Education</b>	
Incomplete secondary	7,41
Secondary and/or special	33,33
Incomplete high	7,41
High	51,85
<b>Number of children</b>	
<b>1</b>	13,89
<b>2</b>	30,56
<b>3</b>	17,59
<b>4</b>	6,48
<b>6</b>	0,93
Percentage of respondents with children	69,44
Percentage of respondents without children	30,56

Annex #2: Priorities assigned by the researched communities to the problematic areas affecting their life quality.

<b>Zugdidi Region</b>		
<b>Town of Zugdidi</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	2	2
Natural gas	1	3
Roads	3	1
<b>Village of Ingiri</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Natural gas	2	2
Roads	3	3
<b>Village of Urta</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Natural gas	3	3
Roads	2	2
<b>Village of Tsaishi</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Natural gas	2	2
Roads	3	3
<b>Gurjaani Region</b>		
<b>Town of Gurjaani</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Natural gas	2	2
<b>Village of Akhasheni</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Water supply	2	2
Roads	3	3

<b>Village of Velistsikhe</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	2
Water supply	2	1
Roads	3	3
<b>Ambrolauri Region</b>		
<b>Town of Ambrolauri</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	2	2
Roads	1	1
<b>Village of Sadmeli</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	2	3
Water supply	3	2
Roads	1	1
<b>Village of Khvanchkara</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Water supply	2	3
Roads	3	2
<b>Marneuli Region</b>		
<b>Town of Marneuli</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Water supply	1	1
<b>Village of Tamarisi</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	1
Water supply	2	2
Roads	3	3
<b>Village of Algeti</b>		
Problematic area	Priorities assigned by Women	Priorities assigned by men
Electricity supply	1	3
Natural gas	3	2
Water supply	2	1

Annex #3: Photos of “Commercial” and “non commercial” electricity wires in the town of Zugdidi.



#### Annex #4: Legal and Institutional Legal Environment

The text below comments on the legal or institutional factors affecting the recommendations made in the text of the study. The recommendations are given in italics, followed by the analysis

1. *Energy policy-makers should consider elaboration of an effective information strategy to ensure transparency and create fertile soil for demand oriented energy policy in the country. The information regarding the tariff of electricity should target especially women as the research has shown that they are less informed about the tariff but mostly affected by the lack of electricity. Informing more women about the tariff of electricity and natural gas can serve as a precondition for economic usage and increased repay scale of the consumed energy resources;*

The Ministry of Energy of Georgia may envisage this recommendation as a part of its general strategic planning. In this potential endeavor the Ministry would not be restricted under any legal premises. Transparency of information and its dissemination should be a strategic priority in the sector in general. As for the gender sensitivity, it is rather a technical issue of determining a relevant media for communication ensuring women's more effective access to such information.

2. *Respective energy policy-makers should elaborate comprehensive system of participation of citizens in the planning of the energy policy especially with regards to the electricity schedule and graded tariff. And provide equal space for women's participation in the energy policy-making process as both women and men can offer insights and suggestions derived from their experience. The participatory component is absolutely lacking in the current energy policy-making in Georgia;*

There are several components in this recommendation. First relates to participation in energy policy planning. The nature of the law and the state order is such, that prerogative of eventual adoption of the policy in the energy sector is vested with the executive power, i.e. the Ministry of Energy of Georgia and Georgian National Energy Regulatory Body as a regulator implementing policy through its normative acts. In elaboration of policy at large, the Ministry involves public institutions and organizations. Public participation in this process is ensured through involvement of such institutions and organizations in the elaboration process and ability to provide comments and feed-back on the policy issues. Broader public participation could result if the Ministry and the Commission were each to exercise their legal right to open publish draft policies and seek comments from the public at large.

Especially as to the tariff system and its elaboration, GNERC's hearings are public and open for both women and men equally. There is no legal or any other restriction whatsoever imposed on any citizen of Georgia in participation in the hearings of the Commission where one can express himself or herself and provide insight into the issues at stake. The participatory component is not absent, simply not utilized, perhaps because of the traditional distance women have held from this male

dominated and technical industry. Communication and information would partially tackle this problem.

However, we also note that for several technical and financial considerations the energy sector is a regulated industry largely requiring somewhat discretionary approach towards issues like electricity schedule and graded tariff. There are issues of objective expertise as well as the technical and financial health of the involved companies that form the background for establishing electricity schedules. Participation of the public in this process, regardless of the gender, is very limited unless individuals are directly involved in company operation, or choose to engage in direct participation in regulatory Commission proceedings and hearings. The Public can especially contribute by timely payment of the bills and abstinence from criminal offences entailing damages to the utility property.

3. *In order to make the user voice heard in the process of energy-policy planning it is important to elaborate mechanism of community members' (both women and men) participation (be it committees by the self-governance, initiative groups, supervisory councils) in the setting of the electricity schedule for their village, block, or street. If due to technical problems it is not possible to ensure individual schedule of electricity supply to villages, blocks or streets the affected community needs to know about the technical limitations of the supplier and cooperate with the latter to find acceptable solutions;*

Again, this issue can be tackled on the informational level only. Legally, because of the specificity of the schedule making for electricity supply, public does not directly participate in this process. Public can however demand access to information as to the application of the schedules adopted by the Georgian Wholesale Electricity Market, and can participate actively in public hearings when matters relevant to their local utility system come before the Georgian National Energy Regulatory Commission..

4. *While setting the graded tariff for the low-income segments of population in compliance with the Georgian Law on Electricity and Natural Gas, Article 7 Clause 43 the Georgian Energy Regulatory National Commission should ensure consideration of women headed households and coordination with the welfare work carried out by the Ministry of Labor, Health and Social Welfare and Social Welfare and Employment Agency as they will soon have database of the most vulnerable regions and households in Georgia;*

This recommendation does not have any formal legal implication since it is addressing GNERC commissioners to give considerations to the gender issues along with the whole spectrum of other thoughts and motivations GNERC involves in tariff setting.

5. *Provide consumers by all means with affordable individual counters, users prefer to pay for the installation of individual meter gradually along with the electricity fee rather than at once. The research has shown that through such policy citizens pay better and the tension caused by only having communal counters are neutralized;*

This recommendation has to be implemented on the utility level entailing financial and technical support. To trigger timely implementation of this recommendation it is possible to envisage such arrangement in the energy policy. Otherwise, there is no interaction with any strict legal obligation.

*6. Improve energy service to the communities so that they are not forced to repair the damages parts of the systems with its own financial and human resources;*

This is a solely financial-technical issue which should be addressed to the Utility. The need for such repairs and capital investments is upfront and evident. No legal obstacles whatsoever exist to implementation of this recommendation. The problems are financial and technical.

*7. Involve community members, especially women in renewable energy projects;*

There is no legal restriction on implementation of this recommendation. Is primarily a *local* policy and also depends especially on women's motivation project by project.

*8. Include more professional women in energy sector decision-making. Along with professional insights they will bring knowledge and experience derived from their gender roles and responsibilities.*

No legal restrictions. Depends principally on considerations of the employer or appointer. Formally, all entities involved in energy sector are equal opportunity employers. One of the Georgian National Energy Regulatory Commission's Commissioners is one of the most qualified women in the sector.

**Annex #5: Questionnaire Used for Data Collection**

D1	Sex (encircle):	1. Female
		2. Male
D2	Age (write in):	
D3	Marital Status (encircle):	1. Single
		2. Married
		3. Divorced
		4. Widowed
D4	Major occupation(Write in):	
D5	Avocation/additional occupation (write in):	
D6	education (Encircle):	1. Less then high school
		2. High school or special high school
		3. Incomplete high education
		4. High education
D7	Number of children (Write in):	
D8	How many people live together in your family? (Write in):	

A1. (The question refers to only those people who have natural gas). On average for how many hours are you being supplied with natural gas? (Write in): -----

A2. (The question refers to only those people who have not 24 hour natural gas) What is the schedule of supply of natural gas? (Write in):

- 1. With fixed graphic
- 2. variable (crawling) graphic
- 3. Natural gas is delivered disorderly (chaotic)

A3. On average for how many hours are you being supplied with electricity? (Write in): -----  
-----

A4. (The question refers to only those people who have not 24 hour electricity) What is the schedule of supply of electricity?

- 1. With fixed graphic
- 2. Variable (crawling) graphic
- 3. Natural gas is delivered disorderly (chaotic)

<b>A5</b>	<b>Please write in how many hours per week devote you to:</b>	<b>Hours</b>
A5.1	Laundry	
A5.2	Dishwashing	
A5.3	Washing the car	
A5.4	Ironing	
A5.5	Food preparation	
A5.6	Housekeeping	
A5.7	Irrigation of the yard plot	
A5.8	Irrigation of agricultural land plot	
A5.9	Grinding of wheat and maize	
A5.10	Watching TV	
A5.11	Reading/writing/home work	
A5.12	talking on the telephone	
A5.13	Rest (daytime)	
A5.14	Night sleep	

<b>A6</b>	<b>(The question refers to only those people who have not 24 hour electricity) please write in how many hours per week would you devote on average in case of uninterrupted, 24 hour delivery of electricity to the following activities:</b>	<b>Hours</b>
A6.1	Laundry	
A6.2	Dishwashing	
A6.3	Washing the car	
A6.4	Ironing	
A6.5	Food preparation	
A6.6	Housekeeping	
A6.7	Irrigation of the yard plot	
A6.8	Irrigation of agricultural land plot	
A6.9	Grinding of wheat and maize	
A6.10	Watching TV	
A6.11	Reading/writing/home work	
A6.12	Talking on the telephone	
A6.13	Resting (daytime)	
A6.14	Night sleep	

A7. Do you experience difficulties due to the lack of electricity? Do you have difficulties in evenings (in dark) while going out? (Encircle)

1. No                      2. Sometimes                      3. Often

A8. (The question refers only to those who have previously answered "Sometimes" or "Often.") Please, indicate what difficulty do you experience in evening (in dark) while going out? (Several answers are allowed)

1. Walking in dark is not safe because of possible offense by criminals/evildoers
2. Relatives are anxious and I hesitate to go out

3. Other (Write in): -----  
-----

A9. In general what do you use in winter for heating?

1. Natural gas
2. Electricity
3. Wood
4. Other(Write in) -----

A10. In general what do you use for food preparation?

5. Natural gas
6. Electricity
7. Wood
8. Other (Write in) -----

A11	Do you have at home:	Ye s	I have, but it is not functioning	No
A11.1	Refrigerator	1	2	3
A11.2	Washing machine	1	2	3
A11.3	Electric iron	1	2	3
A11.4	TV	1	2	3
A11.5	Radio	1	2	3
A11.6	Audio recorder	1	2	3
A11.7	Video recorder	1	2	3
A11.8	Petty kitchen appliances	1	2	3
A11.9	Electric furnace	1	2	3
A11.10	Electric stove	1	2	3
A11.11	Water heater for bathing	1	2	3
A11.12	water pumping machine	1	2	3
A11.sx	Other electric appliances (write in):	1	2	
A11.sx		1	2	
A11.sx		1	2	
A11.13	Generator/"Dvijoki"	1	2	3
A11.14	Coal iron	1	2	3

A12	Do you face problems with stoppage of electricity or the voltage deviated from the norm while using the electric equipment? <i>(Note: Respondent refers only to the equipment owned by him/her)</i>	I do not have problems	Sometimes	I cannot use the equipment because of inexistence/bad quality of electricity
A12.1	Refrigerator	1	2	3
A12.2	Washing machine	1	2	3
A12.3	Electric iron	1	2	3
A12.4	TV	1	2	3
A12.5	Radio	1	2	3
A12.6	Audio recorder	1	2	3
A12.7	Video recorder	1	2	3
A12.8	Petty kitchen appliances	1	2	3
A12.9	Electric furnace	1	2	3
A12.10	Electric stove	1	2	3
A12.11	Water heater for bathing	1	2	3
A12.12	Water pumping machine	1	2	3
A12.sx	Other electric equipment (Write in):	1	2	3
A12.sx	Other electric equipment (Write in):	1	2	3
A12.sx	Other electric equipment (Write in):	1	2	3

A14. In case of improvement of economic conditions and satisfactory supply of electricity which equipment would you buy or improve firstly, secondly thirdly?	Firstly	Secondly	Thirdly
Refrigerator	1	1	1
Washing machine	2	2	2
Electric iron	3	3	3
TV	4	4	4
Radio	5	5	5
Audio recorder	6	6	6
Video recorder	7	7	7
Petty kitchen appliances	8	8	8
Electric furnace	9	9	9
Electric stove	10	10	10
Water heater for bathing	11	11	11
Water pumping machine	12	12	12
Other electric equipment (Write in):			
	13sx	13sx	13sx
	14sx	14sx	14sx
	15sx	15sx	15sx

## Annex 6: Focus Group: Gurjaani Region. Velistsikhe Sakrebulo

15.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-M.1. The delivery of electricity is regulated by the graphic, if we call it a graphic. Sometimes we have electricity for 4 hours, sometimes for 5 or 6. The people must know exactly when the electricity comes, turns off. Previously they gave us electricity in mornings, but now we do not have even this.

-M.2. The situation has been slightly improved since past two months. We did not have electricity at all then. Now the light comes at 8 o'clock and stays till one o'clock at night.

-M.1. We can not say that the supply of electricity has been improved during the past five years. We did not have electricity in winters and do not have it now. Summertime is more or less o.k.

(The group members say that the voltage is normal. They have never checked it by the specialist equipment but they still think that voltage is normal).

(The female participants don't know the price of one kilowatt; male participants think the price is 8.6 Tetris)

-M.1. In the village there we have individual meters installed on outside pillars. The reading is checked by a bill collector. We pay for the electricity consumed and he gives us the check.

-M.2. The individual meters have been installed five-six years ago in the village. The entire village is equipped with individual meters.

-M.3. People have not paid for the installation of meters. The old meters installed in Soviet times have been moved outside.

-M.1. The common meters along the individual ones have also been installed according to the districts. There never was a big difference between the readings of common and individual meters. I personally have never paid additional money.

(The group agrees and says that they have never experienced problems with regard to the readings of the common meter and nobody pays more than it is shown on the individual meter)

-M.1. For example, the individual living in neighboring street has used the welding machine and paid additional sum without any complain.

-M.3. Electricity is delivered by the supply company "Sinatle" in Gurjaani. We don't know exactly whether it belongs to the state or is in private hands.

-M.1- We are not well aware of this issue.

(There is a variety of ideas about the source of supply. Some people refer to Turkey, some to Armenia. The group doesn't know who owns the electric networks).

-F.1. Frankly speaking, the network is not in particularly bad shape. These wires are hung 30 years ago. They are pretty obsolete.

-M.3. The wires are old and loose already. Sometimes in windy days the wires touch each other and electricity turns off.

-M.3. Each line comprises five wires. Now the current passes only through the one of

them. Due to this, emergency is pretty rare. In old days the electricity was supplied through three wires and short-circuits were frequent. The emergency requiring specialist help from Gurjaani has never happened. When a minor emergency occurs, we have people in the village who can undertake necessary works.

-M.1. The electricity is supplied to all transformers. In case if somebody doesn't pay in a certain district, the entire district becomes disconnected. Electricity can not be cut off from individual meters of non-payers because they intimidate bill collectors and don't allow them to disconnect. The bill collector is then forced to disconnect the entire district. After numerous negotiations the supply of electricity to the district is restored again.

(The group members do not blame these people, because many of them do not have any sources of income from employment. Some people work occasionally and earn 3-4 Gel a day in the best case. They do not have permanent jobs and are forced to get by only just with this money).

-F.2. In fact, all people can pay during the harvesting period. People are in dire straits in-between the harvesting periods. Everybody would pay intact if jobs and money are available.

-M.1. Of course, non-payment by several families creates problems, but they feel awkward most of all. They are eager to pay but can not since their families must also be somehow supported.

-F.1. I have close relationships with one old couple. They say that they feel happy when they have bread. What this people can do?

-M.1. Lack of electricity creates a lot of problems, but first of all, it should be said that the level of robbery and violence surges when there is no electricity. When there is electricity, stealing becomes less frequent and many tasks can be accomplished.

-M.2. People can not stay in vineyards for long. They rush home when electricity comes to finish delayed housework.

-F.2. We can not save food for the refrigerator doesn't operate. We are forced to cook everything for just one day and eat fresh. After that food perishes and we have to throw it.

-F.4. The pupils also suffer from the lack of electricity. Usually there is not the electivity in mornings, when children need it. I'm in the final class and have to accomplish home assignments on candle light frequently. We do home assignments on candle and oil light. I frequent feel eye ache.

-F.2. Children, who want to study, suffer from eye ache.

-F.1. In case of any problem in the village, some leader capable of solving them with the support of inhabitants is always available.

-M.1. Our transformer burned down 10 years ago. We knew that the theater possessed the emergency transformer. All the inhabitants gathered, broke the doors of the theater and took the transformer out. They did not want to give it.

-F.2. The parliament member from our Region, Nika Kvezereli has restored two transformers for us.

-M.1. Because the election campaign was underway. If it is not so, why he didn't restore it when it broke down? (The group agrees).

(All the women participating in the group state that they suffer more from the lack of electricity than men because the entire housework, such as food preparation, ironing, laundering falls upon their shoulders. Men need only TV. The male members of the

group also agree with females' idea).

-F.3. Solution of electricity problems in a family is a male prerogative. Some families are the opposite, but this is an exception.

-M.1. Of course, it is a male responsibility. How can a woman call the repairing specialist?

-F.3. We have natural gas 24 for hours a day.

-M.3. We always have gas if we are not disconnected by "Sakgazi". The gas transporting corporation delivers gas supplied by "Sakgazi" through its pipes. Half of the "Sakgazi" is owned by Russia. The transportation is the state's responsibility. The distribution of gas in Gurjaani is managed by the state, but it is in private hands in some villages, like in Arashenda and Tsinandali. The gas distribution system is also private in our village.

(M3. works at gas distribution and is informed. Other group representatives only knew that gas distribution was in private hands). I'm not boasting, but there were times when Tbilisi didn't have gas but we had it. Our village is a good payer.

-M.1. Those who have gas, have the meters too. The common meter is also installed at the common distributor. As they say, the new German meters have been installed two months ago.

(Female members of the group could not refer to exact price of gas. they named 31 and 29 Tetris)

-M.3. The price of one cubic meter of gas in our village amounts to 29.4 Tetris.

(All the group members say that on average the user pays 6-8 Gel for gas. They have to pay the same amount of money for the electricity, but the payment for the gas is more stable. In case of non-payment, the user is disconnected from individual meters)

-M.1. The electricity bill collector can come hundred times and still be refused to pay. 2-3 visits of the gas collector are sufficient for the users to pay. If there is a guaranteed 24 hour supply of the electricity, somebody could definitely buy the Community's transformer, privatize the supply and normalize the payment. The local private supplier is in awkward situation. The gas supply is much more organized than that of electricity.

-M.3. This might be caused by the fact that only 20-25% of the village population has gas. Others are not connected to the network.

-F.2. People lack financial resources. Not everybody can pay for gas.

-M.1. It takes 140 Gel to get connection to the gas network.

-F.2. People face problems while connection to the network, but all of them will pay.

-M.3. The problem of non-payment for consumed electricity is complicated by widespread practice of non-punishment. If a person is disconnected, he can restore connection without punishment.

-M.1. If somebody is punished once or twice, nobody else will dare to violate.

-M.3. The connection to the natural gas network is economically beneficial also. Liquid gas is four times more expensive. People still use wood for heating in winter. Not more than ten individuals out of approximately 500 use gas for heating purposes. Wood is much cheaper for heating.

-M.1. Everybody could use gas for heating had it cost 10 Tetris.

-M.1. Electricity should be delivered for 24 hours a day and non-payers should be disconnected. If I can afford to consume 10 Gel worth of electricity, I would pay accordingly. People, who can pay 2 Gel, must consume 2 Gel worth. It's not a payer's

fault.

(The group members think that all users pilfer gas and electricity colluding with bill collectors themselves)

-M.3. The main problem faced by the Community is employment.

-M.1. People will pay if they are employed.

-F.2. The birth rate has also fallen due to economic constraints.

-M.1. We had four groups of pupils each of them comprising 36 children in our school every year. Now we have only one class of 20 kids. There is no employment here and everybody rushes to Tbilisi or Moscow.

-M.2. Every fifth house is closed. Many people have left the village.

## Gurjaani

16.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-F.1. The schedule of delivery of electricity is as follows: we have it from 7 o'clock to 9 o'clock in the morning and from 8 o'clock to 12 o'clock till the midnight. We are not satisfied with this graphic but what can we do? We face most of the problems in summer when we need a refrigerator.

-M.1. As far as I know, electricity comes only for 3-4 hours in evenings.

-M.2. That's what it is.

-F.2. The voltage is not stable. Sometimes it is high, sometimes low.

-F.1. It happens. Sometimes it dips so low that only the bulb stays incandescent, sometimes it surges up again.

-M.1. If one has black and white TV, there is no way to see anything on the screen. The bulb only shimmers. 220 volts are rarity in the network if you check. The refrigerator also doesn't work. Everything connectable to the plug has been burned down in my house.

-M.3. Electricity distribution stations are in the bad shape. Everything is old and is to be changed. They do not have spare parts.

-F.1. With regard to payment of electricity bills, the meters are brought outside in the street cubicles and pay regularly during the first 10 days of the month. The price of kilowatt of electricity is 8.1 Tetris. The bill collector maintains recording on 25th day of the month. Payments should be made at the cash register. Sometimes I paid 3 Gel, sometimes 4 Gel. Usually I use only TV, refrigerator and one light bulb.

-F.3. I don't know how much we pay. I even don't know where to pay. My brother deals with all these issues.

(The group members don't know who owns the supply of electricity and networks).

-M.3. The wires belong to the distribution. The transformers are in the bad shape too. Wires are intermingled with each other like a cobweb.

-M.2. We have connected our homes with outside meters by ourselves.

-F.3. We have connected homes to the outside meters with new wires, which are normal. We don't know what happens before electricity is delivered to these meters.

-F.1. There is some kind of supply, which is called a special line. The electricity supply

is never being cut at this line.

-F.3. They call it private electricity. Somebody has bought it and has installed the meters by himself. I wonder, if there is always electricity in this line, why we don't have it?

(The group members say that electricity is cut off for those who don't pay from the individual meters. The payer never suffers from non-payment by violators).

-F.1. The supply has been somehow improved during the past year. Before that electricity was delivered rarely and disorderly.

-M.3. The situation has improved after the installation of individual private meters. The cheating is less now. Everybody cheated previously, since there was no other way. People did not have any sources.

-F.3. The people will be able to pay in case of 24 hour supply. Everybody will pay according to consumption.

-M.1. In case of 24 hour delivery everybody will pay. One will pay according to consumption. One will economize.

-F.1. All of us will pay according to consumption.

-M.3. In my opinion, people won't be able to pay in case of 24 hour delivery. People are in dire straits. Even the weather is a peasant's enemy. There is no employment. Some even haven't processed the land because they can't hire the agricultural machines. Finally 1 Kilogram of grapes will cost 1 Lari to the peasant, while the selling price is only 40 Tetris.

-M.3. Previously the people themselves did everything. Now it is relatively O.K. and situation has improved with this regard.

-F.2. In case of damage the electricity company itself cares about restoration.

-M.2. They restore everything by themselves.

-M.1. Of course, they must restore everything by themselves. They get income from electricity. Should I restore everything instead of them?

-F.1. For example, some time ago several families in our district had been cut off due to damage caused by winds. I visited the office and informed the staff. They restored everything during the same day. They have duty station which comes and works at short notice. We are satisfied with such a service. They do everything for free.

-F.2. Installation of individual meters by means of bringing the meters out was undertaken two years ago.

-F.3. We have not bought meters. They simply checked the meters inside and brought them out.

(In women's opinion, the lack of electricity causes them to suffer more than men due to the fact that the entire housework like ironing, laundering and food preparation falls upon their shoulders.)

-M.1. Everybody suffers from the lack of electricity in the same way. Kids also suffer from lack of light. They seat in dark and do home assignments.

-M.3. The lack of electricity makes everybody suffer. I worked for electricity dispatching system in 2002-03. We frequently went on strike due non-payment of salaries and did not supply electricity to the city. The police appeared immediately and forced us to switch the electricity on because, as they say, the rate of robbery surged when electricity was turned off.

-F.1. The natural gas network has been created two months ago. We have gas for 24 hours a day. They checked the old gas lines and pumped gas into them.

- F.4. We have paid the amount shown on the meter.
- F.1. We paid 75 Gel for consumption, 55 Gel for connection to the network and 40 Gel for checking the pipes. It took 170 Gel in total. The price of cubic meter of gas is 29.4 Tetris. Gas is very beneficial. I was eager to be connected by any means. The city is still not fully connected to the network. In case if any district decides to connect and pays for consumption, the problems will be solved.  
(The group doesn't have the information on the gas supplier)
- F.1. Many people have left our city for job.
- F.2. Many people live at other places.
- M.1. People face difficulties. The peasants will become extinct in Georgia, if the situation develops this way. There is neither income, nor employment. I know the families who even can not see the bread for several days long. Previously people could get by somehow. Now everything is prohibited. People haven't money to purchase the fuel and process the land. Unemployment is a huge problem. Lack of water is also the problem.
- F.1. We do laundry by water collected during the rain. We transport water for food from the distance of 1 kilometer. I was out for several days. When I came back I had no water home. I feel awkward to ask the neighbor for water, for I know how difficult it is to bring water home. Probably, water is still the biggest problem.

### **Gurjaani region. Akhasheni "Community "**

16.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

- F.1. The supply of electricity has been improving during the past year.
- M.1. We have the electricity from 8 o'clock till in the evening till one o'clock at night.
- F.2. Previously we didn't have it all.
- M.2. The situation is not very much improved now. There is a progress as compared to the previous years. The improvement is insignificant.
- F.1. The supply has been scheduled since two months ago.
- M.2. The schedule is active for two months already, but sometimes it is still violated. In addition, it is violated at the detriment of the people. Sometimes, in-between 8 o'clock in the evening and 1 o'clock at night the electricity disappears for one hour, or one and a half. This is very irritating.
- M.3. Evenings are O.K, but we need the electricity in mornings too. Kids go to school.
- M.2. 80% of people pay bills without any problems.  
(The entire group agrees).
- M.1. Even 90% of people pays. Where these sums go? Why don't we have 24 hour delivery?
- M.3. All of us have attached the meters to outside pillars.
- M.2. By the way, bringing out the meters turned to be very effective. The consumer can not steal the electricity any more.

-F.2. Those 10%, who do not pay timely, pay in the subsequent month.

-M.2. Sometimes all of us can find ourselves in the situation when payment is impossible. We do not have permanent employment, but sell wine or fruits later to pay for electricity. (The group members don't know who owns the electricity delivery system. They don't know whether it is state-owned or private. In their opinion, the wires belong to the state, at least, they don't know if somebody has privatized them)

-F.3. The wires are in a very bad shape. In fact, we don't have electricity when it is windy. Due to winds, even the pillars have been fallen down quite often.

-M.2. The wires are 30-40 years old, if not older.

(The entire group says that in case of any emergency, be it the burning down of the transformer, fall of the pillar, or disconnection of the wire, they collect the money on their own and do the repairing)

-F.1. During the process of bringing out the meters, the new meters have not been installed. The old meters have been checked and installed.

-M.2. Many people have doubt that the meters have been checked and reconstructed in a way, which makes them record more, than consumed in reality. I personally never consume as much as my meter reads.

(All the group members refer to so called special electricity, which is delivered to several families. The voltage on wires of this special electricity is higher, but it turns off for only one hour a day. The connection to this electricity is expensive, because a long cable is needed. The individual connected to this line had to pay 10 Gel previously even if he/she consumed only 3 Gel worth. Now the meter is installed to this line too. The special electricity is delivered through the transformers, which serve the vital objects in Gurjaani city. The delivery of electricity through these transformers is limited due to overload)

-M.2. The voltage is weak. Because of the weak voltage the refrigerator can not be turned on.

-M.1. During the Soviet times the district was supplied through 3 lines. Currently only one line is fully operating.

-M.3. There is the electricity and these lines can be used in case of necessity.

-F.1. There is a network, but only one wire transfers the electricity.

-M.2. In case of any problem occurs the village itself solves it. There is always a trustworthy leader who takes the responsibility and collects the money to solve the problem.

-M.1. Of course, men are more active than women. (The Group agrees).

-M.2. The payment process is managed by a bill collector. He checks the meters and gets the money. He gives us a check.

(All the women in the group say that women suffer more from the lack of electricity than men. The entire housework, like food preparation, laundering, and ironing, taking care of children is woman's prerogative. It is harder for women to walk in dark. All the men agree with women. M2\_We need the light only for TV. If there is not the light, we simply go to bed).

-M.2. The price of one kilowatt is 8.5 Tetris.

-F.2. In case of 24 hour delivery of electricity, the people will pay the full amount.

-F.1. Everybody must pay. Of course, everybody will pay if there is the electricity.

-M.2. I'm sure that 80% of people will pay if the electricity is delivered for 24 hours a day.

-M.3. Everybody will avoid excess consumption and will consume in accordance to their financial abilities.

(The entire group says that all the families are connected to the network and individual meters are installed everywhere).

-F.1. The village is not connected to the natural gas network. There were gas pipes in our village, but somebody has stolen them.

(The delivery of natural gas to the village was planned since Soviet times. The pipes were also prepared. After the situation has worsened, this issue lost its importance. Since then nobody works in this direction).

-F.2. The connection to gas network will solve a lot of problems. The forest will be saved from extinction.

-M.1. We will consume less electricity. The people have a little rest, since it is unimaginable to do everything on fire. The people have made coal stoves, which are fuelled by wood leftovers. This problem will also be solved.

-F.3. It is extremely hard to do everything on fire throughout the year.

-M.2. It would not have been difficult had a company or a person capable of taking the responsibility for connection to the gas network did appear in our village. The people of the village will work as laborers. The pipes laid down previously are still useful.

(M.4 conversed with the moderator after the meeting).

-M.4. The natural conditions in Georgia are conducive to application of natural sources of energy. We must use them by all means. It is the best way to satisfy people's needs. It might not be possible to deliver this type of energy to all Regions, but a Region, which can afford it, will significantly discharge the entire system. I work for the service of geological survey. We undertake the census of objects and discuss these issues quite frequently. For example, Sartichala and Gombori trunk road is always windy. This can definitely be used; the more especially as modern wind power generators can operate by a puff. During the period of Shevardnadze's governance we offered this project to German businessman. He seemed very interested and eager to work in this direction. This person was prohibited to work due to the fact that, as they say, this business belonged to Nugzar Shevardnadze. There are many places like this in Georgia. The successful installation of sun batteries is also possible. It is not necessary to ruin the ecosystem with such huge water reservoirs. All the mountainous villages with small streams can have mini hydro plants capable of satisfying the inhabitants. It is necessary the ministry of energy to work towards this direction and support the implementation of similar projects.

Annex 7: Focus Group: Kvemo Kartli Region. Marneuli Region. Tamarisi Sakrebulo.

### **Kvemo Kartli Region. Marneuli Region. Tamarisi Community.**

12.05.2005

Number of participants	8
Male	4
Female	4

F.1 - Now we have 24 hour electricity supply, without graphic. Though, this have continued for two weeks due to Armenia Nuclear Power Plant. Before this, we had electricity from 8 to 10 pm and 1 to 3 pm only. What was the reason of such graphic, I do not know. We wanted to change it but we could not.

F.2 – Since Communists times, this was the first time when we had such electricity supply. (Regarding 24 hour supply), as we understood, Armenian Nuclear Power Plant is overloaded and it is necessary to reduce its load to prevent its explosion. Therefore we are given continuous power supply, last year this time we had no power supply at all.

F.3 – Last summer electricity was not supplied even for an hour. In winter it was better than in summer.

F.1 – We do not know how long we'll be getting Armenian power. Information about Armenian power supply was given by the collector, which collects money. This person works in the Distribution service of Marneuli region.

M.1 – Generally Community receives electricity from Khrami HPP. Khrami HPP belongs to Tsalka region, but Marneuli region is providing collection.

F.1 – Voltage is very low (regarding the electricity supplied from Khrami HPP)

M.1 – Is not able to operate even a refrigerator.

F.1 – Is not able to operate even the TV set of soviet production.

F.3 – This is not only poor power supply fault, but also people's fault – whether they need it or not, they have everything switched on.

F. 1 – This is not the reason, the voltage is very low. (Only four members of the group were aware of exact amount of the electricity price – two women and two men, the rest knew only approximate amount)

M.1 – Electricity tariff is 8.3 Tetris here.

F.1 – Too expensive.

F.2 – Yes. 8.3 Tetris, it is less than in Tbilisi.

F.2 – People pay for electricity.

F.1 – 70% of the people pays. Generally, the Marneuli Region occupies the third place in the list of good payers in Georgia. q.1 – The payment collection is maintained by the bill collectors. He visits the inhabitants and collects 5 Gel from each of hem. Now, they collect 10 Gel from each of us, because we have electricity for 24 hours a day.

M.2 – collection of the money in this way is maintained from the families either not having the meters or having the meter, which is not functioning. The rest pay in accordance to the readings on meters.

F.3 – When the bill collector visited me he did not check the reading it all and made me pay without it.

F.2 – Almost everybody has the meter.

M.3 – 95% have the meter.

F.1 – Definitely less than this number have the meters. Probably, 70% of people have the meters in Community. For example, there is a district of Swans. None of them has the meter.

F.3 – The money collection is being done incorrectly. The money collected by the bill collector doesn't go to the government (The style is preserved). During the Communist times both we and the bill collectors signed checks. Now only he signs. He can write the check like this once again and put the money in his pocket.

F.2 – The facts like this happened all the time.

F.3 – Then they blame us, as if we don't pay.

M.2 – But you have checks, right?

F.3 – People who must get the money didn't get it. You can have as many checks as you want.

F.2 – Electricity has often been cut due to this reason.

F.1 – This can not be proved. These are only doubts of us.

F.3 – These are not only doubts. This really happens so. (All the men and F.2 add by nodding).

F.4 – The supply of electricity has not been improved, if not worsened during the past 5 years. Electricity was turned off (She's talking about F.1. As it turns out, all social activities are connected to the woman. She has an NGO. In practice, she initiates all positive activities in the Community) and Mrs. Tamriko gathered the village and took us to the Governor of the Region. We sometimes begged, sometimes fought for electricity. We received his promises and Mrs. Tamriko visited all the families, collected the money and turned electricity on.

F.1 – We have faced a huge problem because of the fact that the transmission lines have been stolen. Previously we have been connected to Marneuli-1 and Marneuli-2 sub-stations with these stolen lines. Currently we are connected to Kolagiri sub-station. This was an ancillary, additional line. These lines are in disastrous state. Even the small wind is sufficient to cut these lines.

M.1 – These lines belong to Bolnisi. The sub-station is also in Bolnisi Region, but this sub-station is also supplied by Marneuli.

F.1 – As the head of Marneuli Electricity Station has explained me, Bolnisi Region is not able to pay for electricity and due to the fact that we are supplied through Bolnisi, we also don't have electricity. Rest of the Marneuli villages has electricity. Also three of Bolnisi Region villages are seating on our line. Due to the fact that they do not get electricity, we are also suffering.

F.4 – The Community always gathers under the leadership of Mrs. Tamar when any problem is to be solved.

F.2 – This lady works on all problems. Many things are being done with her leadership.

M.1 – It is very hard to restore old lines. 21 Kilometers are to be restored.

F.1 – We tried a lot. The governor has promised a lot, but we don't have any results.

F.2 – Everybody, even the police knows who has stolen the lines, but we can do nothing.

Nobody touches thieves.

F.3 – (Laughing). The police itself has stolen lines and who can catch them?

M.3 – The existing line is in awful state. In addition to cutting of lines in winds the pillars also fall down. All the pillars are barely standing.

M.1 – Women are more active than men in solving these problems. Women state unanimously that they are more active.

F.4 – Men only need a cup in hand. They avoid bothering they don't like to work.

F.1 – Men consider humiliating to apply to somebody with complaint. They do not realize the importance of human rights. Women are more consistent in this case.

(All the men agree the idea that women are more active in solving the acute problems in Community).

M.1 – Energy problems makes women suffer more than men.

F.3 – All the housework like laundering and ironing is maintained by the woman in the family. That's why the lack of electricity is more negative to them than to men. (All the group members support this idea).

F.2 – Men are suffering only by the inability to watch TV.

F.3 – Pottable water is a huge problem in Community. The pumping of water from the artesian wells and filling of towers is maintained by electricity. Currently the pipes are rusty and obsolete. Everything is ruined. People have dug wells in yards.

M.1 – It must also be said that many people didn't want to pay 20 Tetris for water. This also has caused the collapse of the system

M.2 – Inexistence of electricity and supply were the main causes of all.

F.2 – It seems that water from wells is good, but no analysis of it has been carried pout.

M.2 – We have put the private pumping machines into the wells, but they have burned down because of bad electricity.

F.3 – We have already changed five motors. Not everybody is able to dig the well.

F.1 – The readings of the common meter attached to the transformer differs significantly from the sum collected from the people. We have to say frankly that many people are in dear constraints and they steal electricity. The individual meters should be installed in every family and brought to outside pillars. Why people should pay for electricity stolen by others?

M.2 – This was the case in Ordjonikidze and Tsereteli (The neighboring communities). In addition, all meters have been checked in laboratory. This has taken 13 Gel.

F.1 – In case of electricity delivery people will be able to pay. (everybody agrees). If everybody pays according to the meter, unnecessary consumption will be avoided. Recently I visited the entire village on purpose when electricity has come. Almost all bulbs were shining. This was happening in daylight. This will not be done in future.

(They don't know exactly to whom belong the distribution lines and generation in Community. Somebody refers to the State. F.1. names "some American". Men have not thought about this issue at all).

(The gas is not linked to Community. The works are underway and the Community will have gas in the nearest future. The connection to the natural gas network was

financed by the World Bank. The negotiations with the Governor of the Region have been carried out by F.1 with the support of female group gathered by her. Prior to the involvement of the World Bank, the group asked Ivanishvili for financing, but they couldn't get it. Men have not revealed any eagerness with regard to this issue).

F.1 – The delivery of gas will solve big problems. One truck of wood costs 350-400 Gel. Not all the people can pay this much. In addition, heating by means of gas is far comfortable, than maintaining fire everyday.

F.2 – The forest will also be saved.

F.4 – We buy gas balloons for food preparation. Their price is 17 Gel. They are not sufficient even for 3-4 weeks.

F.2 – There will be no problem for gas payment, everybody will pay. (Everybody agrees).

F.1 – 150 000 Dollars are delivered, but this is not sufficient for the meters. The people themselves have to install the meters.

M.3 – probably not more than 5% have left the village. Community comprises two Georgian and Azerbaijan villages. Many people have been gone from Azerbaijan village.

F.2 – Major activity in the village is agriculture. There are not pastures cattle breeding is not developed.

M.2 – The families have one or two cows for just themselves.

F.1 – People are in severe constraints. They have cows but cannot eat cheese. They preserve it for selling. It is hard to say who is the breadwinner, a man or a woman. All the family members work. The children are also involved in household activities.

(Community women have already started working on connection to water network.

F.1 is active. Men are passive even with this regard too. Men are getting involved only when physically tough job is to be done).

### **Kvemo Kartli Region. Marneuli Region. Algeti Community. Group of Azeri Women.**

11.05.2005.

Number of participants	8
------------------------	---

The group members unanimously state that the major type of activity of the Community

inhabitants are agriculture and cattle breeding.

4. – Probably, only 5% of Community is not involved in these activities. As for me, I live alone with my daughter and we can not take care of cattle. Maybe only 5% of people do not have cattle.

8. – The biggest problem of our Community is pottable water and water for irrigation. (Everybody agrees).

2. – We buy pottable water. The price of ton is 50 Tetris.

8. – If you don't have money you will die from thirst.

7. – The water fro irrigation is also a big problem. If you have a vegetable garden,

everything will wither without the irrigation. I have two small hotbeds. If I irrigate them, I have to take my place in queue for next irrigation immediately. Person, who delivers water for irrigation, sets prices. When your turn comes, one week has already passed and everything has been withered.

8. – How can you expect any kind of harvest in these conditions? Everything is so dry that if somebody throws a cigarette everything will get inflamed. We even won't be able to extinguish the fire. (The group members agree). Houses have been burned down many times.

2. – The major markets are Marneuli and Tbilisi. Some people take products to Russia too.

(All the group members unanimously state that only women work in vegetable gardens).

7. – The number of men in the village is very small. Majority has departed to Russia to support their families. The majority of families are left without men. All the housework including taking care of gardens is maintained by women in families, which do not have men. (Everybody agrees).

2. – The land has also become a problem. The lessees have taken the land and we can not use them any more. There will be no pastures also. We don't know to whom to apply. WE don't know what to do. (All the group participants say that the Major problems of Community are Water and land).

4. – The unemployment is also the big problem. That's why the men go to Russia. I'm a teacher, but I have not been working for 15 years. How can I support myself? I do have neither money nor skills necessary for breeding cattle and maintaining the hotbed.

2. – Kids are in bad conditions. There are neither libraries, or some kind of educational clubs and amusement. The culture house has been closed.

(The group members counted the following problems: water, land, roads, electricity, gas and unemployment).

(Everybody states unanimously that electricity is being supplied badly).

3. – We don't know exactly which company supplies electricity to Community.

2. – As we have been aspired, Community gets electricity from Armenia.

8. – The price of one kilowatt is 8 Tetris, which is too expensive.

4. – As far as know, it is much more expensive in Tbilisi, but this is still very costly for us.

8. – The transmission lines belong to Marneuli electricity networks. It is a state-owned company.

2. – We don't know exactly. It might belong to Russia.

4. – Some Irish company has also been named. How can we know exact things when we don't get even newspapers?

7. – We pay and electricity is being delivered. How can we know whether the networks belong to the state or private entity? We just pay the bill collector and he gives us checks.

3. – We have the meters. All the meters are attached to outside pillars. The bill collector comes regularly and checks the readings. We pay in accordance to them.

(The members unanimously say that if there is electricity everybody gets it).

2. – The transmission is in awful state. Small wind is sufficient to cut it.

4. – The cut wire is restored by the specialist. Sometimes he restores them in one

day, sometimes in one week. It depends on his mood.

7. – The wires in such a shape, that even if they do not cut they are shimmering anyway. (Everybody agrees).

7. – There is no graphic. We don't know when comes and goes electricity. We have electricity for 4 hours during the day. 8. – sometimes one week or 10 days pass, but we have not electricity even for the minute. (Everybody agrees. The length of supply of electricity is 4-5 hours a day as everybody says).

7. – There were cases when electricity was not delivered for two months.

2. – This was when our transformer was burned. The people collected the money, 10 Gel from each.

3. – They collect money from people in every occasion, like if transformer burns, oil is over, the common meters burns. (Everybody is talk at the same time and is talk about the same).

4. – Nearby villages enjoy better supply of electricity. They say that they are supplied from Azerbaijan.

7. – From the Kachegani station. (Everybody is saying the same).

4. – I don't know exactly, but these villages pay Azerbaijan for electricity.

2. – With regard to connection of our Community to the mentioned line, on which these villages seat, we can not solve this issue. This is to be solved at the state level. (Everybody agrees).

7. – It's a fairy tale that our Community will get electricity normally!!!

7. – In case if electricity is supplied for 24 hours the people will be able to pay.

8. – Let disconnect them who can not pay, everybody has the meters individually.

3. – The people will economize too.

4. – Some families pay 5 Gel to the bill collector and he doesn't pay an attention to the reading of the meter. This shouldn't be so.

(All the group members say that if electricity is supplied, the voltage is so low that washing machine and refrigerator can not be turned on).

8. – The cause of this is bad transmission lines. Sometimes the short circuit occurs. My refrigerator has been burned down twice.

7. – Sometimes it shimmers like a candle, sometimes the voltage is so high that one should shut eyes.

3. – Let them give us electricity for 8 hours if not for 24 hours. Let them introduce the graphic for people to know when electricity comes.

2. – Sometimes electricity comes 3 o'clock a.m. Why should I need electricity at this time, what should I do? (Everybody agrees).

6. – field works, cattle breeding, working in vegetable gardens are finished by 9-11 o'clock. After that people want to seat by the TV for 1-2 hours. We are remote from everything and want to have at least this.

4. – We want to get any information and news. Some want to watch soap operas.

7. – The daily news is broadcasted at 12 a.m. We have to have the possibility to watch it.

4. – WE have not been supplied at all in winters during Shevardnadze's period. Electricity was rarely available in summer. People lived like savages. Now, though badly, but we still have electricity.

7. – The improvement can be felt in all dimensions. The salaries and pensions have been delivered.

4. – The pupils of our school have names Saakashvili Shakarashvili. If he increases salaries, they'll call him Sneakersashvili.  
(All the group members hope that the situation will improve. The hopes and wishes to be supplied for 8 hours are being repeated. The entire group says that it is better the electricity to be delivered by the state. For them the state is more trustworthy than the private companies or foreign states' companies).
6. – The Community is not being supplied with natural gas.
3. – Natural gas is very good for the village. We pay 400-500 Gel for wood sufficient in winter. Natural gas is better by all means.
7. – The natural gas line passes by our Sakrebulo's villages, but gas is still not being delivered to us. I don't know where this pipe goes, but isn't it possible to give us gas too?
3. – If there is gas in the village, wood problem will be inexistent and food would be prepared much more easily.
8. – I have already paid 800 Gel for wood in this season. Of course, I prefer gas.
3. – We buy gas balloons for food preparation in summer. Charging price is 15 Gel and is not sufficient for just one month. Natural gas would be a big relief.
6. – Many products are being perished due to lack of electricity. Refrigerators are often broken because of poor electricity supply. (Everybody agrees).
3. – If there is a man in a family, bringing of woods is his responsibility and he is in charge with this. In opposite case, of course a woman deals with this. (Everybody agrees).
7. – The village inhabitants never gather to solve the problems.
4. – everybody is living on his/her own. There is no sense of collectiveness. (Everybody agrees).
6. – Nobody would have emigrated from the village did the job places and some kind of earning exist.
7. – Quite frequently people can not attend their parents' or relatives' funerals.
3. –20% are out for job. All of them go to Russia.
8. – The people gone from here live abroad for so long that create new families and forget about their old families. The family gets in worse case than previously. The entire burden falls upon a woman's shoulders.
7. – In families with men women still carry the entire burden. The woman of a certain age looks much older than the man of the same age. (Everybody agrees).
2. – Man is responsible for bringing money to the family. When there is no employment, they can no longer do so and women are forced to let husbands go to Russia for a job.

**Kvemo Kartli Region. Marneuli Region. Algeti Community. The group of Azeri men.**

11.05.2005

Number of participants	8
------------------------	---

-M.2- The supply of electricity in Community can not be assessed positive. We can

not say that there was not the improvement in past years, but the situation still remains bad.

-M.4 – We have electricity for 7-8 hours in 24 hours. (All the group members name 6-8 hours. The women of the same village named 4 hours. As men think, women might not know about electricity, which is supplied during the daylight because they deal with agricultural works in this period).

-M.1- All the people in Community have individual meters. They are attached to the outside pillars. Everybody pays according to the reading. The bill collector checks the reading and gets the money.

-M.7 – The electricity was not supplied at all in past years. Months passed without electricity. Now the situation is improved. The people should be supplied for 24 hours. Sakrebulo's people are able to pay.

-M.1- Let them turn off those, who don't pay. Everybody has the meter. Everybody will consume economically. (All the group members agree).

(People name 8, 8.1 and 8.3 Tetris as the rate of payment).

-M.7- We know that electricity is more expensive in Tbilisi, but it is still expensive here.

-M.2- If the 24 hour supply is not possible, at least 8 hour supply must be arranged in hours, which match people's needs. (Everybody agrees).

-M.4- In practice, the only source of information is the TV and the news is broadcasted in evenings. WE always should be supplied with electricity in evenings.

-M.6 - In addition, the field works are over at this time and everybody's home. Women have to wash, iron and clean during this time. Kids also have to do homework and electricity is necessary.

(All the group members agree. Everybody says that the lack of electricity causes women suffer more than men. The housework is solely maintained by women and they suffer more. The major problem with the lack of electricity for men is inability to watch TV).

-M.1 -The electricity supplier is Marneuli. We don't know who owns the supply.

(No one knows the exact name of owner of the source of electricity. they refer to the state, Russian company and some undefined Irishman. The same situation exists with regard to the owner of transmission lines).

-M.6 - We don't know exactly who owns the transmission lines, but the people themselves care about everything. If the transformer burns the people collect the money. The same happens in case of oil.

-M.4- The pillars and wires are in awful state. (Everybody agrees unanimously). The wires are cut in windy days. The pillars have been fallen quite often. The restoration takes 2-3 weeks.

-M.2- Restoration is maintained by people from Marneuli Electricity networks.

-M.7 - It's dangerous to walk in the wind. It is possible that the pillar falls and the wire falls on your head.

-M.1 – In Region, some of our neighboring villages enjoy better supply of electricity. They say that that they supposedly get electricity from Azerbaijan.

-M.6- It is impossible to talk about the normal voltage. Sometimes it is like a candle, sometimes very high voltage gushes unexpectedly. This is caused by the wires too. (Everybody agrees).

-M.2- In practice, there is not a single family in the village, whose electricity

appliances have not broken by the unstable voltage. (Everybody agrees).

-M.1- Problems either relating to electricity or other issues are not being solved collectively in the village. Everybody lives on his/her own and everybody thinks that the state should deal with everything instead of them. (All the group members say the same).

-M.6- Many people have left the village because of these problems. There almost are not the families members of which have not left Georgia for job.

-M.4- Everybody who have the ability go to Russia.

-M.2- There are not job places available here, which causes men to suffer. Men can not bring anything home. Women mostly deal with agriculture. The major types of activity in the Village are cattle breeding and agriculture.

-M.1- The land is also a big problem. Cattle breeding requires lands and pastures and people are not able to use leased out land. (Everybody agrees).

-M.7- The big problem facing our Community is water. We have neither potable water nor irrigation water in sufficient amount. You have to stand in the queue for water for irrigation. You don't know when you get it. Till your turn comes, the entire vegetable garden and yard is already withered away. The major part of our income is vegetables. (They refer to this in the end, while women refer to these problems firstly).

-M.2- Our market is in Marneuli and Tbilisi. Those who are able take product to Russia. Introduction of visa regime has complicated even this. The roads are also bad. (Everybody agrees).

-M.1- Unfortunately, we have not natural gas in Community. The pipe passes by the village but it doesn't come into the village. The village inhabitants think that this problem should be dealt by the state and there is no activity with regard to this.

-M.2- Natural gas could solve many problems in the village. Only for winter season people need 600-800 Gel for wood. We buy balloons for food preparation in summer. Charging one balloon takes 15 Gel. We heat the hotbeds by wood in winter. (All the group members say that connection to the network of natural gas would be beneficial for them both economically and ecologically).

### **Kvemo Kartli Region. Marneuli. Azeri group.**

12.05.2005

Number of participants	7
Male	3
Female	4

-F.1- We have a good supply of electricity, very well.

-M.1- Recently the supply of electricity is very good in Marneuli. It can be said that

electricity is being delivered for 24 Hours to Marneuli.

-F.1- Yes, this is the case. We can not complain for electricity. (All the group members agree).

-M.2- The supply has been improved during the past two years.

-M.1- Especially during the past year the supply of electricity improved very much. (The group agrees).

-F.2- With regard to voltage, it is not the same everywhere. For example there is always good voltage on the hospital's transformer.

-M.2- It's true. The quality of the voltage is different in different districts. It is unstable at some places.

-F.2- In my opinion, this is caused by old wires.

-F.3- As the wind blows or rain starts coming, electricity is turned off immediately. The old wires cause this too. (The entire group says the same).

-M.1- There are old lines in entire Marneuli.

-F.3- When the installation of individual meters was carried out, the meters have been brought outside the dwellings and wires have been installed very badly and disorderly. They are so entwined at certain places, that one is afraid to enter the house. Due to this short circuits are frequent. In addition, these lines frequently pass on gas pipes. When the short circuit happens the pipes get warmed and blast becomes possible. I have called to network. People have come and put resins in-between the pipes and lines. I don't know if this can help.

-M.3- Marneuli's electricity networks are either to be completely changed or repaired.

-M.1- Currently the supply of electricity belongs to Americans.

-F.2- They say so.

-M.1- They own the networks too. Marneuli gets electricity from Armenia.

-F.3- The boxes are open in blocks and any layman can switch off electricity. This is very bad. The Chopper switches stand in entrances.

(Everybody says that the tariff is 8.1 Tetris for Kilowatt).

-M.1- There are cases when one distinct has electricity and other has not. Sometimes vice versa.

-F.2- This depends to payment and occasions like this will happen more frequently.

-F.3- The common meter stands on the transformer. Everybody has the individual meter. When the bill collector checks and collects the money, there always a difference between the total reading of individual meters and reading common meter. The difference is shared equally by all families. This is not right.

-F.2- When the controller finds a violator he switches him off. Why should all the people pay for it? (The entire group agrees).

-F.3- For example, people living in my sister's street pay additional 2-3 Gel each month. All the people pay for electricity in Marneuli. Maybe some pay with delays of several days, but everybody pays anyway.

(The entire group is dissatisfied by the fact that people can not check the reading of the meter, because they are placed in closed metal boxes and it can be opened or closed only by the bill collector. They wish the box to be equipped with the glass screen above the reading).

-F.1- My meter recorded 3.30 Gel in one occasion. The bill collector told me that it was not allowed to pay less than 5 Gel. This is lawlessness. (Everybody agrees). Maybe I was not home at all during that month.

- F.3- One problem also. My neighbor is rarely home, but his meter records 20-25 Gel per month. They are arranged so badly that everybody can seat on other's line. Probably somebody else is seating on his line. I also have checked the meter. I switched off everything, but the meter was still rolling. (The entire group says that the lack of electricity creates more problems for women than for men. Women should prepare food and wash, etc).
- M.2- Men also suffer from the lack of electricity. When it turns off, the man should care about the improvement of the satiation. So, men also have problems.
- F.3- When I saw the cut Line I applied to male neighbor for help, but he didn't care. I gathered female neighbors and we solved the problem collectively. Women are more active in solving these problems. (Both men and women agree).
- F.2- People on Gamsakhurdia Avenue have collected the money. We have laid new wires by this money. IT took 120 Gel from each family to afford this.
- M.1- This is not just. The supply company itself must have laid new wires.
- M.2 – Everybody should be supplied with the electricity for 24 hours. Let disconnect them who don't pay. (Everybody agrees).
- M.1- Since the meters are installed, everybody tries to economize. Nobody switches the bulb on in vain.
- F.1- The supply of electricity should belong to the state. People trust the state more than private companies.
- F.3- Of course, when you pay to the state, the money will be spent on good things. The private company cares about its pocket only. (Everybody agrees).
- F.4- Even the hospitals were being switch off before the supply has improved. Because of no electricity emergency surgeries have often been cancelled. Currently, entities like this have 24 hour supply.
- M.2- They have supply but the wires are old and of bad quality there too. (Everybody agrees).
- F.2- The lines are old in entire Marneuli. As I have already said, the new wires are laid only on Gamsakhurdia Avenue. Even this is bought by the people, because old cable was damaged and put in the ground. That's why the damage happened all the time and the situation was terrible.  
(The entire group says that natural gas is permanently delivered to Marnneuli and the pressure is also normal).
- M.1- Marneuli center has really normal voltage, but it is low in nearby villages, because the pipes are old. The wastage rate is high in case of high pressure.
- F.3- Tariff is 33 Tetris.
- M.1- No, it is 31 Tetris, more precisely 30.5 Tetris.
- M.2- It takes 120 Gel to each family to get gas. Not everybody can afford to pay this money. Everybody, who has paid has natural gas.
- F.3- The installer requires additional 20 Gel. So the total cost of installation reaches 140 Gel.
- F.2- Probably, only 10% of total number of population was not able to get connected to natural gas network. (Woman name 20%).  
(The entire group says that the natural gas and its supply system belong to the state. New pipes have not been constructed. Old pipes are used for gas transmission)
- F.4- The relief should have been introduced for socially vulnerable people in case of electricity and natural gas supply. No relief has been offered to these people.

- F.3- Electricity and natural gas do not represent Marneuli's major problems. The major problem is potable water. This water is not drinkable. (The entire group agrees).
- F.2- The fact that water is useless is largely caused by the people themselves. Clean water requires pumps and filters. ALL this requires electricity, but the people don't want to pay for water. 1 lari per month is required from each family to solve this problem. People don't pay an attention, but they pay 3 Gel per month on average to buy the potable water.
- M.2- All this is true, but people can't be blamed. When electricity was not delivered the discussion was the same. They said that electricity was not delivered because people didn't pay. Since the supply started the people started paying immediately and the situation has been improved. It will be so in this case too. If people are supplied with good water they will pay.
- M.1- Water is delivered to Marneuli from Bolnisi Region's village Arakhlo. 24 pumps were working in old times. Currently, their majority is not operating. Water was pumped into the big pool and cleaned subsequently. It was supplied to the city only after that. Now only the chlorine is being poured in big quantities. Water stinks with chlorine (The entire group says the same).

## Annex 8: Focus Group: Zugdidi Region

**Zugdidi**

03.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-F.1. During the past two months we have electricity 24 hours a day.

-F.3. We can't say that the supply of electricity has been improved during the past five years. Despite the fact that we have 24 hour graphic, there are occasions when things go wrong.

-M.1. During the winter we have not the electricity at all.

-F.2. It depends on the period. Sometimes we have good supply; sometimes we don't have electricity at all.

-F.1. The electricity delivered by the networks is divided into two parts in Zugdidi - commercial electricity and electricity for the city. Commercial electricity is delivered always intact. The electricity called city electricity is has not being delivered at all during the recent period of time.

-M.2. Those who have commercial electricity, have meters outside their homes and pay according to the readings shown on meters.

-M.3. Those having commercial electricity pay for the meters and new wires by themselves.

(Men say that 50% of Zugdidi population has the commercial electricity. Women think it's 30%).

-M.1. It takes more than 100 Dollars the consumer to get connected to commercial network. This depends on the distance to the source.

-M.3. On average it is 300 Gels per month.

-F.2. It depends on the number of neighbors, who have connected collectively. They share the costs and the connection becomes cheaper.

-F.1. Wit regard to the city electricity, we have not it for three months already.

(The entire group knows that the price of kilowatt is 8.1 Tetris).

-F.3. There is no tariff on the city electricity. Individuals pay 5 Gels per month.

-M.3. This was so. Now the communal meter is attached on the transformer delivering the city electricity and people share the cost shown on that meter equally.

(This opinion is supported by men. Women say that even now the major part of the consumers pays fixed sum of 5-10 Gels).

-M.1. The process of installation of individual meters on the commercial electricity started 5-7 years ago. Since then it is called commercial. The suppliers themselves named it so.

(As the group participants say, the commercial and city electricity is delivered by the same company).

-M.2. We paid 5 Gels for the city electricity when it was delivered 2-3 hours a day. Now, after the installation of the communal meter, each family has to pay 45 Gels. The people couldn't pay and the wires are cut off.

(They talk about the city electricity).

-M.1. They say that the complete delineation by means of installation of individual meters should start in July.

(The majority of the group says that the supplier is a state-owned company).

-M.1. No, it's not a state-owned company. It was privatized. I think these are Irishmen working in Kutaisi. The state owns high voltage lines and dispatching.

(The group says that the electricity is delivered to Zugdidi from Enguri hydro plant).

-M.2. Kutaisi gets electricity first of all. It is redistributed only after that. The electricity from Enguri goes to Kutaisi and then comes back to Zugdidi.

-M.1. The networks belong to the state, but now they are being privatized. The tender has been announced.

-F.2. The networks are in awful state. I wonder how we avoid fires. The situation by the transformers is also awful.

-M.3. This issue should be dealt by the state, but nobody cares.

-M.1. The transformers are being maintained by the network staff. It can not be done in other way. The situation is so complicated that nobody else will have an idea about what's going on. You could be scared if you look at it.

-M.4. All the transformers are in such an awful state that their doors can not be locked. They blast almost every week. The people incur expenses for their restoration. They buy the oil too.

-F.2. Those who have the meters, pay in Energy Company. The bill collector maintains recordings, according to which we pay.

-M.2. It is very hard to comprehend the situation in electricity supply system in Zugdidi. The city and commercial supplies belong to the same company. They have to ability to charge only commercial lines with current. That's why they do so.

-F.1. People, who are not connected to the commercial lines, have not the electricity at all.

(On the contrary to the abovementioned, commercial electricity is delivered to 20-25% of people)

-M.3. In practice, there is no electricity other than commercial. Sometimes even that is not delivered.

(All the group members agree to the idea that everybody will pay in case of installation of individual meters. The people will pay in accordance to their abilities).

-F.3. If an emergency happens in a family and electricity becomes an absolute necessity, a person goes to electric service and makes them turn on. In days like this the entire district has electricity. This kind of service takes 30 Gels a day.

(Men think that women and man suffer from the lack of electricity in the same way.

Women think that they suffer more, since the housework is dealt by women, not men).

-F.1. The biggest problem related to the electricity is water. We do not have water if the electricity is not being delivered. If a person lives in state-owned apartment he/she has not water at all. The private people having private homes pump water out of wells by means of electrical pumping machines.

(The entire group repeats the same).

- F.3. There are entities which are never cut off from the source of electricity at all. These include post office, television, and railway. The hospital is frequently cut off.
- F.2. It's interesting why the television, not the hospital has permanent electricity. People call the electricity delivered to the television the "Grisha Electricity." That Grisha is the manager of that television. The transformer, to which the television is linked, is never being cut off.
- M.4. Sometimes, after negotiations the electricity staff member switches us to a different line. If you live in the affinity, you can be transferred to Grisha's electricity. That's why the transformer burns down because of overload.
- F.3. Our organization also has the commercial electricity. The readings of our meter and the meter attached to the transformer show different figures. Somebody else is connected to our line and we pay in excess.
- F.1. This kind of pilferage is called 10 Gels electricity in Zugdidi. You agree with a bill collector, give him 30 Gels and he switches you to other people's line. You should pay 10 Gels to the collector each month. The situation has absolutely gone out of control.
- M.1. If you find a person, who is sitting on your line, that person excuse that he didn't know that the line was yours. In fact, he might not know. Only the collector knows this. (All the group members say that the only solution to this problem is the installation of individual meters for the entire population).  
(In men's opinion the problems with the electricity is being dealt by them. Women say that this is not always the case. Sometimes a woman is more active or it depends on a particular family).
- F.2. In general, the entire district gathers in case if the transformer burns down. This problem is being solved collectively.
- M.4. The voltage is very low. It is more or less o.k. after 12 p.m. (Everybody agrees).
- M.2. Both the wires and pillars are in the bad shape. The pillars have even fallen down several times. The pillars, which somehow keep standing are supported by the people themselves.
- F.1. People having the commercial electricity, pay in the company. The recordings are maintained by the bill collector.
- M.2. For the first time the natural gas was delivered to Zugdidi in 1991. Not all the streets are connected. Currently the gas is not being supplied.
- M.4. The pipes are brought out at many sections from Kutaisi onwards. (In all the group members' opinion, the delivery of natural gas would solve many of peoples' problems. a family pays 600-800 Gels for wood during the winter season. These costs could be shrunk to 100 Gels if natural gas is delivered. The forest will be preserved and electricity will be spared).
- M.1. The level of migration is similar to that of entire Georgia. Everybody who finds a job goes abroad.
- F.3. Mostly men migrate and take their families afterwards.

## Zugdidi . Urta Community

03.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-F.3. We do not have any electricity delivery schedule. They electricity is being turn on or off at their discretion.

-F.1. Sometimes the electricity comes for one our, sometimes for half an hour, in some exceptional cases we have it all day long.

-M.1. The electricity will be delivered in case if people pay. It will be supplied only if everybody pays. If somebody doesn't pay everybody is disconnected. (The entire group says the same).

-M.1. All the people from our district have been gathered and decided to collect the money. Those, who do not pay will be disconnected. This happens only in our district, where there are 20 families. I do not know what's going on in other districts. The payment will be made in accordance to the records of the communal meter. (As it follows from the discussion of the group members, other districts haven't the similar experience)

-M.2. Three communal meters are attached to transformers. The village is being served by 3 transformers. In some cases several districts are connected to one meter. Many people can not afford to pay and payers suffer. To be frank, the village has become poorer. There jobs are not available any more and many people are not capable to pay.

-F.2. The ability to pay is just one aspect of the problem. If we count well, the people should pay more on oil or other types of fuel. (The group agrees with her)

-M.1. The amount shown on the communal meter is divided equally to all users, even if somebody consumes more than average. Many people have electric water heater, many have electric wood processing machines. Of course such an individual consumes more than others. Everybody has to pay the same.

-M.2. Currently our district enjoys 24 hour delivery and each family pays 10 Gels per month. We plan to install the individual meters all across the village. If somebody refuses to install it, then he/she takes the responsibility to pay the difference between the recordings of common and individual meters. If my meter shows 100 Gels I will pay without complain. In my opinion, this should be so not only in our district but in the entire village.

-M.3. The electricity company must install the meters in all families and collect the cost of installation along with the collection of monthly bills. (This idea is supported by all members of the group except M.2. who thinks that the people themselves should install the meters). It will be always difficult to collect 10 Gels from each without the meters more so in winter, when 10 Gels will definitely insufficient. The people can get into the conflict with each other. The collection of money is complicated even now.

-F.4. There is no person equipped with the responsibility to collect the money. For example, we have a duty in our district. Two persons from two families pay for one month. Other two change them in subsequent month and so on. This money is brought to the company in exchange of the bill.

-F.2. This is not the case in our district. We've been informed that if a family pays 10 Gels, it will enjoy 24 hour delivery of the electricity. This has led to tension, since somebody consumed 1 Gels worth of electricity, while others 50 Gels worth.

-F.3- Everybody has the meter in our district. The electric company itself has taken out the old meters. After that they checked the records and installed new meters. We pay in accordance to them. We paid 5 Gels for checking of the meters. The neighbors are switching in their duty to collect the money. (F3. and F4. represent the same district). (The entire group develops the idea that the installation of individual meters by the electric company to all inhabitants is necessary. It is necessary to pay for the new meter and for electricity consumed step by step)

-M.1. We don't know who owns the lines and transformers. Recently the transformer has been burnt down and the electricity company forced us to pay 600 Gels for restoration. The pillars fall down frequently and the people restore them by themselves. The lines are an awful shape. The high voltage lines passing our village are supported with thin laces. The exploitation of these wires is absolutely impossible in normal circumstances. The supplier must own them and undertake repairing. There is a great disorder with this regard. (The entire group agrees). (The supplier of electricity is called the distribution company, but nobody knows exactly whom it belongs).

-M.1. We are left without the electricity due to this disorder and litigations.

-M.3- Nobody controls the lines after they come out from the sub-station. Nobody takes responsibility for repair and restoration. In case of damage, the people themselves collect the money and call the company staff to undertake the necessary works.

-M.2. The repair is often maintained by us, neighbors without any specialists. There are people more or less qualified in electricity. We help these people in works.

-F.3. When comes the time to pay, they give us electricity 24 hours a day. This lasts for 3-4 days. Since we pay we get disconnected again.

(The group says that the voltage is normal during the summer, but low in winter. It is impossible to discern the spiral of the bulb in winter).

-M.1. The people will pay for electricity. If we account for costs of oil and candle, the expenses get higher. In addition, people are poisoned by particulates of oil smoke. The lack of electricity leads to neurosis. (The group agrees).

(The group says unanimously that the entire village gathers and applies equal efforts to solve the problems).

-M.1. The high pressure gas pipe passes 1.5 kilometers away from the village. The gas was delivered to Abkhazia through these pipes. The plan stipulated for delivery of gas to our village too. Many things changed since then and nobody can deal with this, neither the state and , or the people themselves.

(The entire group agrees that delivery of gas to the village would solve many problems. The wood is expensive and ecological conditions have worsened too. The entire Zugdidi is supplied by wood from Urta forest. The forest has been fully destroyed. There are thermal springs in Urta forest. They could be used for heating

purposes and hotbeds if normal a planning is applied. Unfortunately, nobody finances this activity. People definitely don't want to destroy the forest but they don't have any other way. This forest has been transformed to reservation and we will be forced to become the forest stealers).

(Both men and women agree unanimously that women suffer much more from the lack of electricity than men. Women are responsible for housekeeping, which is directly linked to electricity. The only job of a man is to bring water out of the well to help a woman. Men need electricity just for watching TV. Everything else is being dealt by a woman).

### Zugdidi . Tsaishi Community

02.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-M.1. Currently we have electricity for 24 hours a day. This is the case for approximately one week.

-M.2. We had 24 hour supply from April 20 to May 12. After that the electricity has gone but now it has been restored again. This happened because of non-payment. Currently there is not a deficit of electricity. If the payment is available electricity will be delivered for 24 hours daily. The communal meter is attached to the transformer and the entire Community pays in accordance to it. The bill is divided by the number of families and each family pays the same. Of course, this leads to tension among the people. Some people have only the light bulb, while others use electric equipment and machines. It is necessary to install the individual meters to avoid the tension.

-M.1. My impression is that somebody wants to make people fight. (He repeats the idea of M.2 about the different rates of consumption by families). Despite this, everybody has paid 10 Gels in accordance to the records of the communal meter because people were very eager to have 24 hour electricity. But in the future people will not be satisfied with equal payment. This position is just. (All the group members agree)

-M.2. The bill collector checks the recordings and informs the people about how much to pay. We collect money and give it to the electricity company. If the record of the meter shows 10 Gels per family, the collector has the right to turn off the transformer unless the people pay the debts.

-M.1. In spite of fact that the voltage is maintained for 24 hours on the transformer, the people agreed that they will regulate the schedule of supply till the complete delineation of the families by installment of individual meters is finished. Based on agreement, we turn off the transformer in hours agreed. (Everybody says the same). Currently we have an agreement \_ one hour in morning and from 8 p.m. to 1 a.m.

(All the group members say that the decision was made collectively by the entire village).

-M.2. Different districts can have different graphics. If a district is capable to pay, it can enjoy 24 hour schedule. The district must pay by all means. As for today, the entire district likes this schedule.

(The entire group says that the rate is 8.1 Tetris).

(As it follows from the discussion of the group, the name of the supplier is "Elektroservisi", but nobody knows whom it belongs, is it state owned or private)

-M.2. We don't know who own the dispatching lines. The high voltage lines have been robbed five times already. If we are talking about the service, both wires and transformers must be maintained by the company, but this is always done by people.

-M.3. Now it is o.k. but there was a time when the lines were being robbed permanently and people had duty to guard them.

-M.1. The wires have problems since they are not made of aluminum. So called bimetal is applied instead of aluminum, which causes wastage. The people restore transformers too.

(While solving the problem, the entire village supports a person taking the initiative. people trust that person and he works for solution of problems).

-M.1. The installation of individual meters is absolutely necessary and only way to solve the problems of supply. (All the group members agree to this idea).

-M.2. The tension among the people will disappear in such cases. We've been offered individual meters for 35 Gels by a firm (nobody knows the name of the firm or its owners). This money would have been accounted in monthly bills. (Nobody answers, why the proposal was turned down. The impression was that the installation is only the company's responsibility and people don't want to throw the money in vain).

-M.1. I'm not the staff of the company, but still spend each and every day there. The job of the bill collector is done by people themselves. We asked the Saktebulo to charge someone with the responsibility of the electricity specialist, but we could not get even this. If something damages, we apply the efforts of a village inhabitant. It's understandable that the system itself is at the stage of formation and regulation and the will improve. The electricity company treats people as enemies and with intention to subdue us.

(The entire group unanimously states that the pillars are in awful shape and many of them need to be changed).

-M.1. We have changed several pillars, for which the money was allocated from the local budget.

-M.2. We have two sources of electricity in Community. The people call the first one 35 and 110 the second one in accordance to the numbers of transformers. 35 is o.k., but 110 has very weak voltage. (The group agrees).

-F.1. The people will be solvent in case of installation of individual meters. Everybody will consume in accordance to their abilities to pay. (The group agrees).

-M.1. There was the case when the person cut his own wire. He did not want to intrude others by his inability to pay.

-F.1. The supply of electricity has been improved during the past five years.

-M.1. The supply has started just recently. It was a nightmare before. Now the situation is improved. (The group agrees unanimously).

-F.2. Water is not linked to the electricity. There are only a few families who pump water out the wells by electric pumping machines. To most of the people water is delivered naturally, without electricity.

(Women are attuned to the idea that the lack of electricity causes them to suffer more than men. Women do all the housework like laundering, ironing, food preparing and teaching of children. Men are linked to electricity only when the time to pay comes.)

-M.2. From that standpoint, it might be right that women suffer more from the lack of electricity than men, but men suffer too. It's a real shame to live in 21<sup>st</sup> century and miss the light. During the past years the people were screaming by happiness when they saw the light.

-M.1. In order the village to get the natural gas, 10 000 Dollars are needed. The pipe pass nearby the village but we are not connected to it.

(The group unanimously agrees that people are very eager to be connected to the natural gas network)

-M.1. I myself visited Tbilisi with regard to this issue. The project has been written. It costs 10-12 thousand Dollars. The distribution station will be created by this sum and the pipe will access all streets. The installation of individual meters will be people's responsibility. (According to the group, people agree to pay their own money for meters)

(According to the group the delivery of natural gas is economically beneficial for the people. If a family has natural gas, it will pay 70 Gels for heating purposes, when the cost of wood is 400-500 Gels. From the standpoint of ecology, it is necessary to prevent the forest from cutting. In addition, the consumption of electricity will be less).

-F.2. Men are more active in solving problems, than women in Community.

-F.3. It depends on issue under discussion. Women are active too, but the problems are eventually solved by men.

-M.2. We have Asian mentality. Women are also involved in solving the Community's problems.

-F.3. 80% of the people has individual meters, but the electrical company doesn't trust these meters and requires either to check or to change them.

-M.2. More so, when meters are placed inside homes and company requires attaching them to outside pillars. They require bringing them out because of cheating. The entire district should in fact be equipped with individual meters. It's senseless to install individual meters in several families only, because the entire district is disconnected when the total sum is not collected. Unregulated payment system has lead to widespread tensions, animosity and brawling among the neighbors.

(M.1 and M.2 are the Head and the Deputy Head of the Community. Their active position is caused by this. They didn't exert any kind of pressure on group members. They just were more privy in problems. The group participation took the form of agreeing to their ideas and uttering supportive remarks).

## Zugdidi . Ingiri Community

02.06.2005

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

-M.1. We don't have electricity for 24 hours a day. This is linked to many aspects. We have three transformers. There was a bill collector who collected the money. The staff of the bill collector is cancelled and we didn't know this. The people didn't pay for electricity during the past three months. One week ago the representative of the electricity company came to say us that each family should pay 18 Gels. This is a huge sum for unemployed person. People collect 2-3 Gels and are turned on for just two days. Then they are disconnected again.

-F.1. The individual meters are not installed.

-F.2. The communal meter is attached to the transformer. This creates an awkward situation. Some people consume much more than others. Why everybody should pay the same?

-M.1. Individual meters are necessary. Everybody will pay for consumption and tension among the people will be over.

-F.2. The establishment of order in electricity supply system should start from individual meters.

-M.1. If the line is not cut, we have the electricity from 8 to 10 a.m. Our people are satisfied with this.

(The group unanimously states that different districts are supplied differently)

-F.2. For example, our district is located by the tea fabric and if the fabric works, the electricity is supplied for 24 hours to our district. The communal meters have been installed and the district is required to pay 2400 Gels in autumn. We can not pay such a huge sum. (She's talking about the inconvenience with the communal meter). That meter was taken away with people's demand. According to people, not people themselves, but the fabric must have paid, because mostly it had consumed the energy. The meter has been installed again one week ago. This will lead to problems again. (The entire group repeats the same)

-F.3. When the electricity was supplied badly and the communal meter did not exist, people paid 2-3 Gels. After the situation has improved they pay 5 Gels. During the recent period, after subsequent improvement we pay 10 Gels. If the communal meter is installed, everybody will doubt that he/she pays for the neighbor. (Everybody agrees)

-M.3. The wires are old and bimetal is used instead of aluminum on some sections. Due to this the rate of wastage is high and people are forced to pay more than it has consumed.

-F.2. There was a case, when the house inflamed due to bad wires.

(The Ggroup members don't know exactly to whom the electricity company belongs, whether is it private or state-owned)

-F.1. We don't know who owns the company, but it must be state-owned. The state must take the responsibility for delivery of electricity. (The group doesn't know who owns the wires)

-M.1. The people have bought the spare part of one transformer. This transformer works all right. Rests are in awful shape. (Everybody agrees).

-M.3. The transformers damage quite often and people collect the money for repair. They are often robbed too. This is also corrected by people.

-F.2. People don't trust bill collectors. Bill collectors collecting the money for repairing works are always treated doubtful.

(All the group members say that individual meters are necessary and every family itself should pay in cash register)

(None from the group knows the exact price of electricity. They name 8, 8.5, 9 and 11 Tetris, but none is sure).

-M.2. The lines passing on Inguri deliver electricity to other villages too. This comprises many transformers and if one of them damages, electricity is turned off until all the transformers are checked. This continues for 3-4 days. If a village doesn't pay we are also disconnected.

-F.1. The internally displaced persons have been placed in our school two times. They have destroyed the entire electric equipment. All the lines have been burnt down and there is not electricity in the school. It takes 2300 Gels to restore everything, but the school can not afford to pay.

(The enterprise or establishment having electricity permanently, doesn't exist in Zugdidi. Only the tea fabric can have this during the summer)

-F.2. There is so called commercial electricity in Zugdidi, which is delivered for 34 hours to consumers. If we have to grind maize, we go to Zugdidi.

-M.1. The voltage is low. It is never 220. This damages electric equipment. The water pumps, refrigerators and TV-s have been burnt down numerous times. (The entire group repeats the same)

-F.2. The voltage was very high in Christmas and our neighbor Tsurtsunia's house inflamed. The house was made of wood. It burnt down quickly. The head of the family died in fire (He didn't manage to come out quickly). The wires are old in all of our houses and nobody is insured from occasions like this (Everybody agrees).

-M.2. The electricity specialist has been waived. Currently only one team is employed. They often fail to react timely. The staff of the Head of the District has been introduced, but he can not do anything. He even can't climb the pillar.

-F.1. The persons collecting money are being changed every month. The service must be created and money must be collected by one person.

-M.2. In case of individual meters, the people will be able to pay for 24 hour delivery. Everybody will economize. Individual meters are the best solution.

-F.2. There is a pillar in my yard. It has to be repaired. I apply to electricity service, but they did not react in any way. Unless it falls and an accident happens, nobody will pay the attention. (Everybody talks that pillars are in dangerous state).

-M.1. If I'm not mistaken, three different services are involved in delivery of electricity. Line belongs to one, generation to other and so on. All these services must be unified by one organization, which will be responsible for everything and disorder will be removed. (The group agrees).

-F.2. With regard to ability to pay, only I have a job in my family comprising five members. In spite of this, we still manage to pay 300-400 Gels for wood in winter. Of course, we will pay for electricity too. (The group agrees and repeats the same). (In all members' opinion, people won't be able to pay for individual meters fully, but everybody agrees on gradual payment).

-F.1. Women suffer from the lack of electricity more than men. Everything including food preparation, laundering and ironing is to be done by a woman.

-M.1. Men suffer more from the lack of electricity than women. If something is damaged, it must be restored by a man.

-F.2. Wood is to be brought and processed by men. When I look at my family's men I see that they suffer more.

(After short argumentation the group agrees that both men and women suffer from the lack of electricity in the same way)

(The entire group says that the men of the village gather to solve the problems and apply equal efforts)

-M.2. Unfortunately, the contribution of Community to solution of electricity problems is almost zero.

(The group members doubt that the meters attached to communal meters work in such a way as to record far more than practically consumed)

-M.1. The natural gas is not delivered to Community. Connection to gas network would solve many problems. First of all, the forest would not be cut and electricity would be spared. The people would have slight relief. The family should pay for wood 400 Gels in winter anyway. This would be beneficial from this point too.

-F.2. We buy balloons, charging of which takes 15-16 Gels. This is not sufficient even for one month.

(The group says that water problem is linked to electricity. Majority of people have wells. The pumping is maintained by electric pumps. The major problem facing Community is the delivery of electricity).

-F.1. The natural gas is a huge problem too. It is very hard, when we have to use wood stoves in summer heat just to prepare food or heat the water.

## Annex 9: Focus Group: Ambrolauri Regional Center

### Ambrolauri. Regional Center

<b>Number of participants</b>	<b>8</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>4</b>

(7 participants are heads of various Communities)

-M.1. Due to non-payment the electricity is not supplied to various Communities of the Ambrolauri Region. The common meters are installed on transformers and people pay according to these meters. Different graphics of the supply of electricity are applied at places, which have electricity - for example, some have it 15 hours per day, while some for 24 hours. When users do not pay the cut-offs are applied. Currently, the installation of individual meters is a huge problem. People are concerned with the issue of installation of meters on outside pillars. People should pay for these works.

-M.2. The collection of payments is a huge problem and will remain even after the installation of meters outside the dwellings. The heads of councils charge an individual living in a village with the duty of collection of payments and transportation of the money to Ambrolauri. This person becomes responsible, but there is no order regulating his activities and he/she does not receive any remuneration for services provided.

-M.1. Nobody is legally responsible for the loss collected sums. It would be desirable the electricity company to install at least one collector in each community for expeditious collection of payments. (All the participants state that all the Communities face the similar problem).

-M.3. The villages in Racha Region are quite separated from the center. The transportation is costly and rather complicated. In addition, 60% of the population is elderly people. This creates additional difficulties. That is why it is necessary for the electricity company to have bill collectors to mediate with users.

-F.1. There were bill collectors, but the companies removed them by themselves.

-M.1. The electricity company refuses to assume any kind of responsibility to people

-M.4. The Ambrolauri Region is facing a catastrophe. It is rather hard to imagine 70-80 years old lone man or woman capable of attaching the individual meter to the pillar. The rate for kilowatt consumed is 8.1 Tetris. It is interesting, where this money goes and what this rate comprises. The electricity wires and pillars are in disastrous state in all communities. Only trees carry the wires and pillars at many places. I guess that nowhere else around the globe could be found the situation like this from the standpoint of quality of services. I am the Head of Sakrebulo and it has been three months since I could not see electrical light. I have one and a half year old child already suffering for neurosis. I dwell two kilometers away from the central transformer. In case if all the dwellers living between my house and the transformer do not pay, I will not get electricity. How can I pay instead all of these people? I do not get this principle, on what kind of democracy, newly-created or already existing does it rest, I do not understand.

-F.2. As it has already been underlined, there are many pensioners in the region. How can they pay 30 Gel for installing the outside meters if their total monthly income is only 28 Gel? People are in helpless and hopeless state.

-M.4. The representative of the electricity company says that he doesn't care about anything but the common meters and requires all the people to pay the amount shown on the common meter. The equal redistribution of payments on all the users when some of them consume 2 Gel and some 30 Gel, is a criminal offence, stealing of money and violence. As for me, like many other users, I do not understand anything with all these transferring wires and electric services. Despite this, many people are eager to bring the meters outside on their own. This definitely will lead to violence.

-M.2. I wonder if electric companies installed the meters for the people on their own, why the same thing can not be done for poor peasants. If 3-4 meters are attached to already amortized pillars, the bill collector himself will not be able to check them. It would have been far better to tighten the control and use the meters inside the houses more efficiently in order to undertake the final reconciliation according to the common meters. If everybody starts bringing out the meters on their own, all the standards will be violated. One 80 years old man living in my Community applied to me asking to send him to elderly refuge. In addition to all, we, the heads of Communities have become solicitors begging people once a month to pay the due sums in order to bring money to the network staff member. They do not give us checks because they can not do so for each person living in mentioned conditions. That is why we feel rather awkward. When the issue of breaks on land tax for people of mountainous regions was being discussed, the issue of breaks on electricity payments was also raised. The rate must have been 4-5 Tetris, not 8.1 Tetris as it is now. In addition, this 8.1 Tetris comprise network maintenance and pillars' maintenance and installation of meters. If the company places this entire burden upon the people's shoulders why should it require 8.1 Tetris?

(All the group participants say that works of servicing the transformers, restoration and repairing of all damaged pillars in all the Communities are solely carried out by the users.)

-M.1. The Region has its own hydroelectric plant. It is in private hands. Our plant was switched to common system. And it is being managed centrally now. The people and owners are eager to bring the plant back to region administration. There is a conflict with the ministry of energy with regard to this issue.

(It is thought that the network belongs to Irish company, which has purchased all the networks in Western Georgia.)

-M.2. Generally there is a great deal of disorder in this system. Nobody is responsible for any kind of damage. Their only care is the bill collection. Frequently unexpected surges in voltage cause the electric equipment to burn down. (Everybody agrees).

-M.4. Due to this half of the region has already lost TV-s and refrigerators.

-F.3. Since the beginning of the current year electricity was never switched off in our Community, because we always pay the bills timely. But this doesn't mean that service is carried out satisfactorily. One of the pillars has been broken down, but I could not bring the reconstruction group from the electric company. Finally, the people restored the pillar on their own. This becomes a common practice and should be addressed.

-M.3. How can we improve things which do not exist? They should be created, not improved.

(Everybody agrees unanimously that bill payment based on common meter creates conflicts among the people).

-M.4. In addition, the pillars themselves are subject to wastage, particularly if the transformer is remote from the end user. The wastage is further increased by the fact that, at many places pillars collide with trees. Even the works for accounting of this wastage are not carried out. If the common meter shows 120 Gel and total of individual meters adds up to 100, the difference is surely wastage of the network. The company does not have the right to require the reimbursement of this wastage from the population.

(Everybody says that if electricity is delivered 24 hour a day, the users will be solvent only if meters are installed individually. All the people will consume the electricity in quantities, which match their abilities).

-F.4. I live in the Block, which due to installation of individual meters, enjoys electricity 24 hours a day. The total amount of payment falls within the range of 3-4 Gel per user and everybody pays the bills. Prior to the installation of individual meters we collected 10 Gel per month from each user. The system of collection is still vague in our block.

-F.2. Also, the tariff must be cut.

-M.2. If the tariff is not cut the service quality must be appropriate and the people should not be forced to collect money for repairing of damages.

-F.1. In addition, they ask us to control the neighbors, which is absolute nonsense.

(Everybody says that they did not experience problems with delivery of electricity in previous years. The situation deteriorated during the past year. Seven years have been elapsed since the hydroelectric plant was passed to private hands. The electricity was being delivered to the entire region. The situation worsened since the local plant was delineated from region management and joined the common system. After that the bill collectors disappeared. They collected the money before. Each user paid 5-10 Gel per month

-M.1. Lack of electricity creates huge problems. People suffer from neurosis. We don't have natural gas. The gas balloon is expensive. In addition, some villages are separated from Ambroulauri by 40 kilometers and transportation to this distance is very difficult, especially when there is no traffic and 60-65% of population is elderly.

-F.2. We need the refrigerator because the food perishes. People who have cattle have to boil the milk and do other things too. It is very hard to use the wood stove in such a heat.

(Everybody entered the lively discussion when it came to the TV. They said that the information, if not anything else, is absolutely necessary for people).

-M.4. The creation of natural gas network could save the forest first of all. The electricity would be consumed in lesser quantities. (Everybody agrees)

-M.4. Lack of electricity causes to suffer everybody, particularly children.

(According to the other group members, women are suffering more from lack of electricity. Everybody refers to refrigerator, iron, food processing, housekeeping and laundering. Men are exempt from all these activities).

-F.2. The major problems of the Region comprise transport and roads.

-F.3. Unemployment.

-M.1. Which is the most important, the youth unemployment.

-M.4. The demographic situation is a complete catastrophe. Only 67 kids have been born since 2000 in our Region, while the number of deaths amounts to 620. There are many villages, in which the children have not been born for a long time. If the education system develops in a way implying the closure of schools, Racha Region will become absolutely uninhabited. The rate of migration is high anyway. (Everybody agrees).

-F.2. Probably, someone should stay in Racha. (They refer to the government).

30.06.2005

### **Ambrolauti Region. Sadmeli Community**

30.06.2005

<b>Number of participants</b>	<b>6</b>
<b>Male</b>	<b>3</b>
<b>Female</b>	<b>3</b>

-F.1. The electricity is being supplied very badly. It is scheduled only till 9 o'clock in the morning, which is insufficient. We can not manage to do anything in the morning. Then the electricity turns on at 8 in the evening, sometimes even later.

-M.1. They collect money well but can not give the electricity

-M.2. We were informed that 5 Gel per user would be collected in each 10 days from today onwards. When the common meter reaches this mark the electricity would be cut off until the next payment.

-M.3. This will be so until the people bring the meters out and attach them to the pillars. After that everybody will pay according to their own meters.

-M.1. It is not just. They already collected 15 Gel for three weeks of the current month. Besides, the common meter is installed on the transformer and wires coming out from there waste a lot. All the pillars collide with trees and population pays for this wastage.

-F.2. Common meters create a lot of trouble. I'm a sole woman and use very few electricity. Despite this, I pay as much as everybody else using heaters and electric engines.

-M.1. This creates conflicts among the neighbors.

-M.3. Even in the case when meters are installed for only 4-5 families, set aside for the entire village, conflicts are unavoidable.

-F.2. I do not want to leave my neighbors without electricity. That's why I ask the bill collector to cut the wire. They offered me to bring the meter outside for 28 Gel. How can I pay 28 Gel, when my pension is only 28 Gel? Let them bring it out on their own.

-M.2. The issue of bringing the meters out is discussed actively. The user must bring the meter to the company. Once it is checked for 3 Gel, it can be installed outside.

-M.1. One of the network staff members told me that in case if I bring the meter outside, it is sufficient this to be evidenced by 3 neighbors and corroborated by written recording.

-F.2. They are bored even by this and we are forced to intrude the neighbors with company's problems.

- M.1. The village itself carries out the work for bill collection. The individual charged by the village inhabitants collects the money by himself.
- F.3. If somebody doesn't pay the people from network cut the wire off. Currently two neighbors were cut off.
- M.1. If this is not the case the entire village will be cut off because of non-payer.
- M.2. Even if something fails to operate the village must pay itself.
- F.2. In case of disruption the entire village collects the money. But works are executed by people from networks.
- M.1. Sometimes the voltage is so low that the refrigerator and TV can not be turned on.
- M.2. This is because the pillars are entwined with trees.
- M.1. This must be corrected by the network itself. (All the group members know that the cost of electricity is 8.1 Tetris).
- M.3. There is a hydroelectric plant on the territory of our Community privatized by Kervalisjvili. This plant was integrated into the common system one year ago. It must be brought back again. As far as I know, 400 signatures are required to bring it back.
- F.1. Because we live in the affinity of the plant, we should be supplied at much lower price if not for free at all. (Everybody agrees). (Nobody knows for sure to whom the networks belong).
- M.1. I guess it belongs to Irishmen. As if they have bought it from Kutaisi. (The entire group says that the supply of electricity deteriorated in past several years)
- F.1. The cause of this is non-payment.
- M.1. Non-payment and disorder.
- F.1. Prior to the installation of common meters everybody paid duly. The collector checked regularly the meters inside the houses and everybody paid accordingly. (Everybody repeats the same). It is two months since the common meter was installed.
- M.3. After removing of this system the situation has worsened. If my mother was home alone, 3-4 Gel were consumed. In case if I was home, the maximum payment amounted to 10 Gel. We have neighbors who stay for only 2-3 days. They can use at most 1 Lari. Why should they pay 10-15 Gel?! Somebody has a machining workstation, heaters, welding equipment. They pay the same money. Let the meter stay where it is now. Let the strict controls and penalties be applied.
- M.1. Let them install the meters at their discretion, but incur the expenses of bringing the meters out.
- F.2. How can I bring the meter outside just by myself?
- M.3. The people will start bringing the meters out by themselves and some misfortune will surely happen.
- M.3. In case of 24 hour delivery, people will independently regulate the consumption and pay according to their abilities.
- M.2. In case of any problem occurs, males of the village gather and solve them collectively.
- M.3. We always inform the relevant services when the water pipe bursts or the pillar falls, but nobody comes to help us. Finally, we are forced to gather and repair everything collectively. The electric wires are entwined with trees in such a way that it is very dangerous to approach that tree if rain comes. Previously these trees were cut down regardless of their value. Nobody cares now.

- M.1. The payer must not suffer for others' faults.
- M.3. There was a funeral of my mother two weeks ago and the electricity was cut off in the entire street. The neighbors immediately collected the money and brought to the network to turn the electricity on for funeral. We were informed that other streets are also connected to the common meter and we will not be turned on until they don't pay.
- F.1. Of course, lack of electricity creates a lot of problems. Refrigerator is useless, laundry must be done manually, and food should be prepared on wood.
- M.1. It is all right now since days are long and we are working mostly in fields. What can you do during the wintertime when days are dark already at 5 o'clock?
- M.3. One should get the information. I even can not charge the phone.
- F.3. Of course, women suffer more from lack of electricity. All the housework is women's' prerogative and everything requires electricity. (Women agree. They refer to laundry, ironing, food preparation, watching the TV).
- M.1. I also need ironed clothes. I also suffer from lack of electricity.
- M.3. Women suffer more. I need everything ironed and clean, but all this should be arranged by a woman. Woman suffers more from lack of electricity.  
(Preserving of forest, economical consumption of electricity and improvement of living conditions of women are regarded by the entire group as major positive effects of creation of natural gas network).
- F.3. The major problems facing Community comprise water and electricity. The water pipes are cracked. (Everybody agrees).
- M.1. Water is usually delivered once a week.
- F.3. We have a well and get by somehow. There are many families who do not have wells.
- M.3. Approximately 40% of residents have left our village.
- M.2. More people have departed - approximately 50-55%.

### **Ambrolauti Region. Khvanchkara " Community"**

29.06.2005

<b>Number of participants</b>	<b>7</b>
<b>Male</b>	<b>4</b>
<b>Female</b>	<b>3</b>

- M.1. The electricity is delivered to those who pay. They make each of us pay 10 Gel and we have the electricity. There is no meter and it doesn't show who uses electricity and how much. The common meter is installed on the transformer. There are some cases when a certain street is cut off due to non-payment, while there is electricity in other. The electricity is supplied from the neighboring Lajani hydro plant.
- M.2. It is absolutely unacceptable. For example, this woman lives alone. She mostly lives with a relative, comes home in evenings and spends mostly 1 Gel worth of electricity. It is three weeks since she has been cut off. Other people have all kind of electric equipment and spend 20-30 Gel worth of electricity monthly. Why should everybody pay the same amount?
- M.3. Everybody should install the individual meters.

-M.1. There is a cheat in case of difference between the readings of individual and common meters, but all the people are obliged to pay. It is not my fault. They should find the cheater by themselves. They do not work, but still need the money.

-F.1. How can I install the meter just by myself? They must install it on their own.

-M.2. The wastage of electricity is huge due to the fact that wires touch the trees. That is why there is always a difference between the readings of individual and common meters. This must be accounted for.

-M.1. 24% of payment should be excluded due to that.

-M.2- Nobody accounts for this. They want to collect money for everything the plant has produced. When they get such huge money, why do not they install the meters on their own? (Everybody agrees).

-M.1. The process of bringing out the individual meters has to start yet. They cheated to the people and wanted to squeeze out more money by checking and requiring 25 Gel for installation of meters outside the homes.

-F.2. How can I get 25 Gel to give tem?!

-M.1. After that only those having the meters outside their homes will pay in accordance to reading. They faced the resistance from people with regard to these 25 Gel. That's why we were allowed to bring the meters out on our own. They will just come, record the amount shown on the meter and seal it.

(Women can not refer to exact rate. Men refer to the rate within the range of 8-9 Tetris)

-M.1. Currently the active part of the population collects the money. When times come, the person from network informs us and we collect the bills.

-M.1. There is such mess that it is impossible to determine who owns what, whose are the networks and whose is the production of electricity. Initially Dutchmen, who were in charge, supposedly passed everything on Americans. Saying plainly, I do not know. (Nobody has information with regard to this issue in the entire group).

-M.4. They have bought the plant built by our fathers at no price.

-M.2. There is no information on their activities. They did not tell us that they intended to install the new meters. Prior to this we paid 10 Gel per month regardless of the amount consumed. People started economizing after the common meters have been installed. The costs shown on individual meters will be less anyway. (Everybody agrees).

-M.1. This is a special sphere. Privatization of this branch was unacceptable. How can we talk about these issues when state doesn't exist? The high-voltage pillar was hit by a car and it hardly keeps standing. We informed the networks but they replied that we should restore them on our own. Only the specialist can deal with this. We should not touch it by any means.

-M.3. We should deal with everything - road, water, electricity networks and pillars.

-M.1. In general, pillars and wires are in a disastrous state. They are 40 years old. We undertake the repairing works if anything happens. Even the transformer is purchased by us. They have done just nothing.

(Both women and men say that men are active in solving Communitys problems.)

-M.1. Of course, a woman suffers more from lack of electricity than a man. Woman manages the entire housework including laundry, cleaning, ironing and food preparation. Men are interested only in TV. (The entire group agrees).

-M.2. The entire housework is based on electricity. That's why a woman suffers a lot from lack of electricity. My daughter was cooking when suddenly the electricity was turned off. There was no gas in the balloon and she was forced to resume cooking by the wood stove. Can you imagine how hard it is to stay near the fire in such a heat?

(Women repeat the same).

-M.1. In case of 24 hour delivery and installation of individual meters, people will spare the electricity. Recently people got accustomed to profligacy, but everybody will consume in accordance to their abilities to pay. (Everybody agrees).

-M.4. The natural gas should have been delivered to our village in Soviet period. The pipes were laid. Nobody paid attention to this issue after the collapse of Soviet Union and the pipes have been stolen.

-M.1. The delivery of natural gas would solve many problems in Community.

-M.4. The forest would have been saved, set aside everything else. All these landslides and misfortunes are due to unregulated logging.

-F.1. Natural gas is economically beneficial. It takes 15 Gel to charge the gas balloon, but one can use it for food preparation only for one month.

-F.1. The main problems of Community comprise electricity, water and roads. The migration from our village is relatively less. We have a lot of vineyards, which plays the significant role.

-M.2. If the price of grapes is high the youth will be interested to stay here.

-M.4. The peasant works restlessly throughout the year hoping to sell his product at a normal price in autumn. Finally he's got only crumbs. They steal everything.

-M.1. One of the inhabitants has installed the mini-hydro power station on the river. It generates the electricity, which is sufficient for his family. There is a possibility to build a small-scale plant in our village. The plant will satisfy the needs of 4 villages, i.e. the entire Community. We want to find an investor. The entire region of Racha was full of micro hydropower plants, but everything has been destroyed and perished.

**Annex 10: Guide for Conduct of the Focus Groups**

Region		-----
District		-----
Community		-----
Meeting Leader		-----
Assistant		-----
Number of Attendees		-----
Women		-----
Men		-----
Date of the Meeting		-----
Duration		-----

## 1. Economics

- Types of economic activity at City Councils (“Sakrebulo”):

Community’s main economic activity; its development level; what needs to be done for the further development (improvement/expansion)? (Average percentage of genders must be specified)

Indicate other economic activities (besides the main ones). Which of them have future prospects? What needs to be done to develop them even more? (Average percentage of genders must be specified)

What is the potential for economic development of the community? What needs to be done for its development?

## 2. Problems

- Identification and ranging of the community most important problems:
  - a) according to urgency;
  - b) according to gender
- Identification of ranging factors (why?)

## III. Power Supply Information

### III. 1. Supply Source and Intensity

- General satisfaction with the power supply service
- Power supply sources

Where from does the community mainly receive power?

Are there any **commercial lines, private lines, re-metered state owned or any other lines**?

- Who is the owner of each source?
- Who owns the power transmission system?
- What is the technical condition of the power transmission system?
- Does every family have electricity wiring? If not, how many families have and why?
- Does every family use electricity? If not, what is the percentage of families not using electricity? Why?
- How is power supplied: uninterruptedly, based on a schedule or chaotically?
- Indicate the power source in case of uninterrupted power supply.
- Indicate the schedule in case of scheduled power supply. Does the schedule depend on seasonality? If yes, how and why?
- How many hours of power supply does the family get during a day/month in case of chaotic power supply?

- Is there any discrimination in power supply? Specify privileged communities, districts, institutions, families. Why are they privileged? Indicate the supply source (Where do they get electricity from? Who is the supplier?)
- Is there a hospital, maternity hospital, medical institution, kindergarten, library at the regional center/community? If yes, do these institutions have privileges in getting power supply?
- Was the power supply schedule developed in agreement with the community members?
- What types of economic activity need power supply? (e.g.: pumping/distribution of water, greenhouses, mills etc.).
- What household activities need power supply?
- Information regarding electrical household equipment: iron, refrigerator, washing machine, water pump etc. How many families have each of these equipment? What is the opportunity of using it?
- Give an assessment of voltage: is it lower than standard, normal, higher than standard?
- Have there been any cases when the equipment is damaged due to low or high voltage? How frequently? Examples.
- How stable is the voltage? Are there voltage fluctuations? If yes, have there been any cases when the equipment is damaged due to the voltage fluctuations? How frequently? Examples.

### ***III. 2. Tariffs; Forms of Metering and Payment; Payment Level***

- Possession of information. What is the price of one kWh?
- What is the average electricity payment of one family per month? Are there any distinct exceptions? If yes, indicate.
- What is the payment form? (payments according to meter readings, fixed fees or other)
- Does the tariff change according to seasons? If yes, why and how?
- Are the existing tariffs and payment forms acceptable? If not, why? What would be more acceptable tariff and payment form? Why? Are there any analogies of the proposed options? Where? How well do they work?
- Does the population pay for electricity regularly? What percentage of the community members cannot / does not pay? Why? Is power supply disconnected for non-payment? If yes, how, by whom, with what results?
- Is there any guarantee or potential that the community will be able to pay for electricity if the supply meets demand? If yes, specify in detail.

### ***III. 3. Comparison with the Past History and Future Tendencies***

- Has power supply situation changes during the past 5 years? If yes, how?
- Will it improve or worsen during the following 5 years? Why?
- How can power supply improve?
- Is improvement of power supply possible under the current circumstances? If yes, how? Why not? Who does it depend on?

- What will change in the economic activity of the community or families as a result of improved power supply? What benefits will the people receive?

#### ***IV. Natural Gas Supply Information***

##### ***IV. 1. Supply Source and Intensity***

- General satisfaction with the power supply service
- Gas supply sources
- Who is the owner of each source?
- Who owns the gas pipe system?
- What is the technical condition of the system?
- Is every family connected to the gas supply system? If not, how many families have and why?
- Does every family connected to the gas supply system use gas? How intensively? What is the percentage of families using gas only in special occasions? Why?
- How is natural gas supplied: uninterruptedly, based on a schedule or chaotically?
- Indicate the schedule in case of scheduled gas supply. Does the schedule depend on seasonality? If yes, how and why?
- How many hours of gas supply does the family get per day/month in case of chaotic power supply?
- Is there any discrimination in gas supply? Specify privileged communities, districts, institutions, families. Why are they privileged? Indicate the supply source (Where do they get gas from? Who is the supplier?)
- Is there a hospital, maternity hospital, medical institution, kindergarten, library at the regional center/community? If yes, do these institutions have privileges in getting gas supply?
- Was the gas supply schedule developed in agreement with the community members? (only for the communities receiving scheduled gas supply)
- What types of economic activity need gas supply? (e.g.: greenhouses, factories etc.)
- What household activities need gas supply?
- How many families have gas stoves or gas heaters? How intensively is this equipment used? Why do not some of the families have gas equipment?
- Give an assessment of pressure: is it lower than standard, normal, higher than standard?
- How stable is the pressure? Are there any problems caused by the pressure fluctuations? If yes, give an example.

##### ***IV.II Tariffs; Accounting and Payment Form; Payment data.***

- Information. How much does 1 m<sup>3</sup> gas cost?

- How much on average does a family pay per month for natural gas consumption?
- Are there distinct exemptions? please, indicate;
- In what form is payment made? meter reading, fixed payment, other;
- Is the tariff changed according to seasons or not? If “yes”- how and why?
- How acceptable are tariffs and the form of payment. If it is not acceptable, why? What kind of tariffs and payment forms are more acceptable, why? Does the analogy of the proposed suggestion exist? Where? How well does it work?
- Does the population pay the natural gas payment regularly? Which percentage, approximately, of the members of Community do not/cannot pay the payment? Why? Is supply of natural gas disconnected for such non-payment? If “yes” – in what form, by whom, what are the results?
- Are there any guarantees or potential that Community population will be able to pay the price of natural gas? in case supply meets the demand requirements? If “Yes”, please, indicate in details.

### ***V. General Information on Energy Sources***

- Which energy sources are used for heating?
- Which energy sources are used for cooking?
- What is replacing family electric equipments? (e.g. Coal iron, heat water for hygiene purposes, etc.) What are the difficulties connected with this? (time, energy, quality, etc.)
- Are the products for sale or for family feeding spoiled due to lack of electricity? Examples.
- What role does a traditional fuel play in the population’s mode of life? Who takes the responsibility for collecting, bringing, or buying wood? What kind of difficulties of children’s role (girl/boy) is this related to? (work of pregnant women, elderly women);
- What does the population know about renewable sources of electricity (explain to them what is this) and what is their attitude regarding this issues, particularly, would they wish or not to participate in the renewable energy development projects? Describe the projects to them.

## ***VI. Comparison with Past History and Expectations (general attitude)***

### ***VII. Ethnic, Religious, Social and Age Structure of the Community.***

People of which nationality live in the community? Indicate the percentage of each nationally in the Community.

Religious self-identification of the community members. If the representatives of different religions live in the community, what is the percentage of each of them in the Georgian population? Do the representatives of religious sects live there or not?

Which social status groups are in the Community? (peasants, public workers, teachers, business representatives and etc.)

What is the percentage of each of them in the community? Do the representatives of deviant groups live in the Community?

Approximately what percentage of the Community's population occupy children, teenagers, youth (including 34 years old) before pension age, pension age and more?

### ***VIII. Who does the Population Trust and When?***

Family, relatives, friends, members of the community, people with good reputation, representatives of the criminal world, international organizations, NGOs, mass media, local governance organs, law enforcement organs and etc.

### ***IX. Integrity of the Community Members, Social Activeness, Factors of Activity***

Are there the cases when the community members (the whole community) solve problems together? Example.

Who are the most active person/ group in organizing collective activities?

Do the people/families/groups live in the Community, which do not participate in the collective activities? Who are they? Why do they not participate?

Do the people/families/groups live in the Community, which behavior is unacceptable for the majority of the Community? Who are they? Why are they unacceptable?

### ***X. Decision Making Mechanisms in Solving the Community Problems***

Usually which groups take part in the decision making process of the Community

problems? (Official structures, persons, families and etc.). Example

Can we assume that all Community members/households participate in making decisions? If “Yes” - in what form? (meetings, visits to all families, etc). Example

Were the cases of misunderstanding between the groups/members of the Community during the decision making process? If “Yes” – who are they?

Do the members of the community know how is the budget of the Community formed, spent and how much is the Community budget? If “Yes” – from which sources? If “No” – why they do not know?

### ***XI. Migration Data***

During the past 5 years, presently, in the coming 5 years. Gender and age of the migrants – based on general observations.

Approximately what percentage of the population left the Community for the last 5 years? Permanently? Temporarily? How many are employed outside of the Community, what are they occupied with and how often do they visit the Community?