





Task Report on Implementation of Law Enforcement Strategy (LES)



UNDP/GEF project "Catalyzing Financial Sustainability of Georgia's Protected Areas System" (00070382)

Testing site-level revenue generation mechanisms in Tusheti PAs

Prepared by

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Conservation & Research

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The views expressed in this report are those of the author and do not necessarily represent those of the United Nations or UNDP.

Abbreviations Used

APA Agency for Protected Areas

AVF Administrative Violation Form

FFI Fauna & Flora International

GCCP Georgian Carnivore Conservation Project

GEL Georgian Lari

GIS Geographical Information System

GIZ Deutsche Gesellschaft fur Internationalle Zusammenarbeit

IUCN International Union for Conservation of Nature

MIS Management Information System

NACRES Centre for Biodiversity Conservation and Research

NP National Park

PA Protected area

SNR Strict Nature Reserve

TPA Tusheti Protected Areas

UNDP United Nations Development Program

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1 Introduction

Establishing a cost-effective law enforcement system is crucial for the effective management of any protected area. This is particularly important where available resources (human, financial and material) are extremely limited.

In spring 2011, within the scope of the UNDP/GEF project "Catalyzing Financial Sustainability of Georgia's Protected Areas System" (00070382): Testing site-level revenue generation mechanisms in Tusheti PAs (hereinafter referred to as Project), and involving all stakeholders the Law Enforcement Strategy (LES), including patrolling strategies, for TPA was developed. This document sets out a framework for law enforcement activities relevant to TPA and defines core directions and connections among them. The document also gives, as far as possible, detailed and specific recommendations for law enforcement. The focus is on patrolling, as it is one of the most effective elements of law enforcement.

The present document describes law enforcement activities in TPA and obtained results for the 2011 season.

2 Law enforcement priorities and objectives

The Law Enforcement Strategy outlines main priorities for 2011-2012 that were identified on the basis of the human, financial and material resources currently available to TPA. The primary priorities are: (a) the protection of wild goat and their habitat; and (b) control of illegal logging; the secondary priorities are: (a) the protection of Tur; (b) control of illegal grazing in forests and meadows; and (c) control of people's (including visitors) movement in strictly protected zones and the nature reserve.

Activities required to address the above priorities were outlined and grouped in four main objectives. It was expected that these activities would significantly improve the law enforcement in TPA. In 2011, the TPA administration in close cooperation with partner and donor organizations implemented a number of activities that were to some extent innovative for Tusheti or had never been implemented at such a scale.

3 Existing resources for law enforcement

The payroll of the TPA ranger service has 28 rangers. However, the lack of suitable applicants to fill the vacancies was already evident in 2010. The problem persisted in 2011 too: out of 28 ranger posts only 14 were filled by full time rangers and 8 rangers were employed on a seasonal basis, namely for the summer months. The lack of rangers had a negative impact on the effectiveness of law enforcement.

The lack of infrastructure, with only three ranger stations (one of them is not completed), also affects the performance of the ranger service. In the last years there was severe lack of equipment too. During 2011 the situation has been in part improved (see below).

4 Implemented activities and results

The implementation period for LES activities was from late spring through early autumn. These activities were to address the main four objectives of the strategy and were expected to boost the effectiveness of the law enforcement in TPA.

Objective #1: Improve the protection of species and their habitats through effective law enforcement measures

Activity 1.1 Develop law enforcement operational plans for 2011

The LE Strategy outlines 10 high priority patrol routes dedicated to the protection of the wild goat and tur populations and their habitats.

A joint meeting of the NACRES team and the TPA rangers was held in Alvani on May 27, 2011 to elaborate an effective patrolling operational plan. At that meeting it was articulated that there were certain problems with filling the existing staff vacancies. Hence, it was clear that the TPA administration was unable to implement all 10 priority patrol routes during the 2011 season. It was necessary to adjust the LE operational plan to the existing capacity of the TPA administration in respect of human resources i.e. the number and/or frequency of the patrol routes was to be further reduced.

At the above meeting, we, together with the Chief of Ranger Service and Senior rangers, carefully reviewed each of the patrol routes as per LES. Certain routes were fine-tuned and some were even merged together if it was considered appropriate and also on the basis of the cost-effectiveness principle. Finally we selected 5 routes out of 10, the previously identified in the LE Strategy (see Appendix #1 for map of patrol routes).

Eventually only a certain number of the routes originally proposed in the strategy were included in the 2011 patrolling operational plan. Nevertheless, the patrolling activity planned for 2011 was overall relevant to the main LE priorities: the protection of wild goat and its habitat, and control of illegal tree cutting; also one of the planned patrol routes was solely dedicated to combat poaching of Tur in highly sensitive areas. The selected patrol routes were also expected to help control illegal grazing and in part human movement on the NR and strictly protected zones.

In the future as the ranger service becomes fully staffed and the number or rangers is increased, the scope of the patrolling operational plan should extend to include maximum number of the priority patrol routes outlined in the strategic document.

Activity 1.2 Develop and implement monthly patrol plans

Based on the above operational plan, the TPA Ranger Service independently elaborated monthly operational plans with monthly frequency, schedule, participating rangers, required equipment for each patrol route. Each of the patrol routes was conducted by 2 or 3 rangers (including Senior ranger). Patrol reports were completed after every patrol and submitted to the Head of ranger service.

The work conducted by the TPA Ranger Service over the 2011 season is summarized below:

The routine inspection was conducted in the sections of Chagma, Chanchakhovani, Gometsari and Pirikita from May 1-15, 2011. Later certain ranger stations were visited in additional unplanned inspections. No violations were revealed during those activities. Since May 25, 2011 ranger rotation scheme became operational at the Samkhevi ranger station.

On June 22, during patrolling on the Chagma section, the rangers revealed a violation - processed 32 fallen pine trees with a total quantity of 4.156 m³. The violator(s) could not be determined. The total damage to the state was calculated at 32.20 GEL.

During the period from July through October, the TPA rangers carried out patrols in the Chagma, Pirikita and Chanchakhovani sections of TPA. Patrolling frequency differed for each patrol route (see Appendix #2 for the description of implemented patrols). The rangers performed patrolling on foot or horseback and were equipped with: a tent, camera, GPS units, binoculars and a first aid kit.

During patrolling in the Chnachakhovani section, on July 8, the rangers revealed an instance of illegal grazing; a relevant violation form was completed and the case was sent to court.

In addition to the planned patrolling activity, the rangers conducted several "unexpected" patrols in the Chagma, Chanchakhovani, Gometsari and Speroza sections. During the hot summer periods, patrols intensified in those areas of TPA that are prone to forest fires. The rangers reminded the local people about the risks of forest fire as well as the need to obey fire safety rules.

Activity 1.3 Analyze patrol and intelligence data using GIS/MIS

Due to lack of equipment (GPS units) TPA rangers were unable to record geographic coordinates for the field data collected in the LE activities or biodiversity monitoring during the 2011 season. Presently, this problem has been partially solved¹. In the future it will be possible to analyze the LE data in GIS.

It is notable that within the framework of GCCP (FFI/NACRES) TPA was provided with a powerful portable computer, and the natural resource specialist of TPA attended a short course in use of GIS technologies. Thus TPA already has certain level of capacity to analyze collected data in GIS.

Objective #2: Improve law enforcement capacity

¹ Within Georgia Carnivore Conservation Project (FFI/NACRES) two GPS units equipped with a digital camera were donated to TPA administration and more units are planned to be purchased.

Activity 2.2 Implement ranger bonus scheme – encouragement of active rangers

Through evaluating the additional trainings delivered to the TPA rangers and the joint work in the field, the project implementation team identified staff members who showed outstanding performance in the activities implemented by the Project or their direct duties. With the prior approval of the TPA management we negotiated with the GCCP management that subsequently provided additional payment to the selected TPA employees in the form of informal bonuses.

Financial forms of encouragement of active rangers should continue in the future too on the basis of the principles proposed in the LE strategy.

Activity 2.4. Develop a program of operational guideline with detailed SOPs

Within the FFI/NACRES Georgian Carnivore Conservation Project (financed by EU) an international consultant prepared the draft ranger program manual. Currently it is only available in English. It is planned to translate this document into Georgian and review it with relevant stakeholders.

Activity 2.5 Rangers trainings

Due to high turn-over among the TPA rangers, staff training is needed on a regular basis. The TPA administration carries out trainings of new rangers using own internal resources.

In June, newly recruited rangers were introduced to those articles of the Administrative Code of Georgia that are relevant to the law enforcement in a protected area. In addition, rangers were introduced to the different protection regimes effective in various zones of TPA and to the internal regulations of the administration. They also received instructions how to interview local population stressing the importance of this activity.

In spring 2011, TPA rangers attended the training courses organized by the International Technical Assistance Program of the U.S. Department of the Interior. They became familiar with the best practices in US national parks. These practices are to be adapted and used in the TPA administration's future work.

In July, the project implementation group (NACRES employees) delivered training to the rangers and to the Resource Specialist of TPA. The topics included: data collection, data processing and storing. The training lasted several days and the participants improved their GPS and map reading skills, and were trained in use of the compass. The basics of use of GIS and the maintenance of data bases were also reviewed.

Within the framework of GCCP (FFI/NACRES, funded by EU) the TPA staff members attended a two-day training in basic first aid. (Later, 8 first aid kits were handed over to TPA administration to be placed in their cars and ranger stations and some to be carried on patrols).

Activity 2.6 Supply equipment

Based on the work conducted in Tusheti protected areas as well as the view of the TPA administration, the project implementation team shared their thoughts on the equipment needs of TPA with the GCCP management. One of the components of GCCP was to increase the law enforcement capacity of TPA. The project implementation team was actively involved in the procurement of the selected equipment and assisted the GCCP in choosing suitable suppliers and models of the equipment. Within the framework of the GCCP the TPA administration was provided with a high capacity portable computer for GIS application, saddles, binoculars, first aid kits and GPS units. Notably those GPS units were equipped with a digital camera that would facilitate data collection and documenting of violations in the field.

Activity 2.7 Provide per diems/food for rangers on patrol

The project implementation team and the TPA administration estimated the number of staff to be involved in patrolling and worked out a daily field menu for rangers. The need of food provision to TPA rangers was subsequently discussed with the GCCP management. With their financial support and with the help of the Project's local working group (LWG), namely the association "Friends of Tusheti protected area" it was possible to provide the TPA staff with daily food while in the field. During the period from July through October 2011, all the rangers involved in patrolling were provided with sufficient food.

As it was expected, the rangers were very satisfied to be supplied with food and this apparently raised their motivation.

Activity 2.9 Develop and implement ranger exchange pilot program

Ranger exchange program is viewed as an effective tool to increase the effectiveness of law enforcement. The program involves sending rangers from one protected area to another for them to take part in different management activities in the host park. The participating rangers will have the opportunity to share their knowledge and experience with each other. This is expected to increase their qualification as well as motivation.

The work plan and preliminary budget for the ranger exchange pilot program is presented in Appendix #3

Objective #3: Involve the local communities in the protection of natural resources

Activity 3.1 Advertise the APA hot line among local population and tourists

One of the key elements of law enforcement is quick and timely response to violations. Therefore it was considered necessary to advertise and widely publicize the APA hot line. Various methods are used to publicize the APA hot line among the local population. However many high risk sections of the park are more frequently visited by the visitors as compared to local people (perhaps excluding shepherds). Therefore it is important to advertise the hot line among the park visitors too. The hot line number will be indicated on the tourist maps that are being prepared as a joint work between

the TPA administration, project implementation team and GCCP, and will be printed soon. The maps will also have visitor guidelines, which will help prevent the violations of protection regime in TPA by the visitors. The maps will be widely disseminated among local guesthouses and visitor centers.

Activity 3.2 Involve community groups in LE activities

In July, a two-week eco-camp was organized in Omalo in which 10 Tushetian students participated (See Appendix #4 for the list of eco-camp participants). TPA rangers and the Resource Specialist delivered trainings in completing field date sheets and forms for patrolling and biodiversity monitoring. The participants also attended theoretical and practical sessions in use of the compass, maps and the GPS. On July 25, the students participated in patrolling along the patrol route *Omalo-Keseloebi-Que-Tsiteli mta-Omalo*. One of the purposes of this patrolling was to find and remove snares placed by poachers in the Omalo area. No violation was detected during the patrol.

Objective #4: Integrate law enforcement issues into other aspects of protected area management

Activity 4.1 Ensure TPA reclassification reflects law enforcement principles

Law enforcement principles including practical aspects of law enforcement and violation prevention, were used as a basis for the TPA reclassification assessment and then for the actual elaboration of reclassification recommendations prepared within the Project². In respect of reclassification, the last amendment to the relevant law was made on March 22, 2011. As a result the status of certain parts of TPA was changed. These changes are to some extent in compliance with the results and attitudes deriving from the assessments and analyses conducted within the Project. They are expected to contribute to conflict resolution between the TPA administration and the local population, and to facilitate prevention of violations as well as sustainable use of resources. However our assessment has shown that the present spatial planning of TPA still has certain important shortcomings that should be taken into account when the next reclassification process can be initiated. Concrete recommendations have been elaborated within this Project and can be found in the relevant report³. Report on Tusheti Protected Area Reclassification, NACRES 2011, (UNDP/GEF).

Activity 4.2 Conduct educational activities and raise awareness of law enforcement issues among the local communities

Rangers periodically met with the local population and informed them about protection regimes in Tusheti and about biodiversity conservation. TPA staff periodically disseminated among the local people posters and other materials on nature conservation issues.

Environmental education for school children was one of the main focuses of the TPA administration's work. Several seminars were organized for the schools of Upper and Lower Alvani

² Report on Assessment for Tusheti NP reclassification, NACRES 2010 (UNDP/GEF); Report on Reclassification of Tusheti Protected Areas, NACRES 2011, (UNDP/GEF)

³ Report on Tusheti Protected Area Reclassification, NACRES 2011, (UNDP/GEF).

to introduce the Tusheti Protected Areas, its aims and roles. In total, more than 200 school children attended the seminars.

Activity 4.3 Ensure that law enforcement principles and challenges are reflected in tourism management and planning

The law enforcement principles were fully considered in the development of the tourism and marketing sub-plan for TPA, as well as in planning and implementing wildlife watching tourism⁴. All activities that were planned and implemented within the above components were based on the primary need of practical law enforcement and prevention of violation. This was reflected in the following elements: spatial planning of tourist infrastructure, planning of tourism development, communication with local population and visitors about the significance of protected areas, protection regimes and etc.

5 Recommendations for improving law enforcement

At large, the activities of LE strategy planned for 2011 were fully or partially implemented. In 2012, most of the activities should not only continue but be implemented at a wider scale. Activities, which were not implemented in 2011, still remain valid and should be carried out in the next year.

Below are concrete recommendations for improving the law enforcement in TPA listed according to the objectives of the 2011 LE Strategy.

5.1 Enhancing capacity for law enforcement

Raising rangers' motivation

As outlined in the LE strategy, rangers' motivation could be increased through a bonus scheme (Activity 2.2), as well as through a system of scaled salaries dependent on the length of service and qualification (Activity 2.3). Within the LE strategy this latter activity was planned for 2011, but due to lack of funds was not implemented. This is crucial for raising rangers' motivation and should be considered a primary priority in the future as soon as this becomes feasible.

Increase coverage

Currently the patrolling and other law enforcement measures do not equally cover all parts of TPA. Many parts of territory remain unprotected or effective control cannot be undertaken. It is necessary to expand the "effective zone" of protection through covering the areas that are not

⁴ Sub - Plan for Tourism Development and Marketing for Tusheti Protected Area Complex, NACRES 2011, (UNDP/GEF); Report on Sub-Plan Implementation for Tourism and Marketing, NACRES 2011, (UNDP/GEF); Task report on Development of community-based ecotourism/wildlife watching, NACRES 2011, (UNDP/GEF); Task report on Establishing Wildlife Watching Tours for Visitors 2011, NACRES (UNDP/GEF).

currently patrolled or through increasing the patrolling effort (frequency) where this is not sufficient. The increase of coverage is directly linked to enhancing the ranger force.

Enhancing the ranger force

Increasing the number of rangers is one of the objectives of the LE strategy (Activity 2.1). However in 2011 it proved problematic even to fill the full complement of available ranger posts i.e. 28 rangers. The major impediment to a full complement of staff is the available comparatively low salary. Accordingly, to fill the available ranger posts with qualified and motivated staff, ranger salaries should be increased.

However, 28 rangers are not enough to effectively control illegal activities on the whole territory of TPA. In order to provide complete coverage there should be a total of 36 rangers (so additional 8 ranger posts should be added). This would allow optimally sized patrol teams (three or four rangers per team) and an increase of patrol intensity while still providing sufficient care to the stations and all sections of TPA.

Improvement of protection infrastructure

Lack of funding does not currently allow any significant improvement of the LE infrastructure on TPA. E.g. in 2011 it was planned to improve/install additional regulatory signage throughout the TPA (activity 2.8). It still remains an acute need to build additional ranger stations in parts of TPA that are far from the TPA Headquarters in Omalo, hence are less easily accessible, and have high risks of illegal activities.

5.2 Improving species and habitat protection

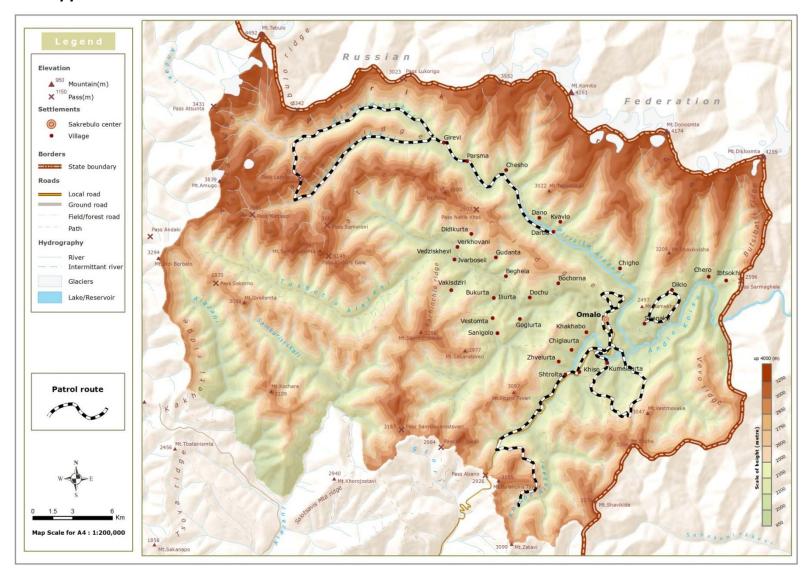
Camera traps as a method of law enforcement

In addition to the LE techniques prescribed in the LE Strategy, camera traps may be used to effectively control the "hunting" trails. This method has been successfully used in Borjom-Kharagauli national park and Lagodekhi protected areas (the ranger exchange program described in Appendix 3 would be an additional opportunity for the rangers to learn how to use camera traps against violations).

Control of the hunting trails near village Omalo using camera traps will be possible all year round including the winter months. This would be a good tool to detect and also prevent illegal activities. During the winter months camera traps can in addition collect valuable information for biodiversity monitoring.

Appendixes

Appendix 1: Patrol routes



Appendix 2: Description of patrol routes implemented on TPA in 2011

Patrolling date	Start time	Frequency per month	Duration	Route	Potential risks	Used equipment
18. 07. 2011 22. 08. 2011 25. 09. 2011 12. 10. 2011	07:00	Once	2 days	Omalo – Samkhevi – Bulancho – Alatovani – Samkhevi – Omalo	Hunting / illegal timber cutting Snares	Binoculars, camera, GPS, 1st aid kit
01. 07. 2011 04. 07. 2011 16. 07. 2011 03. 08. 2011 12. 08. 2011 15. 08. 2011 04. 09. 2011 14. 09. 2011 27. 09. 2011 07. 10. 2011	06:00	Three times	1 day	Omalo – Keseloebi – Kue – Tsiteli mta – Omalo	Hunting / illegal timber cutting Snares	Binoculars, camera, GPS, 1st aid kit
03. 07. 2011 15. 07. 2011 27. 07. 2011 15. 08. 2011 27. 08. 2011 04. 09. 2011 17. 09. 2011 25. 09. 2011	06:00	Three times	1 day	Shenako – Tusheti Alazani gorge – Dotkalti – Diklo – Shenako	Hunting / illegal timber cutting Snares	Binoculars, GPS, camera, 1st aid kit
17. 07. 2011	06:00	Once	4 days	Omalo – Ighone – Kochorta	Hunting / illegal	Tent, binoculars, GPS,

17. 08. 2011				– Vestmovake–Kumelaurta	timber cutting	camera, 1st aid kit
17. 09. 2011				– Omalo	Snares	
13. 07. 2011	07:00	Once	3 days	Dartlo- Larovani gorge –	Hunting and	Binoculars, camera, 1st aid
15. 08. 2011				Kvakhidis Tskali gorge-	Snares	kit
15. 09. 2011				Dartlo		
10. 10. 2011						

Appendix 3: Ranger exchange pilot program

Background and purpose

Georgian protected areas differ in respect of ecological as well as socio-cultural environment. There are differences in organizational development, institutional experience, management, etc. Sharing experience and knowledge between the protected areas is useful for increasing the effectiveness of the whole system as well as of each protected area. At present, knowledge and experience sharing is more or less facilitated between the higher management of the protected areas (Directors, Heads of Law Enforcement, Natural Resource specialists and visitors specialists) through joint meetings, trainings and etc. Whereas most of the rangers have never visited other protected areas and have little understanding of the work of their colleagues from other protected areas.

The purpose of the ranger exchange program is to raise ranger qualification through experience sharing among different protected areas.

Pilot program description

Tusheti Protected Areas (TPA) and Borjomi-Kharagauli national park (BKhNP) may be selected for piloting the ranger exchange program as the two parks are thematically linked while the distinct seasonality in the operation of TPA may be used for the benefit of the program.

As the autumn progresses TPA rangers become less busy. During this period (e.g. in the first half of October) some of them may be sent to Borjomi. Apart from other activities, the exchange rangers from TPA may be involved in red deer counts during the rut. The Tushetian rangers would gain valuable experience in recording the rutting red deer by audio signals. By participating in red deer tracking they would get additional training in recognizing red deer tracks and pallets. All of this will be useful for monitoring in Tusheti.

Borjom-Kharagauli rangers could in turn go to Tusheti in summer. They would participate in patrolling activities as well as in wild goat counts. This would be a good opportunity for the Borjomi rangers to observe wild goats in their natural environment, learn more about wild goat habitat, their behavior and ecology. This experience would help them improve ungulate monitoring in Borjom-Kharagauli national park and more importantly in the planned wild goat reintroduction program (e.g. in monitoring the released individuals).

Such obvious thematic links between the Tusheti and Borjom-Kharagauli protected areas will help to achieve additional tangible results during piloting of the ranger exchange program. But in the future this may not be a requirement. PA rangers may find it interesting to work in an environment that is ecologically and culturally different from their own one, e.g. if ranger exchange program is implemented between Tusheti and Kolkheti protected areas.

The exchange team should consist of 3-4 employees of the ranger service and apart from rangers may also include senior rangers.

The exchange period may be 10 days or more. The visiting rangers will learn about the landscapes of the host protected area, specifics of law enforcement, prevailing risks and problems and relations with the local population. They will participate in patrols and biodiversity monitoring conducted by the local rangers. They will in turn share their experience with the host rangers. When back to their protected area, they will share newly acquired knowledge and experience with their fellow rangers.

Tentative budget

(a) Cost for 4 rangers from TPA to visit Bordjomi-Kharagauli National Park

Description	Unit price	No. of units	No. of	Total (GEL)
	(GEL)		rangers	
Transportation (Alvani-Borjomi and back)	25	2	4	200
Per diems/food	30	10 days	4	1,200
			Total	1,400

(b) Cost for 4 rangers from Bordjomi-Kharagauli National Park to visit TPA

Description	Unit price	No. of units	No. of	Total (GEL)
	(GEL)		rangers	
Transportation (Bordjomi-Alvani and back)	25	2	4	200
Transportation (Alvani-Omalo and back)	60	2	4	480
Per diems/food	30	10 days	4	1,200
	•	•	Total	1,880

NB: The above budget does not include accommodation costs. Visiting rangers should use existing facilities at the host protected areas (ranger stations or ranger rooms) to minimize expenses.

Appendix 4: List of student participants in patrolling

- 1. Levan Chrelashvili Tbilisi Humanitarian University, Faculty of Law.
- 2. Levan Cholikidze Tbilisi Technical University, Informatics and Management.
- 3. Soso Cholikidze Tbilisi Technical University, Informatics and Management.
- 4. Mikheil Bashinuridze Tbilisi Technical University, Faculty of Construction.
- 5. Vakhtang Kochlamazashvili St. Andrew University, Faculty of Physics and Mathematics and Computer Sciences.
- 6. Tamar Azikuri Ivane Javakhishvili Tbilisi State University, Business and Management Faculty.
- 7. Salome Idoidze Ivane Javakhishvili Tbilisi State University, Business and Management Faculty.
- 8. Natia Tilidze Ilia State University, Faculty of Arts and Sciences.
- 9. Natia Ujirauli Georgian Aviation University, Business and Management Faculty
- 10. Lia Itiuridze University of International Relations of Georgia, Faculty of Finance and Banking