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|  | Clima_East_Logo |  |  |

Sustainable management of pastures in Georgia to demonstrate climate change mitigation and adaptation benefits and dividends for local communities

UNDP project ID# 000 84937

Terminal Evaluation Report

December 2016

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Table of Contents[[1]](#footnote-1)

[List of Acronyms 4](#_Toc473403980)

[Summary Tables 5](#_Toc473403981)

[1. Project description and design 8](#_Toc473403982)

[1.1. Project timeframes 8](#_Toc473403983)

[1.2. Specific problems that the project sought to address 8](#_Toc473403984)

[1.3. Project’s Indicators including Baseline and Targets 11](#_Toc473403985)

[1.4. Main stakeholders and planned stakeholder participation 13](#_Toc473403986)

[1.5. Management arrangements at project design 13](#_Toc473403987)

[1.6. Linkages between the Pilot in Georgia with the Policy project and with the different Pilots 14](#_Toc473403988)

[2. Project Implementation 15](#_Toc473403989)

[*2.1.* Adaptive management and changes to the project design 15](#_Toc473403990)

[2.2. Partnership arrangements with relevant stakeholders 16](#_Toc473403991)

[2.3. Project Finance 17](#_Toc473403992)

[2.4. Monitoring and evaluation during implementation\* 18](#_Toc473403993)

[2.5. Implementing Agency and Executing Partners\* 21](#_Toc473403994)

[3. Project Results 23](#_Toc473403995)

[3.1. Overall results (attainment of objectives)\* 23](#_Toc473403996)

[3.1.1. Output/Component 1: Implementation of sustainable land use practices in Dedoplistskaro region, including partial rehabilitation and restoration of migratory routes 23](#_Toc473403997)

[3.1.2. Output/Component 2: Implementation of the pastures management plan and development of degraded pastures rehabilitation plan for territories within the Vashlovani PAs 27](#_Toc473403998)

[3.1.3. Output/Component 3: Livelihoods of farmers are improved and sustainability is ensured 29](#_Toc473403999)

[3.1.4. Overall assessment of results 31](#_Toc473404000)

[3.2. Relevance\* 33](#_Toc473404001)

[3.3. Effectiveness and Efficiency\* 33](#_Toc473404002)

[3.4. Sustainability\* 35](#_Toc473404003)

[3.5. Impact\* 37](#_Toc473404004)

[4. Conclusions, Lessons & Recommendations 39](#_Toc473404005)

[4.1. Main conclusions and lessons of the Terminal Evaluation 39](#_Toc473404006)

[4.1.1. Understanding of pastures management at the conceptual level 39](#_Toc473404007)

[4.1.2. Responding to pastures management within the regional specificity 40](#_Toc473404008)

[4.1.3. Establishing an institutional basis for pastures management in Georgia 41](#_Toc473404009)

[4.2. Key recommendations of the Terminal Evaluation 42](#_Toc473404010)

[4.2.1. Continue the institutional and policy process for pastures management 42](#_Toc473404011)

[4.2.2. Disseminate the Pastures Management Plan for VNP among local stakeholders 42](#_Toc473404012)

[4.2.3. Document and upscale the technical information generated through the project 42](#_Toc473404013)

[4.2.4. Continue the implementation of needed interventions for pastures management and the development of the sector as a whole 43](#_Toc473404014)

[Annex 1. Itinerary 45](#_Toc473404015)

[Annex 2. List of persons interviewed 46](#_Toc473404016)

[Annex 3. Summary of field visits 47](#_Toc473404017)

[Annex 4. List of documents reviewed 48](#_Toc473404018)

# List of Acronyms

|  |  |
| --- | --- |
| AMC | Association Management Center |
| APA | Agency for Protected Areas |
| ASP | Agency of State Property |
| EU | European Union |
| GEL | Georgian Lari |
| GHG | Green House Gas |
| MoA | Ministry of Agriculture |
| MoEP | Ministry of Environment Protection |
| MTE | Mid-Term Evaluation |
| NACRES | Centre for Biodiversity Conservation and Research in Georgia |
| PA | Protected Area |
| PEB | Project Executive Board |
| PM | Project Manager |
| PMP | Pastures Management Plan |
| PMU | Project Management Unit |
| ROM | Results-Oriented-Monitoring |
| SAVI | Soil-Adjusted Vegetation Index |
| TE | Terminal Evaluation |
| UNDP | United Nations Development Programme |
| VNP | Vashlovani National Park |
| VPAs | Vashlovani Protected Areas |

# Summary Tables

**Table 1. Georgia Pilot Project Summary Table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Project Title |  | | | |
| **UNDP Project ID** | 00084937 | **EU Project ID** | | 5197 |
| **ATLAS Business Unit Award No.** | 00071514 | **Project Document Signature Date** | | 27.05.2013 |
| **Country** | Georgia | **Date Project Manager hired** | | 01.04.2013 |
| **Region:** | Caucus Region | **Inception Workshop date** | | 09.07.2013 |
| **EU Focal Area/Strategic Objective** | EU Eastern Neighbourhood and Partnership Instrument (ENPI) | **MTE date** | | June 2015 |
| **Trust Fund** | 30079 | **Proposed closing date:** | | December 2016 |
| **Implementing Agency** | United Nations Development Programme (UNDP) | | | |
| **Other executing partners** | Agency for Protected Areas (APA)/ Ministry of Environment Protection (MoEP) | | | |
| Project Financing | **At approval (USD)** | | **At Final Evaluation (USD)** | |
| **[1] EU Financing** | 1,389,609 | |  | |
| **[2] UNDP Contribution** | 26,900 | |  | |
| **[3] Others** |  | |  | |
| **PROJECT TOTAL COSTS** | 1,416,509 | | 1,295,354 | |

**Table 2. Summary of Terminal Evaluation Rating for the Georgia Pilot Project**

|  |  |  |  |
| --- | --- | --- | --- |
| **1. Monitoring and Evaluation** | ***Rating at MTE*** | ***Rating at TE*** | ***Qualitative summary evaluation of main criteria at TE*** |
| M&E design at entry | Satisfactory | Highly Unsatisfactory | The indicators at objective level and component level were not aligned with results-based management nor were SMART indicators. They did not support the project’s needs for M&E and reporting. |
| M&E Plan Implementation | Satisfactory | Highly Unsatisfactory |
| **Overall quality of M&E** | **Satisfactory** | **Moderately Unsatisfactory** |
| **2. Implementation & Execution** | ***Rating at MTE*** | ***Rating at TE*** | ***Qualitative summary evaluation of main criteria at TE*** |
| Quality of UNDP Implementation | Moderately Satisfactory | Satisfactory | Clear implementation and execution responsibilities allowed the timely project implementation and developing partnership arrangements and stakeholders’ participation despite lack of a clear intervention logic of the project. |
| Quality of Execution by Executing Agency | Satisfactory | Satisfactory |
| **Overall quality of Implementation / Execution** | **Satisfactory** | **Satisfactory** |
| **3. Assessment of Outcomes** | ***Rating at MTE*** | ***Rating at TE*** | ***Qualitative summary evaluation of main criteria at TE*** |
| Quality of Project Outcomes | Satisfactory | Satisfactory | Despite challenging design and M&E system, the project has met its objectives and confirmed its importance and relevance at national and local level. Without the highly effective and efficient management of this project, the results could not have been achieved. |
| Relevance | Relevant | Relevant |
| Effectiveness | Moderately Satisfactory | Highly Satisfactory |
| Efficiency | Satisfactory | Highly Satisfactory |
| **4. Sustainability** | ***Rating at MTE*** | ***Rating at TE*** | ***Qualitative summary evaluation of main criteria at TE*** |
| Financial resources: | Moderately Likely | Moderately Likely | Despite major breakthrough in the project’s achievement related to pastures management, the fact that this is a first initiative dedicated to pastures management in Georgia makes it challenging to establish a sustainable basis for pastures management in the country after few years of project’s implementation. |
| Socio-political: | Moderately Likely | Moderately Likely |
| Institutional framework and governance: | Moderately Likely | Moderately Likely |
| Environmental : | Moderately Likely | Moderately Likely |
| **Overall likelihood of risks to Sustainability** | **Moderately Likely** | **Moderately Likely** |
| **5. Impact** | ***Rating at MTE*** | ***Rating at TE*** | ***Qualitative summary evaluation of main criteria at TE*** |
| **Overall project impact** | **Not available** | **Significant** | Although the M&E system did not allow to document the project’s impact and to support reporting of the attainment of planned impacts, the project’s outputs and results have been planned based on strategic and in-depth assessments which have ensured that the project’s interventions reflect the national and local priorities in pastures management and reach the required impact. |

|  |  |  |
| --- | --- | --- |
| ***Rating scales to be used in the TE*** | | |
| ***Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution*** | ***Sustainability ratings:*** | ***Relevance ratings*** |
| 6: Highly Satisfactory (HS): no shortcomings  5: Satisfactory (S): minor shortcomings  4: Moderately Satisfactory (MS)  3. Moderately Unsatisfactory (MU): significant shortcomings  2. Unsatisfactory (U): major problems  1. Highly Unsatisfactory (HU): severe problems | 4. Likely (L): negligible risks to sustainability | 2. Relevant (R) |
| 3. Moderately Likely (ML):moderate risks | 1.. Not relevant (NR) |
| 2. Moderately Unlikely (MU): significant risks  1. Unlikely (U): severe risks | ***Impact Ratings:***  3. Significant (S)  2. Minimal (M)  1. Negligible (N) |
| ***Additional ratings where relevant:***  Not Applicable (N/A)  Unable to Assess (U/A) | | |

# Project description and design

## Project timeframes

The pilot project for Georgia was planned over a duration of 4 years (48 months), extending from January 2013 till December 2016; however, the effective project duration was slightly less than 4 years given that the project was only initiated in May 2013.

As such the effective project duration was only 44 months instead of 48 month.

The key project’s timeframes are presented in Table 3 below and are compared with the initially planned key milestones and show that the project has met the timelines of all its projected milestones, and has even conducted its Terminal Evaluation (TE) and ensured its completion few months in advance.

**Table 3. Project key milestones and dates**

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Date** | **Month of project**  **(initially planned month)** |
| Project Document Signature by the Government | May 2013 | 0 (0) |
| Official Project Start | May 2013 | 0 (0) |
| Project Inception Workshop | July 2013 | 3 (3) |
| Mid-Term Evaluation (MTE) | May 2015 | 24 (24) |
| Terminal Evaluation | November 2015 | 43 (44) |
| Project Completion (planned) | December 2016 | 44 (48) |

## Specific problems that the project sought to address

The pilot project for Georgia under the Regional ClimaEast project targets the pastures located in the Vashlovani Protected Area (VPA) which is constituted of the Vashlovani Nature Reserve (10,142 ha), Vashlovani National Park (24,598 ha), and three natural monuments (the Alazani floodplain forest, the Takhti-Tepa mud volcano and the Artsivi gorge). With a total surface area of 35,053 ha, VPA is one of the largest PAs in Georgia.

The VPA is situated in the south-eastern most part of Georgia in the Dedoplistskaro Municipality between the slopes of the Gombori Mountain Range in the north and the Iori plateau in the south.

The VPAs is remarkable for its landscapes and habitats, which are generally not typical of Georgia; these include juniper and pistachio arid light woodlands, semi-deserts and dry steppe. The biodiversity of the VPA includes a rich community of carnivores (brown bear, wolf, leopard, lynx, golden jackal, wild cat, etc.) and is also distinguished by high reptile diversity. Since it still harbors what seem to be the best suitable habitats, Vashlovani is one of the key sites for the planned reintroduction of the goitered gazelle, a species which became extinct in Georgia almost half a century ago.

Parts of Vashlovani National Park (VNP) and its adjacent areas are traditionally used as winter pastures for livestock. Livestock grazing is the most important of the human factors that have played an important role in shaping the Vashlovani landscapes and creating the ecological mosaic currently found throughout the park.

The Georgia pilot project came as a response for the need for the rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia as a whole and in the VNP in specific. The project planned to achieve this through various activities conducted to rehabilitate the pastures that are degraded within the territories the VNP as well as pastures outside of the VNP territories (refer to project area of intervention where pastures were identified within the VNP and outside the VNP in Figure 1 below).

The initial project document for the Pilot in Georgia (signed in 2013) is based on information on the types and condition in the pastures within the VPA and its adjacent territories from a study prepared in 2007 within the framework of the Georgia’s Protected Areas Development Project implemented by APA with funding from the Global Environment Facility (GEF) through the World Bank. The study showed that ecological, phyto-sociological, floristic and living conditions of ground vegetation of the VNP are disturbed. The study indicated that the ecological condition of pastures was considered to be in critical conditions due to the unsystematic and excessive grazing of large number of sheep; the study also indicated that severe pastures degradation is leading to the decline of populations of many rare plants.

|  |
| --- |
| Alternative pastures.jpg |
| **Figure 1. Map of project’s intervention area in and around the Vashlovani National Park territories (VPA territories are the white areas with black boundaries in this map)[[2]](#footnote-2)** |

**The overall goal of the initial project document is the following: “Rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia”.**

The main objectives of the project were defined as follows:

* To improve the quality of pastures by reducing the pressures of climate change and by rehabilitating the most degraded pastures.
* To encourage economic activity to be reduced in pasturelands located in the protected area and increased in areas less vulnerable.
* To provide training and support to the local farmers and sheep breeders in sustainable land and grazing practices, thereby increasing their capacity in natural resource management, raising awareness and resilience to natural disasters.
* To increase sustainable use of natural resources such as solar and biomass.

It should be noted that the initial project document (which was signed in May 2013) has been revised in March 2014 following an EU Results-Oriented-Monitoring (ROM) mission which resulted in some modifications in the project’s objectives and activities.

Among others, the ROM mission requested that the initial plan to resettle farms from the VNP to alternative pastures outside the VNP territories should be changed. This recommendation was also in line with initial findings of the project’s updated baseline assessment which confirmed lack of feasibility of alternative pastures outside VNP territories.

As such, the project’s objectives were modified by deleting the following main objective: “**To encourage economic activity to be reduced in pasturelands located in the protected area and increased in areas less vulnerable**”.

It was also agreed following the ROM mission to focus the “Pasture Management Plan” on the VNP territories while the project activities would still benefit farmers outside the VNP. This resulted in changing the project’s interventions to focus the restoration of pasture lands within the boundaries of the VNP.

As such, the project document was restructured around three main components, as follows:

* **Component 1:** **Implementation of sustainable land use practices in Dedoplistskaro region, including partial rehabilitation and restoration of migratory routes.** In the initial project document, this component aimed for the following: “Restoration of alternative pastures and implementation of sustainable land use practices in Dedoplistskaro region”.

Activities under this component included the following:

* Development and implementation of a sustainable Pastures Management Plan (PMP)
* Increase awareness on sustainable land management
* **Component 2: Updating and implementation of the pastures management plan and development of degraded pastures rehabilitation plan for territories within the VPAs.**

Activities under this component included the following:

* Rehabilitation works of overgrazed territories
* Improvement of pastures quality within the VPA
* **Component 3: Livelihoods of farmers are improved and sustainability is ensured.**

Activities under this component included the following:

* Diversification of sustainable livelihood practices
* Dissemination of best practices

## Project’s Indicators including Baseline and Targets

The project has not been designed with impact indicators at the level of its goal/objective, while process indicators were set in the project document at the level of the Outputs/Components.

The main indicators at the objectives’ level were revised from the initial project document and are the following:

* 4,064 ha of degraded pastures restored within the VNP territory
* Methods for migratory routes rehabilitation applied in 300 ha within the VNP territory

However, these indicators were not provided with a clear baseline and targets, instead the same qualitative assessment provided in the initial project document were kept and were established based on earlier studies for pastures categorization (ACTA, 2007) as presented in Table 4 below.

As such, the impact indicators were described through a general description of pastures conditions, whereby out of the 24,598 ha which constitute the surface are of the VNP, 4,064 ha i.e. 16% of the total surface area of the VNP should be restored.

The revised project document also called for the restoration of the 300 ha of degraded migratory routes within the VNP, compared to 4,650 ha of alternative pastures in Dedoplistkaro region but external to VPA territory.

**Table 4. Modification in project’s objectives compared to the project design**

|  |  |  |
| --- | --- | --- |
| **Pastures covered in the initial project design** | **Pastures covered in the revised project design** | **Pastures condition (as per initial and revised project)** |
| 4,064 ha of territory within the VPA | 4,064 ha of territory within the VPA | Degraded and moderately degraded |
| 4,650 ha of alternative pastures in Dedoplistkaro region but external to VPA territory | 300 ha of migratory routes within VPA used for sheepherding between winter/summer and to/from water sources | Degraded |
| 1,805 ha of restoration zone (included in the 4,064 ha of VPA) | 1,805 ha of restoration zone (included in the 4,064 ha of VPA) | Moderately degraded |

Given the changes in surface areas of pastures to be covered by the project’s interventions, the calculation of carbon mitigation as a result of project activities in the VPA territory was also aligned with the proposed changes as reflected in the Table 5 below. As such, the GreenHouse Gas (GHG) emissions reductions were estimated to be around 296,662 tonnes of CO2if the project meets its objectives.

**Table 5. Changes in carbon mitigation as a result of modification of project’s objectives**

|  |  |  |
| --- | --- | --- |
| **Change in carbon stocks in the project territory** | **Initial project design** | **Revised project design** |
| **Total storage for 20 yrs (tonnes C)** | 132,193 | 80,908 |
| **Equivalent GHG emission reductions**  **(t CO2)** | 484,708 | 296,662 |

With regards to the indicators at the Outputs/Components level, the baseline values set for these indicators were not specific to each indicator but were rather common for the whole set of indicators at the level of each Output/Component. Similarly, the targets of the indicators were not aligned with the baseline values but instead have reflected activities to be implemented in order to meet the indictors (as presented in Table 6 below).

In addition to changes in the indicators at the level of the project objectives, the revised project design was also modified at the level of some indicators; the two main modifications covered the following:

* A new indicator was added covering the following: Inter-ministerial policy debate on pastures management issues initiated on national level. Key priority actions agreed.
* An initial indicator related to “Biogas pilot introduced to deter illegal wood cutting” was replaced by the following new indicator: "Monitoring System on Climate conditions introduced”

**Table 6. Project indicators including their baseline and target values**

|  |  |  |
| --- | --- | --- |
| **OUTPUT 1: Implementation of sustainable land use practices in Dedoplistskaro region, including partial rehabilitation and restoration of migratory routes** | | |
| **Output Indicators** | **Baseline** | **Targets** |
| * Sustainable pasture management plan developed and implemented | Degraded pastures in VPAs | Targets in RRF reflecting activities to be implemented and not change in baseline value |
| * **DELETED INDICATOR : 4,650 ha of pastures restored** * **NEW INDICATOR: 300 ha migratory routes rehabilitation** |
| * Local farmers’ knowledge in sustainable land management practices increased and SLM practices applied. |
| * Pilot projects established and lessons learned extracted and disseminated. |
| * Infrastructure improved. |
| * Capacity of Association of cattle-breeders improved to coordinate the activities |
| * Carbon release and sequestration monitoring established and conducted. |
| * **NEW INDICATOR: Inter-ministerial policy debate on pastures management issues initiated on national level. Key priority actions agreed.** |
| **OUTPUT 2: Implementation of the pastures management plan and development of degraded pastures rehabilitation plan for territories within the Vashlovani PAs** | | |
| **Output Indicators** | **Baseline** | **Target** |
| * Rehabilitation of 4,064 ha | 4,064 ha of VPAs severely or moderately degraded | Targets in RRF reflecting activities to be implemented and not change in baseline value |
| * Introduction of sustainable land use practices. |
| * **DELETED INDICATOR: Biogas pilot introduced to deter illegal wood cutting,** * **NEW INDICATOR: Monitoring System on Climate conditions introduced** |
| **OUTPUT 3: Livelihoods of farmers are improved and sustainability is ensured** | | |
| **Output Indicators** | **Baseline** | **Target** |
| * Introduction of new technologies | Local community resilience in pasturelands is low. | Targets in RRF reflecting activities to be implemented and not change in baseline value |
| * Dissemination reports. Information disseminated within Georgia and to neighboring countries |
| * Increase in productivity in piloted areas |

## Main stakeholders and planned stakeholder participation

Key stakeholders and project partners were identified in the project document in a fairly general way; the project document did not proceed with a detailed stakeholders’ assessment but indicates that the project should work closely with the Government of Georgia, including more specifically APA, NGO community, private sector representatives in the region and other donors. Specific stakeholders were identified at the level of some Outputs/Components; these included the Ministry of Agriculture, Dedoplistskaro and Akhmeta Municipalities, VPA administration.

The project document has indicated that community mobilization and participation of local people is essential to the success of the project and to achieve ownership and sustainability; but no further description for such modalities is provided outside the project activities where stakeholders’ participation is called for. Such activities included the development and implementation of sustainable pasture management plan and increasing the awareness of farmers on sustainable land management.

A key platform for stakeholders’ participation has been included in the revised project design through the establishment of the “Inter-ministerial policy debate on pastures management issues initiated at national level. Key priority actions agreed”.Although limited information regarding the modality for launching such “high-level inter-ministerial discussions”, was provided in the project document, it did call to include Ministry of Agriculture (MoA), MoEP, municipal authorities, and others as needed in such a debate.

## Management arrangements at project design

The project document provided clear guidance for the project’s management arrangements, in line with UNDP’s direct implementation modality in accordance with UNDP rules and regulations. A Project Management Unit (PMU) should be established composed of the Project Manager (PM) and an Admin/Finance Assistant. The PMU ensures that project planning, review, monitoring, evaluation and reporting requirements are met; that coordination among participants is effective; and that decisions are implemented. Implementation arrangements with partner agencies are set out in the Terms of References which are provided in the project document.

In order to strengthen project’s management, the project document called upon the establishment of the Project Executive Board (PEB). The PEB is planned to provide strategic direction for the project management and ensures that the project remains on course to deliver the desired outcomes of the required quality. The project document provided clear guidance for the establishment of the PEB including its composition which should include the following roles within the project:

* ***The Executive’s role***, to ensure that the project is focused throughout its life cycle on achieving its outputs. The project document indicated that APA UNDP will play the Executive Role in the Board.
* ***The Senior User/Beneficiary role***, responsible for specification of the needs of all those who will be primarily using or benefiting from the project outputs. The project document indicated that APA should have the Senior User role, while representatives of the MoA, the regional authorities and local community should be invited as appropriate.
* ***The Senior Supplier role***, representing the interests of those committing resources either financial or human to the project. The project document indicated that APA and the EU delegation to Georgia should represent the senior supplier role.

The project document also provided guidance on the proposed membership of the PEB and any potential change if there is a need as well as meetings frequency.

The management arrangement provided in the project document is presented in Figure 2 below in line with the defined the management responsibilities of the PEB, the Project Assurance functions and those of the PMU.

|  |
| --- |
|  |
| **Figure 2. Project Organization Structure as proposed at project design** |

## Linkages between the Pilot in Georgia with the Policy project and with the different Pilots

Linkages between the Pilot and Policy projects within ClimaEast is defined upstream of the project and is not identified within the project document itself; the same applies for the linkages among the different Pilots of ClimaEast.

As such, it is expected that the Pilot Project in Georgia would mainly follow up on ensuring the linkages with the Policy project and other Pilots of ClimaEast in coordination with the UNDP Regional Center.

# Project Implementation

## Adaptive management and changes to the project design

The project has faced challenges due the weak initial project design which lacked a proper understanding of the concepts of pastures management in general and lacked clear intervention logic in specific.

The fact that the initial project was based on outdated studies from 2007 and limited understanding of key aspects governing pastures management, have led to the formulation of a conceptually erroneous project activities, although the overall objective of the “rehabilitation of pastures and the introduction of sustainable grazing practices in Georgia” was a much needed intervention, especially that this pilot project can be considered as the first project in Georgia dedicated to pastures management.

To remedy to the initial project design, many efforts have been deployed to strengthen the conceptual design and the project implementation and include the following:

1. **UNDP’s Project Inception Mission**

The mission was conducted in July 2013, three months after the project’s initiation, and confirmed the need to conduct baseline studies and ensure a proper understanding of the situation, based on which several assessments have been initiated in 2013, including the following:

* Assessment of Pastures Vegetation
* Legal and institutional aspects for the use of pastures
* Assessment of Alternatives for Currently Used Pastures
* Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures

1. **EU’s Results-Oriented-Monitoring Mission**

EU Monitoring Mission which was concluded in December 2013, has raised several concerns regarding the project’s objective and proposed activities which the mission considered are not in line with the overall goals of the ClimaEast project.

As such, modifications to the project’s objectives and indicators were made and approved by the project’s PEB; accordingly, a revised project document was signed in March 2014 and reflected both the clearer understanding of the situation based on more in depth assessments analysis as well as the recommendations of the EU ROM mission.

1. **UNDP’s Mid-Term Evaluation Mission**

The Mid-Term Evaluation mission was conducted in May 2015, and concluded that the project design was still considered to be weak and lacking clear linkages between the project’s objectives, outputs/components and activities, but the MTE considered it not constructive to improve the systematic logic of the project strategy and outcomes, especially that the UNDP and project team are “successfully managing to overcome these limitations”.

**Overall assessment of adaptive management and changes to the project design**

Despite efforts to support the revision of the project document and the technical modifications in the project’s objective and some activities from the initial project design, the TE notes that initial project design as well as its modification did not allow the adoption of the “Theory of Change” principles. The reformulation of the “Components” and “Activities” did not ensure clear linkages to the project objectives nor among each other; for example, the development of the pastures management plan is under Component 2 while it figures as an activity under Component 1.

Regardless of this challenging factor, the project team has been able to progress smoothly in the implementation of the project activities and in meeting the project’s objectives and adapting the unclear design into a practical and operational approach.

## Partnership arrangements with relevant stakeholders

Partnership arrangements and stakeholders’ participation can be considered among the project’s strong assets and various proactive modalities have been adopted in this respect.

**At the larger level, the project has established regular meetings of the Project Executive Board (PEB) and of the Pasture Management Stakeholders**, each functioning under clear mandates and with a strategic focus for decision making in the case of the PEB and with strategic discussions of the key issues to be raised at the level of the Pasture Management Stakeholders’ meetings.

In the case of the PEB, 2-3 meetings per year were held during the project duration, which allowed continuous ownership of the key project partners in the decision making process. The PEB meetings were planned in a way to make them concise and encouraged engagement of the members in such meetings. The members of the PEB are presented in Table 7 below.

Similarly, the Pasture Management Stakeholders’ meetings were held on a regular basis (twice a year) and included a larger group of around 30 participants with the same principle of focusing the topics of the meetings on priority issues and conducting the meeting in a timely manner.

This has allowed the project to ensure a transparent dialogue with all concerned stakeholders in Georgia and allowed a productive communication to support project’s implementation.

**Table 7. List of the PEB members**

|  |  |  |
| --- | --- | --- |
| **Name** | **Position** | **Institution** |
| 1. Natia Natsvlishvili | Assistant Resident Representative | UNDP Georgia |
| 1. Nino Antadze | Environment and Energy Portfolio Team Leader | UNDP Georgia |
| 1. Alvaro Ortega | Programme Manager | EU Delegation to Georgia |
| 1. Medea Inashvili | Regional coordinator | ClimaEast Policy Project |
| 1. Merab Pirosmanashvili | Head of Vashlovani PA Administration | MoEP/APA |
| 1. Nita Tkavadze | Head Of Department | MoEP/APA |
| 1. Mate Kavtarashvili | Deputy Head of Local Municipality | Akhmeta Municipality |
| 1. Malkhaz Merabishvili | Deputy Head of Local Municipality | Dedoplistskaro Municipality |
| 1. Zurab Murtazashvili | Head of Association | Association “TushiMetskhvare” |

In addition to the large stakeholders’ engagement modalities, the project also built strong partnerships with concerned institutions paving the way for a continuous involvement in pasture management.

Such partnerships included among others:

* **NACRES, building upon past and on-going cooperation with various national and international agencies**
* **GIS Lab, building upon its cooperation with the Tbilisi State University and the Tbilisi Botanical**
* **Association Management Center (AMC) for Planning Required Veterinary Services jointly with the Regional Veterinary Centres**

## Project Finance

The project’s budget has been completely disbursed and reflects the efficient management of the project.

By end of the project, 90% of the project budget was disbursed; with some remaining funds were kept to cover some final visibility activities.

However, the project expenditures at the level of the different components show divergence from the initially planned allocations; while in the case of components 1 and 2 the total expenditures have exceeded the budget (113% and 131% of the initially planned allocation respectively), the expenditures at the level of component 3 and for project management were below the allocated budget (refer to Table 8 below). This trend reflects lack of proper alignment of the effected activities with the initially planned design, which confirms the weakness in the initial and revised project design.

**Table 8. Total expenditures of the project by end of the project duration**

|  |  |  |  |
| --- | --- | --- | --- |
| **Project’s Component** | **Total Budget**  **(US$)** | **Actual as of 28.10.2016**  **(US$)** | **% spent** |
| **Component 1** | 485,751 | 550,554 | 113 |
| **Component 2** | 338,509 | 444,447 | 131 |
| **Component 3** | 302,500 | 163,527 | 54 |
| **Project Management** | 198,840 | 53,361 | 27 |
| **GMS (7%)** | 90,909 | 83,465 | 92 |
| **Total** | **1,416,509** | **1,295,354** | **91** |

On the other hand, the yearly project expenditures have reflected normal trends in project management, with a low total expenditure in the first year (equivalent to 8% of the total budget). As shown in Table 9 below, the bulk of the expenditures are effected in year 2 and year 3 of the project, with a total expenditure reaching 39% and 42% respectively. The allocation of 10% of the budget in year 4 also confirms that the project has succeeded to commit its resources well before project completion and can thus ensure proper closure and exit of the project.

**Table 9. Yearly expenditures of the project at the of financial data**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total Budget**  **(US$)** | **Year 1**  **2013** | | **Year 2**  **2014** | | **Year 3**  **2015** | | **Year 4 as of 28.10.2016** | |
| **Project’s Component** | **Actual**  **(US$)** | **% spent** | **Actual**  **(US$)** | **% spent** | **Actual**  **(US$)** | **% spent** | **Actual**  **(US$)** | **% spent** |
| **Component 1** | 485,751 | 51,033 | 11 | 242,366 | 50 | 232,312 | 48 | 63,383 | 13 |
| **Component 2** | 338,509 | 46,826 | 14 | 194,718 | 58 | 195,664 | 58 | 37,915 | 11 |
| **Component 3** | 302,500 | 4,677 | 2 | 55,224 | 18 | 115,072 | 38 |  | 0 |
| **Project Management** | 198,840 | 9,944 | 5 | 27,487 | 14 | 10,729 | 5 | 8,004 | 4 |
| **Total** | **1,325,600** | **112,480** | **8** | **519,795** | **39** | **553,777** | **42** | **109,301** | **8** |

## Monitoring and evaluation during implementation\*

**Monitoring and evaluation can be considered by far as the weakest aspect of the project’s implementation.**

Although the M&E system was already very weak in the initial project documents, none of the management efforts to review and evaluate the project have allowed it to establish a solid M&E system.

The revised project document following the inception meeting and the EU ROM mission have maintained broad impact indicators at the objective level reflecting the project’s context, despite the additional assessments conducted at the outset of the project. The M&E system was also not considered as a major concern as part of the project’s MTE and was even rated as “Satisfactory” taking into consideration that the project is following upon achieving the indicators to which it is contractually committed with the EU. **The revised project document has adopted 2 impact indicators (refer to Table 10 below), however these cannot be considered as SMART indicators and were not provided with a clear and quantitative baseline and a target; as such, the level of restoration of 4,064 ha of degraded pastures was not indicated as a target, similarly, the location of the 4,064 ha of degraded pastures to be restored was not indicated either.**

The same applies to the second indicator related to the “Methods of migratory route of 300 ha to be rehabilitated”, as it does not specify the methods to be used nor the target to be reached.

However, it should be noted that this has allowed the needed flexibility in defining the project’s interventions and the methods for rehabilitation given that this was a pilot which necessitated the exploration of appropriate options (based on technical and financial feasibility), and which have been further determined and adopted by the project.

Finally, both indicators provide an assessment of the quality of pastures in the VNP and do not monitor the achievement of the project objective which aims to reach a larger impact in pasture management rather than to be limited to the VNP boundaries.

**Table 10. Impact indicators of the project**

|  |  |
| --- | --- |
| **Objective** | Rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia |
| **Indicators at Objective level** | 1. 4,064 ha of degraded pastures restored |
| 2. Methods for migratory route rehabilitation applied in 300 ha area |

It is accordingly considered as a missed opportunity to keep the impact indicators provided in the initial project document while the project had already proceeded with an assessment of the pastures of the VNP and produced a Soil-Adjusted Vegetation Index (SAVI) model with a standing biomass distribution map. The map produced by the project was used to classify all available pastures into 5 classes of pastures from very low biomass (“very poor” pasture) to very high (“excellent” pasture). The results of the study showed that 46% of pastures in the Vashlovani National Park are classified as Moderate to Poor quality (refer to Table 11).

In fact, out of the 24,598 ha which constitute the surface are of the VNP, the SAVI model have indicated that around 4,919 ha are considered as “Poor” while none was “Very poor”; compared to the project indicator in the revised project document which defined 4,064 ha of pasture as “Degraded and moderately degraded”. Although this can be considered only as an inconsistency in use of the terms while referring to the same classes of pastures (given that the information is clear in the maps), the TE considers that the alignment of the baseline and targets of the indicators with recent studies would have supported the project’s efforts.

**Table 11. Classification of pastures in the Vashlovani National Park[[3]](#footnote-3)**

|  |  |  |
| --- | --- | --- |
| **Classification levels** | **Pastures condition** | **% of surveyed area** |
| 1 | Excellent | 47 |
| 2 | Good | 7 |
| 3 | Moderate | 26 |
| 4 | Poor | 20 |
| 5 | Very poor | 0 |

**However, it should be noted that the lack of a rigorous M&E system to monitor the project’s impact did not prevent the project from strengthening the cause-effect relations of activities within the VNP and the impact of the project’s interventions on pastures quality and pastures management as a whole.**

**The project did proceed with fundamental monitoring activities of the pastures quality and of the carbon stock as will be described in the next sections of the TE report, although these have not been reported within a clear and consistent M&E system.**

As such, the TE considers that the M&E system of the project did not support the needed “Theory of change” in linking the priority interventions to the degraded pastures and thus ensure clear linkages to the overall objective of the project, which is the “Rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia”.

Two other aspects related to the M&E system are also important to raise and also constituted a challenge for the adoption of a clear M&E system:

1. **Monitoring of carbon mitigation as a result of the project activities.**

The project document as well as its revised version provided an estimation of the reductions of GHG emissions based on the surface areas of rehabilitated pastures to be covered by the project’s interventions, as presented in the Table 12 below.

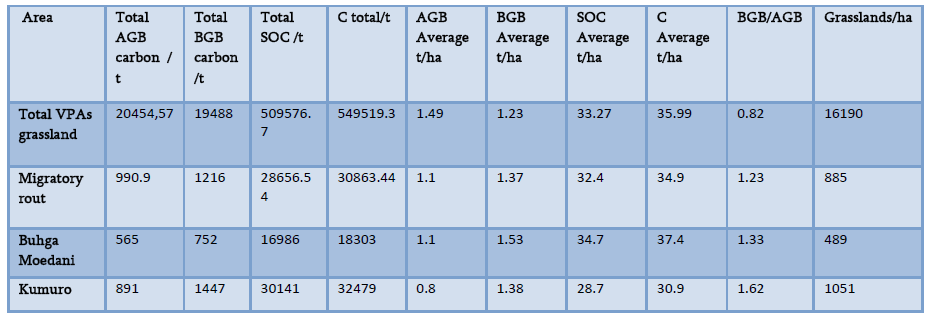
**Table 12. Changes in carbon mitigation as a result of modification of project’s objectives**

|  |  |  |
| --- | --- | --- |
| Change in carbon stocks in the project territory | Initial project design | Revised project design |
| Total storage for 20 yrs (tonnes C) | 132,193 | 80,908 |
| Equivalent GHG emission reductions  (t CO2) | 484,708 | 296,662 |

However, these measurements were not compared to the estimations made by the project based on the in-depth analysis of carbon stock for all of the VNP and at the level of three pools in 2014 (as presented in Table 13 below) and which were available only after the project was re-designed.

While the report indicated that the carbon stock calculations should be measured again in two years using same sampling technologies and using “stock difference method” described in the analysis, the report did not provide a clear comparison to the earlier estimations or targets of set in the project document.

**Table 13. Carbon stocks of different pools calculated as a tonnes of carbon per hectare for different areas of Vashlovani grasslands[[4]](#footnote-4)**



1. **Monitoring of project activities at output level**

Another major weakness in the M&E system of the project at design as well as at implementation is the number and type of indicators at “Component/Output” level and which have been developed rather as activities than as indicators, they were numerous (8 indicators for Component/Output 1) and at the level of each Component/Output all the indicators were provided with a single and un-measurable baseline and targets. The trends identified at the level of the Component/Output indicators is shown in Table 14 below, and confirms the difficulty to use these indicators in an analytical and strategic manner, as it would be needed from an M&E system.

**Table 14. Trends identified for the project indicators at Component/Output**

|  |  |  |
| --- | --- | --- |
| **Component/Output Indicators** | **Baseline** | **Targets** |
| 8 indicators at the level of OUTPUT 1 | Degraded pastures in VPAs | Targets in RRF reflecting activities to be implemented and not change in baseline value |
| 3 indicators at the level OUTPUT 2 | 4,064 ha of VPAs severely or moderately degraded | Targets in RRF reflecting activities to be implemented and not change in baseline value |
| 3 indicators at the level of OUTPUT | Local community resilience in pasturelands is low | Targets in RRF reflecting activities to be implemented and not change in baseline value |

**Based on all the above, it can be concluded that the M&E system both at design and at implementation is Moderately Unsatisfactory (MU)** **and showed significant shortcomings which did not provide the project a clear and systematic approach for project monitoring and reporting.**

## Implementing Agency and Executing Partners\*

**Main implementing agencies and their responsibilities**

As a “Pilot Project” within a larger Regional Project, several partners were involved in the project implementation and execution.

At the national level, UNDP-Georgia is considered as the project’s implementing agency, and it has established a clear and operational basis for project implementation which was defined in the project document and was adopted in project implementation with limited needed modifications.

Project implementation is also supported by the UNDP Regional Coordination Unit based in Istanbul, and which provided input and facilitated coordination of this project with other pilot projects as well as with the Policy component under the ClimaEast umbrella.

The EU delegation was also overseeing project implementation in line with its responsibilities as the project’s main source of funding donor and ensuring the alignment of the project with the overall project objectives as well as EU’s national policy framework in Georgia.

**Main executing partners and their responsibilities**

The main national executing partner of the project is APA which has clearly played a major role in facilitating project implementation and partnerships at central level as well as at local level.

The project has accordingly established a strong cooperation in the project’s execution with the Ministry of Agriculture as the main institution in charge of pastures management in Georgia as well as with other key institutions such as the Agency of States Property.

APA also facilitated smooth project execution at the level of the VPA management team as well as with other key local partners including the Municipalities of Akhmeta and Dedoplistskaro as well as the Local Shepherds Association.

**Main aspects related to the implementation arrangements**

The project’s implementation has been aligned with the project’s design has not necessitated many changes to the initial management arrangements of the project.

At the inception phase, the management arrangements adopted at project inception were in line with those identified at project design and mainly with regards to the Project’s Organization Structure including the following:

* Project Management Unit
* Project Executive Board
* Project Assurance

Although the inception phase has supported further clarification and definition of the different roles and responsibilities, the initial design has served as a basis of the management arrangements of the project. The coherence in the management structure is reflected in the timely implementation of the project despite a challenging technical context.

The key project’s timeframes have confirmed that the project has met the timelines of all its projected milestones and ensured its completion few months in advance and this was the case for most milestones including:

* Project Inception Mission
* Mid-Term Evaluation
* Terminal Evaluation

It is based on such a clear implementation and execution responsibilities that the project has been able to develop important partnership arrangements and stakeholders’ participation and could pursue various proactive modalities in this respect. As such, the smooth implementation and execution arrangements have supported a solid consultative approach which on its turn allowed the project to evolve despite the unclear project design which lacks a clear intervention logic. In this respect, it is worth noting the efficiency in holding the PEB meetings (which held 2-3 meetings per year) and the Pasture Management Stakeholders’ meetings (which held 2 meetings per year).

Finally, the trends and levels of disbursement of the project’s budget has reflected the efficient management and implementation arrangements put in place by the project and supported by the implementing and executing partners; whereby the project’s funding was almost committed by year 3 of the project.

**Based on the above, the TE considers the Implementing Agency and Executing Partners rating as “Satisfactory” with minor shortcomings in project implementation and execution mainly due to lack of a clear intervention logic in project design and execution.**

# Project Results

## Overall results (attainment of objectives)\*

This section will consolidate the activities and results of the project in a way to present an intervention logic which is linked to the overall objective of the project. As such the presentation of the project results will provide a story line and findings of the interventions as they link to the specific output/component rather than to the output indicators provided under each output/component, given the lack of consistency between the output/component and their respective indicators.

It should be noted however, that this does not provide a retrofitting exercise of the output/component indicators, given that such exercise is futile at this late stage of the project; instead, the TE has proceeded with a consolidation of the different indicators within the appropriate output/component as considered most applicable, noting that the indicators should be considered as indicative activities rather than indicators, especially that no baseline or target were set for these indicators and that the project di not track them accordingly.

### Output/Component 1: Implementation of sustainable land use practices in Dedoplistskaro region, including partial rehabilitation and restoration of migratory routes

This output aims at engaging the farmers in the Dedoplistskaro region as a whole, within the VNP boundaries and outside of it, in sustainable pastures management.

In order to ensure a better focus this component, the TE will cover the interventions related to the rehabilitation of 300 ha of the migratory route within the VNP territories under the Output 2.

Under this output, the TE will cover mainly the aspects related to the current patterns and practices for migration along migratory routes. Sustainable pasture management under this component entails the introduction of sustainable practices, including the introduction of traditional practices (such as grazing tactics), new rangeland management techniques (such as living fences and solar energy) as well as improved infrastructure (such as water supply). This output calls upon engaging associations of cattle-breeders and nomadic shepherds in proposed alternative rangeland management practices.

This output also calls upon the launching of debates on pastures management at national level, through high-level inter-ministerial discussions to be organized within the framework of the project.

The indicators which are considered by the TE to be relevant to this output are the following:

* Local farmers’ knowledge in sustainable land management practices increased and SLM practices applied.
* Pilot projects established and lessons learned extracted and disseminated.
* Infrastructure improved.
* Capacity of Association of cattle-breeders improved to coordinate the activities
* Inter-ministerial policy debate on pastures management issues initiated on national level and key priority actions agreed.
* Dissemination reports. Information disseminated within Georgia and to neighboring countries

Under this output, the project proceeded with implementation of a series of related assessments and interventions which can be clustered at 2 levels:

1. **Assessing and implementing pastures management practices to support sustainable pastures management in the Dedoplistskaro** **region as a whole**

Based on the assessment of alternative pastures, it was first possible to confirm that no pastures outside VNP could be used as comparable alternatives for currently used pastures in VPAs, as all feasible alternatives were already under a lease agreement[[5]](#footnote-5), which was along the recommendations of the EU ROM mission to avoid resettlement of farms from VNP.

The project also conducted important in-depth assessments of the needs of the **farms using the VNP territories and its surrounding pastures and identified the socio-economic conditions as well as needs at the level of these farms.** In total, 70 farms were covered by the assessment conducted by the project (presented in Table 15 below), and identified several priorities, of which **2 main recommendations were retained and which included the following:**

* **Improving the infrastructure of farmers**
* **Establishment of unified veterinary service for Tush shepherds**

**Table 15. Location of Farms using Territory of Vashlovani Protected Areas for winter pastures[[6]](#footnote-6)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Location of Farms** | **VPAs** | **2 km zone** | **Total** |
| West Part | 3 | 22 | 25 |
| Central Part | 13 | 4 | 17 |
| Part of Shavi Mta | 22 | 6 | 28 |
| **Total** | **33** | **32** | **70** |

Once the priorities for intervention for pasture management were identified, the project conducted further specific assessments and proceeded with the implementation of priority activities and the following results were reached:

* A detailed plan for the needed works to provide water sources, showing directions of pipes, taps, holding tanks, in accordance with the requested rules and standards was prepared[[7]](#footnote-7). This was used to implement the following: **(1) a water Supply System based on natural flow regime to lift off the pressures from migratory route within Vashlovani National Park, including 2 watering points, and water connections to the administrative buildings of VPA (total length 27 km); and (2) a water supply system based on a drainage system to lift of the pressures on Vashlovani National Park from adjacent farms (including 3 watering points with a total length 7 km).** Refer to Figure 3 below for the plan of the water pipeline system put in place. It should be noted that the Water supply co-financed by Akhmeta municipality.
* Based on a specific assessment of needed measures at the level of pilot farms[[8]](#footnote-8), **two pilot farms were selected to demonstrate pasture management practices and benefited from improvements to the shepherds’ homes, electric fence and photovoltaic energy.** Refer to Figure 4 below for the location of these farms.
* Based on in-depth assessments of veterinary needs through the Association Management Center and the Veterinary Regional Association, and the strong support and cooperation between various concerned partners including the municipalities, ministry of education[[9]](#footnote-9)&[[10]](#footnote-10), **a veterinary Service Centre for Tush Shepherds (based in Village Kvemo Alvani) and a satellite/overnight point (based in Village Kasristskali) with all needed veterinary equipment and services were established.** This has also allowed initiating qualifying studies for veterinary assistants in Alvani in close collaboration among concerned partners.

1. **Establishing a knowledge base and a continuous dialogue on pastures management**

The main basis for consultation and dialogue on pastures management in Georgia were the “Pasture Stakeholders Coordination Meetings”, which were started in 2014 and were held regularly, twice a year, throughout the duration of the project.

The coordination meetings allowed a validation of the recommendations and priority interventions proposed by the project as well as for building a clearer understanding of pastures management in Georgia. In this context, the project prepared an initial assessment of legal and institutional aspects related to pastures in the VNP in 2013[[11]](#footnote-11) to provide a clear basis for its interventions. This was followed by a more in-depth assessment of policy gaps related to pasture management in Georgia and provision of recommendations for addressing them, through the preparing a policy package for governmental and other key national stakeholders. As such a report identifying policy gaps and providing examples of international good practice as well as a Proposed Roadmap was initiated in 2015 and completed in 2016[[12]](#footnote-12). A summary of the key issues covered in this report is provided in Box 1 below.

|  |
| --- |
| **Box 1. Roadmap for Strengthening Policies for Pastures Management in Georgia. July 2016**  The Project has developed this report in order to provide a comprehensive understanding of the current situation of pasture management systems in Georgia, including the legal, policy and institutional aspects governing the pastures. It also provided an overview of key on-going programmes and initiatives related to pastures management in Georgia and recommendations of measures needed to strengthen national policy for pastures management. The report summarizes the key policy gaps for pastures management and proposes a roadmap for action.  This report is based on a desk research and a series of consultation meetings conducted between December 2015 and June 2016 as well as a review of good international practices related to the situation in Georgia and covers the following aspects:   * Definition of pastures and pastures management; * Description of pastures and the livestock sector in Georgia; * Analysis of the legal, policy and financial gaps related to pastures management and key recommendations to address the policy gaps; * Proposed Roadmap for responding to policy gaps at the national and local level**.**   This report constitutes a basis for discussions and consultation with all concerned stakeholders in view of establishing an agreed strategy and action for pastures management in Georgia. |

|  |
| --- |
|  |
| **Figure 3. Water supply system designed by the project** |
| Pilot farms |
| **Figure 4. Location of pilot farms benefiting from the project** |

### Output/Component 2: Implementation of the pastures management plan and development of degraded pastures rehabilitation plan for territories within the Vashlovani PAs

This output aims at developing and implementing a Pasture Management Plan (PMP) within the VNP territories, which should lead to the rehabilitation of degraded pastures in these territories.

The starting point of this output is the assessment of degraded pastures in the VNP territories and the identification of modalities which can release the pressure from the most degraded pastures. The rehabilitation plan will include activities such as rotation of pastures and wind breaks and will focus on most degraded areas. In order to ensure coherence of the analysis, the TE has included the rehabilitation of degraded migratory routes within the VNP under this output, given that this stretch of 300 ha constitutes an integral part of the VNP and of the overall rangeland system operating within the VNP.

This output includes also the monitoring of climate change impact on the pastures of the VNP in view of identifying most appropriate pastures management responses as well as measuring carbon sequestration in pastures before and after restoration interventions are conducted.

The indicators which are considered to be relevant to this component are the following:

* Sustainable pasture management plan developed and implemented
* Rehabilitation of 4,064 ha of degraded pastures in the VNP territories
* Rehabilitation of 300 ha of degraded migratory routes in the VNP territories
* Introduction of sustainable land use practices
* Monitoring System on Climate conditions introduced
* Carbon release and sequestration monitoring established and conducted.

Although the project proceeded swiftly with the assessment of pastures[[13]](#footnote-13) and other livelihood assessments as the Pasture Management Plan for the VNP was not completed until summer of 2016 and its validation expected in November 2016; i.e. at the end of the project.

The PMP development process has accordingly required 3 years and was developed according to the following steps:

* **Preparation of ToRs for developing general guidelines for Pasture Management Planning. International Expert. 2014**
* **Development of General Guidelines for the Pasture Management Planning. Prepared by NACRES in 2015**
* **Development of the Pastures Management Plan for VNP. Prepared by NACRES in 2016 (in Georgian).**

While the process adopted for the development of the project merits praising as it paved the way for a solid basis for the development of the plan and thus facilitating the development of future PMPs within the protected areas system in Georgia, the process was very lengthy and did not allow the APA team and the VNP team to test its implementation.

Regardless of the delays in the development of the PMP, the project has proceeded with the implementation of specific measures related to the expected results under this output and the following results can be indicated:

1. **Application of pastures rehabilitation tools such as fertilization and enclosures.** Fertilization was done by spraying through a tractor with sprayer and shredder which was purchased through the project. The application of active pasture management measures arrangements and future use of the equipment was discussed and agreed upon with the members of “Tush Shepherds”.
2. **Installation of two automatic meteorological stations** and connecting them to the national meteorological system under the responsibility of the National Environmental Agency (NEA).
3. **Conducted carbon release and sequestration monitoring in 2014[[14]](#footnote-14) and in 2016.** The monitoring survey provided the following: a carbon stock inventory, a general soil fertility assessment, and water balance modeling.
4. **Conducted pasture monitoring in spring 2015 and 2016,** with the support of NACRES and including engaging and training of 6 APA rangers from the VPA on pasture monitoring in both years. Pasture monitoring was conducted using agreed methodologies for winter pastures and which was adapted and used by NACRES in VPA in 2015[[15]](#footnote-15).

**As the thrust of the project concerns the rehabilitation of pastures within the VNP, the TE notes that reporting on this issue has not been done in a clear and analytical approach. Although extensive efforts have been deployed for pasture monitoring, the monitoring results and the changes in the status of pastures are not readily available through the project.**

The project has provided information regarding the monitoring process but not regarding the results over the duration of the project[[16]](#footnote-16), as such, the following support for monitoring of pastures can be indicated:

* the development of a software to support the whole cycle of pasture monitoring process from data collection to storage and maintenance (refer to Figure 5 below),
* the provision of two tablets for use in the field and the establishment and adoption of a technically validated methodology,
* the project has been able to test different types of liquid fertilizers as well as solid fertilizers in the case of extremely degraded sections of the migration route with very poor vegetation (refer to Figure 6 below).

**While it is expected that monitoring results can establish a basis for follow up of the PMP and support the implementation of proposed management measures for pastures under the PMP, the TE notes that the reporting on pastures monitoring did not offer such opportunities by the end of the project.**

|  |  |
| --- | --- |
|  |  |
| **Figure 5. Hardware and software for pasture monitoring** | **Figure 6. Degraded area at the migration route fertilized with a solid organic fertilizer** |

### Output/Component 3: Livelihoods of farmers are improved and sustainability is ensured

This output aims at conducting detailed assessments of the “full production chain” of sheep breeding (including products, amount of wool, milk, litter generated) and the potential for diversification and increase in productivity. The output also calls upon the implementation of the most promising technologies to increase quality and production capacity of from wool, sheep milk and litter and the use alternative energy sources for water and heat supply.

Under this output, it is expected that such detailed assessments of the “full production chain” will support the diversification of the use of natural resources in the area which will increase the resilience of the local populations to climate change. This output also includes holding workshops and developing publications covering pastures management in general and the PMP in specific; however, since the TE has considers that communication activities should be covered under Outputs 1 and 2 for consistency of the analysis.

The indicators which are considered to be relevant to this component are the following:

* Introduction of new technologies.
* Increase in productivity in piloted areas.

**Under this output, the project has not been able to deliver major results beyond the assessment the socio-economic conditions and needs at the level of the 70 farmers in the VNP territories and around it**[[17]](#footnote-17)**.**

This in-depth livelihood assessment has addressed the key aspects related to pastures management including the seasonal calendar, winter pasture output, sales of products and related problems, veterinary service, and sheep flock profitability, and has accordingly provided an extensive understanding of the conditions and needs of these farms (examples are given in Figures 7 and 8 below).

|  |  |
| --- | --- |
|  |  |
| **Figure 7. Status of farms ownership** | **Figure 8. Number of livestock on winter pastures** |

Based on this assessment, several recommendations were developed which covered the aspects called upon under this output for the development of value chains and increasing the productivitysuch as:

* Implement a pilot inter-cropping model (without tillage) on trial plots of absinth (wormwood) and saltwort to conserve biodiversity.
* Set up primary collecting stations for wool and look for a market
* Develop the branding of regional products (refer to Box 2 below)
* Training Needs Assessment

It is to be noted that the PEB made the decision after discussion of the ELKANA report on what were the most vital issues. Given that the needs of the area were at a more rudimentary level and thus the basic health of the sheep (veterinary) and access to water were more pertinent as first step to achieve any level of ‘productivity’ (i.e. mortality). Moreover, the issue related to the wool, and which was also considered as a problem in the summer pastures, was being addressed within a Czech Fund project in the summer pastures in upper Tusheti.

**As such, in addition to the provision of training in line with the training needs assessment, priority aspects related to pastures productivity were implemented,** **to cover interventions related to the development of value chains and increasing the productivity of farmers.**

It should also be noted that the assessment of pilot activities has also provided an identification of activities which are related to the development of value chains and increasing the productivity of farmers and which can also be further developed to support the livelihood development aspects of the farmers[[18]](#footnote-18). As such, several measures related to value chain development were identified such as tourism development, Compensation Schemes for Loss to Wildlife, Accounting system development and integration, Herder cooperative structure; however, these were not developed as pilot activities due to the short duration of the project*.*

|  |
| --- |
| **Box 2. Developing a brand of regional products[[19]](#footnote-19)**  **Cheese Production:**  Enactment of the law on food safety may pose a serious threat to one of the most important income source for traditional Tush farmers – Tushetian Guda Cheese. Therefore, regional product branding and standardization is a high priority issue for maintaining traditional Tushetian Sheep breeding. Key objectives of the development of regional product brand and standards should include:   * Ensure the product recognition; * Stop counterfeits; * Bring production of Tushetian Guda Cheese in compliance with the food safety legislation.   The latter is especially important as the National Agency of Food Safety of Georgia (NFA) is focused on the control of milk processing, and the conditions of Guda Cheese production do not meet the legal requirements at present. With the view of filling the above mentioned gap, it is required to establish the obligatory (place of origin, technology, storage conditions, etc.) and minimal standards (processing conditions, sanitary norms, etc.) for this product and to lobby their approval by the NFA.  A Switzerland’s standard for traditional Swiss cheese, as an exceptional one, is a good example of the possibility of having different standards and requirements for the production of traditional goods. Creation of a logo for regional products is a significant requirement to ensure traditional sheep production visibility and achieve market recognition. Special attention should be paid to the elaboration and approval of the procedures related to the assigning logo. Logo should be assigned either by existed (e.g. Association “Tush Shepherd”) or newly created local body, which is capable to control and certify the regional product. Creation of the logo (not only logo/brand of Tushetian cheese) is recommended in order to reduce advertising costs at the production and market development stages.  **Establishment of the wool primary reception center and looking for the market:**  A survey has shown that the sale of wool is a serious problem in Georgia despite the fact that the wool is one of the precious natural raw materials. In order to support the sale of Georgian wool, it is necessary to carry out the following activities:   * Make research on market demand and market prices (both local and export markets); * Establish the wool categories according to market demand; * Identify Tushetian sheep wool category and needed technology for obtaining of standard goods; * Develop business plan and make comparison of the estimated costs to market prices in assumption of the current situation (market prices), and in case of positive indicators * Support establishment of a small primary wool processing shop on the spot. |

### Overall assessment of results

**Based on the above assessment of the outputs, the overall assessment of the project’s results is rated as “Satisfactory” as summarized in Table 16 below.**

**Table 16. Summary of the overall assessment of the project’s results compared to the MTE assessment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Objective/Outcome** | **Indicator** | **Baseline level** | **EOP target** | **MTE level** | **FE level** |
| **Rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia** | 4,064ha of degraded pastures restored | Severely or moderately degraded pastures | Not available | Delay in development of PMP till winter 2015/2016 due to complex legal situation of target pastures.  The means by which the restoration of the 4,064 ha will be achieved is by application of PMP by VNP and leasers of farms.  There is strong commitment from all sides to changing situation and the sustainability is considered moderately likely and there would be major benefits in being able to support a 2nd season application of the PMP implementation | Although the PMP was only completed at the end of the project, the process which was adopted for its development paved the way for an institutional approach which can be replicated elsewhere in Georgia’s PAs system.  The various assessments conducted for pastures vegetation, carbon stock monitoring as well as livelihood assessment provided a solid basis for the project’s interventions.  However, the weak M&E system didn’t allow adequate reporting of the project’s results. |
| Methods for migratory route rehabilitation applied in 300 ha area | Severely or moderately degraded pastures |  | Infrastructure for water supply provided for 8 farms of shepherd. Further 6 farms will be covered by end of project.  Sustainability considered moderately likely as both VPN and shepherds are interested to maintain and self-fund the infrastructure | Significant results were obtained with regards to supporting infrastructure needs within the Dedoplistskaro region as a whole and the migratory route in specific.  The main achievement covered the infrastructure (pilot farms and water supply) and the veterinary services provided through the project.  However, no interventions were made on value chain development and increasing farmers’ productivity. |

## Relevance\*

The project is highly relevant to the national priorities and constitutes the first programme focusing of pastures management in Georgia. Pastures constitute around 25% of the total surface area of Georgia and significantly contribute the agricultural sector as a whole and to the economic and livelihood development of the rural population in specific.

The project has been able to mobilize the interest of all stakeholders at central and local level to position pastures management on the agenda of concerned stakeholders and confirm the importance of this sector as an important socio-economic priority.

The project also confirmed the importance of the project from an ecosystem management context; the vegetation assessment and the carbon stocking monitoring have allowed acquiring a clear understanding of the current status of pastures and future impact of climate change on pastures. As such, long-term adaptation measures to climate change as well as using pasture for carbon sequestration have been documented and proven through this project.

As such, this project was not only relevant at the national development agenda but also supports Georgia to better respond to its commitment to global international conventions including biodiversity and climate change.

Finally, the project was also relevant to EU’s strategic priorities and orientations and has responded to the objectives of the project as well as to the recommendations of the EU ROM mission as documented in Table 17 below. In this context, the presence of the Policy Project’s Task Leader in Georgia has offered a significant opportunity to expand the cooperation between the Policy Project and the Georgia Pilot Project, whereby the Policy Project Task Leader has attended all the project’s main meetings (PEB, Stakeholders Coordination). This has allowed the project to positively contribute to the overall “Regional dimensions” of the ClimaEast project as a whole and to strengthen the exchange of expertise related to policy aspects in Georgia. Although the project could not directly benefit from Expert Facility of the Policy Component to avoid dual financing, clear synergies were made among the two components.

**Based on the above, the TE rating of the project is considered as Relevant.**

## Effectiveness and Efficiency\*

The project’s effectiveness is well demonstrated through the adequate attainment of its objective and output, despite inadequate design and lack of a clear “Theory of Change” to use as a basis for tracking the project’s results.

The analysis of the project’s outputs and results confirmed the high quality of the assessments which can be used a nationwide reference, and were used as a basis for implementation of relevant and focused interventions. The project also demonstrated its timely and cost effective implementation, whereby all activities were implemented by the third year of the project and within the required budget.

The project’s efficiency can also be highlighted by the various partnerships and resource mobilization efforts conducted by the project team and supported by the various stakeholders, at local level (through the funding of the water network through Akhmeta municipality) and at central level (through the funding from various ministries).

Technical partnerships were also made in a strategic way with technical institutions (such as AMC, NACRES and GIS LAB) and which will support the replication of similar interventions and future efforts in pastures management in the region and elsewhere in Georgia.

Finally, the project’s effectiveness in mobilizing key partners in project implementation through the PEB and in promoting and effective policy dialogue on pastures management in such a regular and timely manner merits to be praised and to be recommended in future initiatives related to pastures management in Georgia.

**Based on the above, the TE rating of the project’s Effectiveness and Efficiency is considered as Highly Satisfactory.**

**Table 17. TE’s assessment of project’s response to the recommendations of the EU ROM mission of October 2013**

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| **Recommendations of the ROM mission in 2013** | **UNDP’s management response approved by the PEB in 2014** | **Action taken by the Project to respond to EU ROM mission recommendation** |
| The Project's intervention logic should be reviewed so that the Project  a) Focuses on rehabilitating pastures in and around the VPA and abandons its attempt to encourage herders and their families to resettle;  b) Ensures that local authorities and herders play an active role in project management.  c) Activities are revised to ensure they are in line with the project's purpose and overall objectives, rather than to do with the conservation of the VPA. | The Project`s intervention logic will be reviewed by middle of March 2014. Changes to the Project design will be reviewed by Project Executive Board. All activities are designed in line with project objectives. The representatives of Akhmeta and Dedoplistskaro Municipalities as well as Local Shepherds Association are members of the PEB since the first PEB meeting (July 9, 2013) | * The “Complex Assessment of Alternative sites” confirmed that resettlement outside VNP is not feasible and the project adopted an integrated approach for pastures management based on in-depth assessments covering socio-economic aspects and pastures vegetation. * The project adopted a participatory approach throughout its implementation * A holistic approach for pastures management has been adopted by the project |
| Strong management support and guidance is given to the Project Manager. | Management support and guidance provided but can be improved. | Needed support to the Project Manager has ensured smooth implementation and completion of the project activities |
| The dissemination strategy includes developing policy recommendations which will help to create an enabling environment for sustainable community pasture management.  This should be done in collaboration the ClimaEast Policy Project. | Such collaboration established since July and August 2013 through meetings between PM, BRC and CE Policy Project Team Leader and needs follow-up. | * Policy recommendations were made at different levels including the PEB, Pasture Coordination Meetings and the Policy Paper on Pastures Management * The collaboration with ClimaEast Policy Component was active but the Expert Facility could not support directly the pilot project to avoid dual financing |
| A sustainability and exit strategy is developed as soon as possible which includes working with municipalities and the APA to ensure that fees paid for grazing leases are reinvested in pasture management activities. | The sustainability and exit strategy will be developed after the revision of the project design.  There is no assurance from UNDP on specific recommendations or results on how financing mechanism will be applied at this time. | * Exit strategy prepared and supported with needed training and visibility material. * The Pasture Management Plan and Policy Paper on Pastures Management provide proposals for needed financial instruments including reinvestment of lease fees into pastures management |

## Sustainability\*

Despite major breakthrough in the project’s achievement related to pastures management, the fact that this is a first initiative dedicated to pastures management in Georgia makes it challenging to establish a sustainable basis for pastures management in the country after few years of implementation.

**Financial sustainability** cannot be confirmed at the long-term after the project’s completion despite various sources of funding which have been mobilized through various institutions by the project. Financial sustainability requires policy changes in the financial modalities governing pastures and the re-allocation of leasing fees towards the development of needed infrastructure and other requirements including veterinary services and livelihood development of shepherds. This requires a long-term programme which was beyond the scope of this project. **As such, financial sustainability is rated by the TE as Moderately Likely.**

**Socio-economic sustainability** has been strengthened through the promotion of pilot activities which were efficiently implemented by the project and could be further adopted by the local farmers (refer to the example in Box 3 below). This was also the case for the provision of water supply and veterinary services and for which the engagement of the various partners in the continuation of such efforts still requires external support which has not been confirmed to date. **As such, Socio-economic sustainability is rated by the TE as Moderately Likely.**

**Institutional sustainability** has been strengthened through the different modalities established through the project for engaging the different concerned stakeholders in the project’s implementation. At the central level, APA is well positioned to take an active role in pastures management within the PMP although this has still to be tested. The Ministry of Agriculture is also well positioned to take over the process of mobilizing the Pasture Management Stakeholders Coordination Platform after the closure of the project but this is yet to be confirmed. Other institutions at central and local level were also mobilized, but the sustainability of their efforts requires further support to be concretized. **As such, institutional sustainability is rated by the TE as Moderately Likely.**

**Environmental sustainability** has been strengthened through the in-depth assessments of the status of pastures and other assessments such as the carbon stock inventory, the general soil fertility assessment and the water balance modeling. These have allowed developing the PMP for the VNP and conducting some initial monitoring of the changes in the pastures. However, a longer timeframe is needed to be able to confirm the sustainability of these efforts and the continuous implementation of the PMP and the translation of the PMP into policies and relevant measures, including the need to develop grazing norms; which has not been conducted to date. **As such, environmental sustainability is rated by the TE as Moderately Likely.**

**Based on the above, the TE rating of the project’s Overall Sustainability is considered as Moderately Likely.**

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| **Box 3.Sample of the Description of Pilot Activities promoted through the Project: Electric Fences[[20]](#footnote-20)**  **Justification**  Electric fences are an important tool for protecting livestock and if managed and maintained properly, can result in up to 90 per cent reduction in sheep predation losses.[[21]](#footnote-21) The advantage of this measure is that it is easily adapted to most livestock situations. While electric fences have been used mostly to protect pasturing sheep, they are an effective measure for more specific protection such as sheep in times of lambing.  **Results**  Fences are known to effectively reduce wildlife-caused sheep mortality and thus human- wildlife conflict. The Measure is relatively inexpensive.  **Activities**   * Determining right areas for fencing together with shepherds; * Installation of fences around pens; * Installation of fences around small areas for weak or sick sheep; * Training of shepherds/sheep herders in utilization and maintenance of fences; * Development of utilization and maintenance manual for shepherds.   Figure 3. The ways current can flow when a predator touches an electric wire.  **One of the possible models of an electric fence. Picture Credit: Government of Alberta, Canada** |

## Impact\*

The weak M&E system within the project did not allow to document the project’s impact nor to support a reporting system for demonstrating attainment of planned impacts.

The fact that the two impact indicators adopted by the project namely (1) **4,064ha of degraded pastures restored**, and (2) **Methods for migratory route rehabilitation applied in 300 ha**; are not closely linked to the overall project objective and which is “**Rehabilitation of pasturelands and the introduction of sustainable grazing practices in Georgia”.**

Moreover, the impact indicators were not provided with a baseline or a target in order to measure the achievement of the planned impacts.

Despite the above, the project’s outputs and results have been planned based on strategic and in-depth assessments which have ensured that the project’s interventions reflect the national and local priorities in pastures management and reach the required impact.

As such, at the level of the Vashlovani PA, although the Pasture Management Plan was only completed at the end of the project, the process which was adopted for its development has been able to pave the way for an institutional approach which can be replicated elsewhere in Georgia’s PAs system. The various assessments conducted for pastures vegetation and carbon stock monitoring are reference studies which can be used as a solid baseline in Georgia for future management of the sector.

The vegetation map has allowed to determine the conditions of the pastures in VNP and to adopt a basis for future monitoring of pastures across the country.

Similarly, the carbon stock inventory which also included a general soil fertility assessment and water balance modeling of the Vashlovani PA (refer to Figure 9 below). This assessment is not only important for monitoring the potential of carbon sequestration of pastures but also for identifying the long-term impact of climate change on pastures. As such, it was clear that future planning of pastures management should take into consideration the trends in moisture deficit which will more extreme in southern part of Vashlovani (refer to Figure 10 below). According to the assessment has indicated the impact change in climate will lead to desertification to most territories which are currently used as a pastures, which will cause expansion of desert vegetation species to the higher zones, whereas overall trend will be change of mezophilic vegetation to xenophilic one, and should be of addressed through appropriate policies for pastures management.

The project has also led to significant results and impacts on the livelihood of the shepherds in VNP and in the Dedoplistskaro region as a whole by providing a solid basis for the project’s interventions and responding to infrastructure needs (pilot farms and water supply) and the provision of systematic veterinary services. Although the impacts were not quantified by the end of the project, the TE could confirm the positive perception of the beneficiary farmers from the improved conditions.

Finally, the project’s impact at the institutional level can be confirmed through the continued interest of all stakeholders to attend the pastures stakeholders’ coordination meetings highlighting the importance and need to institutionalize such mechanisms. The adherence of the concerned ministries, namely the Ministry of Agriculture and the Ministry of Environment through APA for the continuation of these efforts has been significantly strengthened through the project. The communication and outreach as well as the visibility material conducted by the project throughout its duration have also significantly contributed to advancing the priorities related to sustainable pastures management in Georgia.

**Based on the above, the TE rating of the project’s Impact is considered as Significant.**

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| **Figure 9. Distribution of Above-Ground Biomass Carbon across the Grassland** |
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| **Figure 10. Maps reflecting the annual moisture deficit in VPAs in 2014 and 2070** |

# Conclusions, Lessons & Recommendations

## Main conclusions and lessons of the Terminal Evaluation

### Understanding of pastures management at the conceptual level

The project has promoted the concept of rangeland management and pastoralism within the new development paradigm, which emphasizes two key aspects related to pastoralism which are “Mobility” and “Types and breeds of animals”.

In this framework, the project supported the concept of mobility which distributes grazing pressure and helps tracking variability of nutrients at larger scales including feeding selectivity in livestock. This is not only more productive and more economical but also most ecologically sustainable.

The project has also ensured that the “Types and breeds of animals” classifications does not reflect the assumption of modern breeding as ‘normality’ (e.g. with all breeds ranked in relation to improved ‘high-performing’ breeds). It rather supported the customary pastoral breeding systems in place, highlighting the strategic economic use of a variety of specialized ‘types’ even within a homogeneous breeding population, and giving the needed attention for complex behavioral traits of **the Tushuri sheep (refer to Box 4 below)** in this case as a breed which is has a developed a capacity for learning, propensity for feeding selectively, and adapted to the natural environment of the pastures of the area.

By doing so, the project has linked pastures degradation to the overall rangelands management system, whereby the degradation of the pastures is a sign of overall dysfunctioning of the system and cannot be addressed as a stand-alone aspect. The project also clarified that the perception of extensive degradation of pastures is not a real one and that areas where extensive degradation is taking place require that the root causes for such degradation is addressed, and in such cases the root causes are linked to institutional aspects (land tenure) or operational aspects (lack of proper infrastructure) and go beyond the capacities of shepherds to adopt “sustainable pasture management practices”.

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| **Box 4. Characteristics of the Tushuri sheep[[22]](#footnote-22)**  This semi fat-tailed sheep breed has been produced in Eastern Georgian nomadic farming conditions according to longstanding popular selection (XIII –XIV centuries) by cross-breeding of old Georgian breeds with other coarse-wool sheep. With time, Tushuri sheep gained the qualities that made it stress resistant and easily adaptable to changing climate. Due to a “strong knee”, Tushuri sheep is able to travel on a long distance -approximately through 4 000 km yearly. Tushuri sheep are compact with a great construction, they manage to get fed on sparse pastures, they are meaty and wool productivity increases if they eat more. They grow up quickly, have high quality meat and white, bendable, elastic and shining wool which is used for high quality carpet making. | **Figure 11. Tushuri sheep**  **(Photo from:** [**http://www.agro-group.me**](http://www.agro-group.me/)**)** |

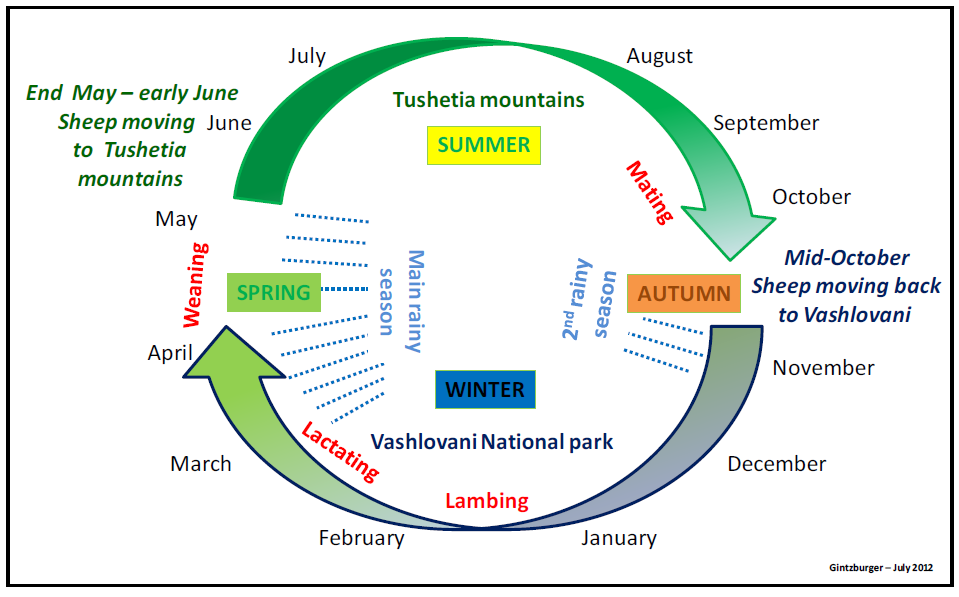
### Responding to pastures management within the regional specificity

The project has built upon a clear understanding of the transhumance model in the use pastures in and around the Vashlovani National Park (as presented in **Figure 12 below**), by establishing partnerships with the local as well as central actors, including the following:

* Individual shepherds and the Association of “Tush Shepherds”,
* Vashlovani National Park and APA
* Local authorities and municipalities
* Key technical institutions with a solid experience in the field and the region including NACRES, GIS-Lab, Association Management Centre and Veterinary Regional Association in Alvani
* Concerned ministries including Ministry of Environment, Ministry of Agriculture, Ministry of Education and National Agency of State Property

As such, the project has built upon previous studies by NACRES**[[23]](#footnote-23)** and conducted structural assessments which allowed a good understanding of the status of the pastures, regional needs. The main studies included:

* Assessment of Pastures in Vashlovani National Park, NACRES, 7 May to 17 June, 2013
* Review historical data on pasture vegetation in Vashlovani national park, NACRES, 2013
* Legal and institutional aspects for the use of pastures in the Traditional Use Zone of Vashlovani National Park. NACRES, 2013
* Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures. Prepared by the Biological Farming Association ELKANA. December 2013 - April 2014
* Recommendations for Planning Required Veterinary Services for Tush Sheep Breeders, Prepared by the Association Management Center (AMC), December 2014
* Provision of water supply for the farms on Samukhi Valley, which use the territory of Vashlovani Protected Areas for sheep watering. Prepared by GEO LTD. 2014
* Grassland Carbon Stock Calculation and Preparation of Water Balance Model for Vashlovani Protected Areas. GIS Lab, 2014



**Figure 12. Pastures use and sheep movement around the Vashlovani National Park**

This has allowed the project to implement priority interventions to address root causes linked to pastures degradation and which support a sustainable pasture management system at various level including: transhumance routes, summer pastures, winter pastures, veterinary services, and feeding practices. Although priorities were mainly identified within the project boundaries, they were clearly identified based on this solid understanding of the overall dynamics of pastures management and implemented based on an institutional anchor for pasture management.

As such, the interventions of the project where not only pilot activities, but can be considered as fundamental interventions which supported the establishment of a long-term action for pastures management and included the following (refer to Figures 13&14 below):

* Establishing a water supply system to lift off the pressures from the migratory route within Vashlovani National Park and from adjacent farms.
* Testing of active pasture management measures through fertilization and enclosures
* Developing appropriate veterinary services and related education and professional requirements
* Implementing two pilot farms to demonstrate pasture management practices

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| **Figure 13. Establishing watering points nearby grazing areas** | **Figure 14. Provision of veterinary services on the migration route in Alvani** |

### Establishing an institutional basis for pastures management in Georgia

The project has established an important inter-sectoral policy debate on pastures management issues on national level. The pasture stakeholders’ coordination meetings were started in 2014 and were held twice a year following the approval of key priority actions.

Through these coordination meetings, the project was able to trigger an institutional dialogue among all concerned stakeholders and allowed to initiate a policy process for the adoption of needed policy actions for pastures management, this was supported by a technical and policy dialogue related to the project’s interventions and results. In 2016, the project has thus presented and discussed at the level of this pasture stakeholders’ coordination committee report on: “*Strengthening Policies for Pastures Management in Georgia: Gap Analysis, International Good Practice, and Proposed Roadmap*” which can be used a basis for future action for the adoption of a policy reform at the level of the sector.

The project has also established a solid basis for developing pasture management planning within the Protected Areas system of Georgia. Although the implementation of the related activities to the Pastures Management Plans has proven lengthy and did not allow the finalization of the PMP well before the end of the project, the process was strategic and highly technical, and allowed the establishment of a sound basis not only for the development of the Pastures Management Plan for VNP but for other protected areas in Georgia as well.

## Key recommendations of the Terminal Evaluation

### Continue the institutional and policy process for pastures management

The project has highlighted the importance of pastures as a driver for rural development and poverty alleviation; in addition to the fact that pastures constitute an important part of Georgia’s ecosystem (it is estimated that 25% of Georgia’s total land area is classified as permanent pastureland). As such, pastures contribute significantly to the functioning of Georgia’s economic, social as well as environmental services.

The project’s activities have established an innovative policy and institutional dialogue for pastures management which needs to be continued in order to sustain the project’s results, through the following:

* Establishing a national committee under MoA which can support a participatory approach involving all concerned stakeholders to agree on priority actions for pastures management. Such a Committee can include all concerned institutions, local Governments, municipalities, pastoralists, NGOs and the international donor community and promote a national dialogue for reaching consensus and partnership building for pastures management.
* Developing a national strategy for pastures management which can identify priority actions to be implemented in order to adopt a policy reform for pastures management including harmonization of legal and policy framework governing pastures, strengthen institutional responsibilities for responding to pastoral development and strengthening organizational structures of pastures users.
* Continuing the implementation and development of Pasture management Plans in all the Protected Areas in Georgia to be able to identify relevant institutional mechanisms (such as mutually agreed lease contracts) which can allow the provision of financial incentives for the adoption of sustainable pasture management practices within the protected areas boundaries.

### Disseminate the Pastures Management Plan for VNP among local stakeholders

The Pastures Management Plan for VNP has been finalized towards the end of the project and was not developed as a basis for promoting visibility and communication among local stakeholders given the extensive information provided within this plan.

In order to support adherence of local shepherds to the orientations and recommendation of the plan, it is important for APA to provide simplified and clear information to the shepherds based on the management plan. This will allow a better understanding of the outcomes of the various discussions which were conducted during the development of the plan and will strengthen the collaboration with the VNP and APA as a whole for the safeguard of the VNP ecosystem.

### Document and upscale the technical information generated through the project

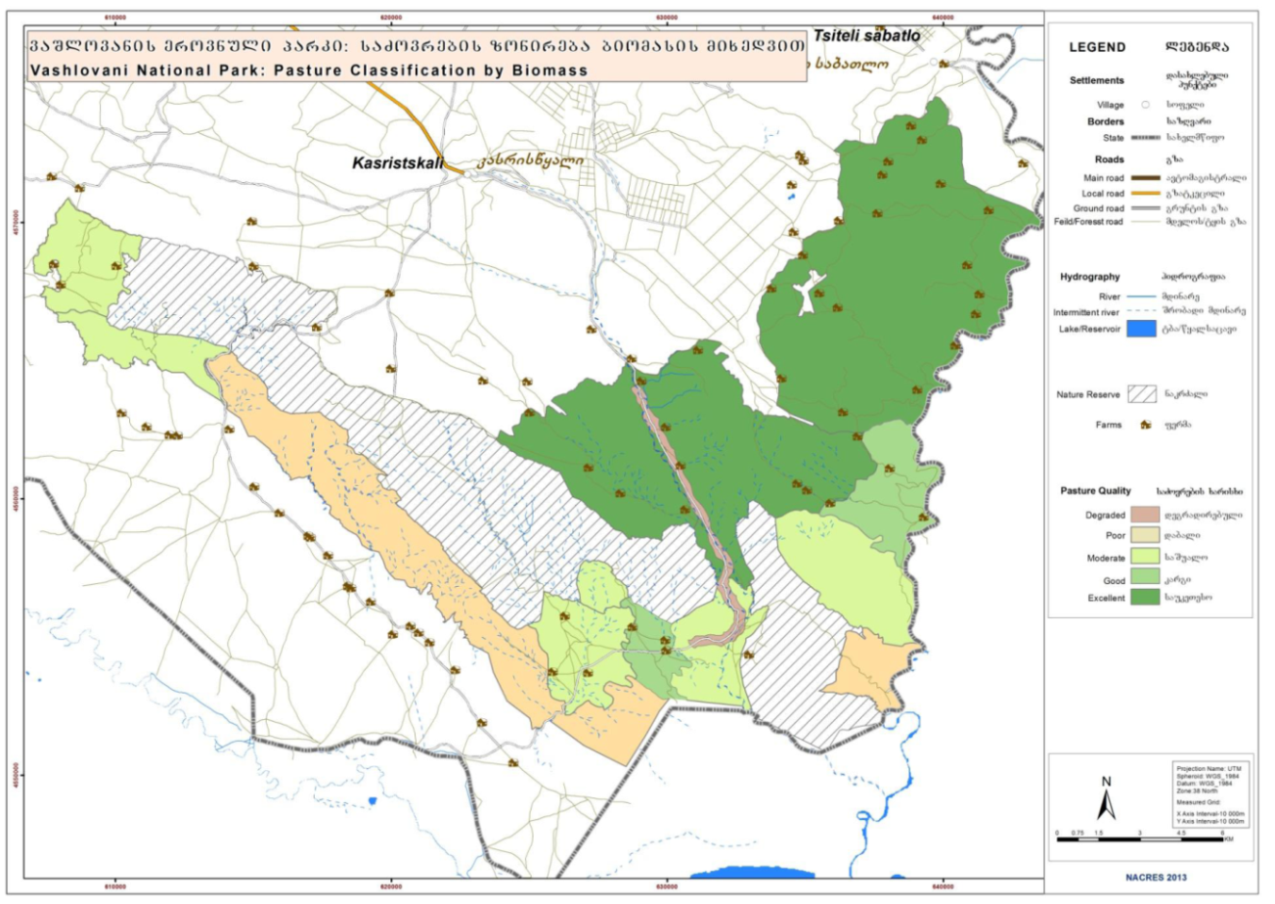
The project has generated an extensive wealth of technical information on VNP which merit being well documented and up-scaled at national level and adopted as national guidelines for pastures management.

The lack of legally binding norms for pastures and the multitude of actors engaged in the development of pasture management plans have resulted in the adoption of different methods for the classifications of pastures across the various studies.

A very important assessment of includes the VNP Soil-Adjusted Vegetation Index (SAVI) model which was used to create a standing biomass distribution map (refer to Figure 15 below). This map was used to classify all available pastures according to standing biomass and create a less detailed but more practical map with 5 classes of pastures from very low biomass (“very poor” pasture) to very high (“excellent” pasture). Although other systems have been also adopted in Georgia, it is important to harmonize the methodologies and adhere to one approach at the national level.

Other important tools and guidelines developed by the project and which should be further promoted as national guidelines include the following:

* Grassland Carbon Stock Calculation and Preparation of Water Balance Models
* Guidebook on veterinary services and diseases
* Guidelines for the pastures management plans



**Figure 15. Pasture classification in the Vashlovani National Park**

### Continue the implementation of needed interventions for pastures management and the development of the sector as a whole

Pastures in Georgia are included under agricultural lands and constitute around 25% of Georgia’s total land area, which represents about 1.7 million ha of Georgia total land area and confirms the importance of pastures in Georgia. Similarly to the agricultural sector, the productivity of pastures is dramatically decreasing since the independence of Georgia, and the livelihood of shepherds is significantly affected.

This is leading to economic losses for the country, as in the case of the agriculture sector as a whole, which has reflected a significant decrease in its share of the GDP from 31% in 1990 to 9% in 2013, although the agricultural sector accounts for about 52% of the country’s labor force.

The limited productivity of the sector is also a major cause of rural poverty; whereby the average annual salary of a farm workers amounted to only 64% of the national average in 2013, which is widening the income gap between urban and rural residents and constituting a major factor to the high levels of the rural population which were living below the national poverty line (estimated at 18.8% in 2012).

This socio-economic drawback affecting the pastures is linked to several constraints including land tenure of the pastures, and the lack of a long-term programme and measures to support the pastures requirements for using a continuity of grazing cycle which requires access to winter pastures, summer pastures as well as transhumance routes.

The project has conducted several in-depth assessments of reflecting the socio-economic needs and priorities which respond to the requirements of a sustainable pasture management system in Georgia.

While the project interventions have focused on priority interventions which could be implemented within the lifetime of the project, several other interventions could not be covered due to limited time and resources.

It remains that the in-depth assessments conducted under the project for livelihood development, and the related interventions which focused on water supply and provision of veterinary services require continuation within the region and expansion elsewhere in Georgia. These assessments have provided substantive information on the needed actions based on a clear understanding of the situation and which could serve as a good basis for nation-wide programmes (refer to Box 5 on the veterinary assessment).

Other important aspects related to improving the productivity of the sector through the development of value chains and diversification and which were only covered through initial studies merit to be further developed and implemented and can only be done as part of a comprehensive and long-term approach for pastures management.

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| **Box 5. Assessing and Planning Veterinary Service for Tush Shephards**[[24]](#footnote-24)&[[25]](#footnote-25)  The project conducted an assessment to identify veterinary problems and needs of sheep breeders and shepherds owner and to determine the quality of the current veterinary infrastructure and veterinary services in municipalities.  The study area covered seasonal pastures, Tusheti Protected Areas, Vashlovani State Reserve, and the territory of sheep movement routes including with approximately 97 Tush sheep breeders and a total number of sheep of about 60000-70000.  The information provided an in-depth diagnosis of the situation, among others, it provided very specific information about the veterinary needs and current practices, which allows to establish a clear response. For example, the study showed that the highest vaccination rates (above 80%) are only made against few diseases, while no preventive measures are taken for other and the frequency of activities depends on incidence of diseases or the focus of the disease. The study also showed lack of knowledge regarding state-funded vaccination programmes, whereby very low levels of preventive vaccinations were recorded for 3 out of the 4 state-funded vaccinations.  The study also assessed the situation at the level of veterinarian in the region and identified equally important trends and findings. For example, the study confirmed that despite the lack of qualified veterinarians, there is a sufficient veterinary potential in the region to solve Tush sheep breeders’ problems. The study indicated that the major challenge is poor planning by the shepherds.  Based on the assessment, a plan for the provision of veterinary services for Tush sheep breeders was developed and its implementation initiated through the project and was based on the following:  1. Veterinary center in Kvemo Alvani  2. Veterinary facilities including animal collecting and resting places in Kasristskali and Omalo  3. Mobile veterinary group with a vehicle equipped according to veterinary standards  4. Special equipment to liquidate infection (pathological agents)  5. Using the sheep collector through the Regional Veterinarians’ Association.  6. To ensure sustainability of the veterinary center and stations and their full functioning, it should be business-oriented. It is recommended to spend income on development of the Veterinarians’ Association as well as introduction of new services. The AMC developed the Structure of Projected Costs, Sales and Incomes that includes calculation of fixed and variable costs to ensure streamlined business operations. |

# Annex 1. Itinerary

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| 31 October 2016 | |
| 09:00-11:00 | Travel from Tbilisi to Dedoplistskaro |
| 11:00 | Meeting with the VPAs administration |
| 12:00 | Departure to Vashlovani National Park |
| 14:00 | Site visit/Watering Points, tractor, pilot farms, enclosure experiments |
| 16:00-18:00 | Travel from Vashlovani National Park to Dedoplistskaro |

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| --- | --- | --- |
| 1 November 2016 | | |
| 09:00-11:00 | Travel from Dedoplistskaro to village Kvemo Alvani |
| 11:00 | Meeting with the chairman of Association “Tush Shepherd” and individual beneficiary shepherd |
| 12:00 | Visit to the Veterinary Centre and meeting with the Veterinary Regional Association Director |
| 13:00-15:00 | Travel from Kvemo Alvani to Tbilisi |
| 16:00-17:00 | UNDP-Georgia |

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| --- | --- | --- |
| 2 November 2016 | | |
| 11:00-13:00 | NACRES – Main Partner Organization |
| 13:30 | Ministry of Agriculture |
| 15:00 | Association Management Centre |
| 16:30-17:30 | Agency of Protected Areas |

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| --- | --- | --- |
| 3 November 2016 | | |
| 12:00-13:00 | GIS-Lab – Partner Organization for Carbon Monitoring |
| 13:30- 14:30 | ClimaEast Policy Project |
| 15:00-16:00 | EU Delegation Georgia |

# Annex 2. List of persons interviewed

* Akaki Elanidze, Director, Veterinary Regional Association in Alvani
* Alvaro Ortega, Programme Manager, EU Delegation in Georgia
* Giorgi Mikeladze, Director, LTD GIS-Lab
* Irakli Shavgulidze, Chair of Board, NACRES
* Jimsher Koshadze, Main Specialist, Agriculture Development Department, Ministry of Agriculture
* Lasha Moistsrapishvili, Chairman, Agency of Protected Areas
* Medea Inashvili, Regional coordinator for Caucus countries, ClimaEast Policy Project
* Merab Pirosmanashvili, Head of Vashlovani Park Administration, Agency of Protected Areas
* Nino Antadze , Environment and Energy Portfolio Team Leader , UNDP Georgia
* Otar Pareulidze, Individual beneficiary shepherd
* SergoTurmanidze, Chairman, Association Management Centre
* Tamar Kvantaliani, Deputy Chair, Agency of Protected Areas
* Tornike Phulariani, Project Manager
* Zurab Murtazashvili , Chairman, Association of “Tush Shepherds”

# Annex 3. Summary of field visits

The field visit was conducted on 31 October 2016 in the VNP territories and other areas outsid the VNP within the Dedoplistskaro region. The visit allowed checking on several activities funded by the project in support of pasture management in the VNP territories and outside of it. This included the following main activities:

* watering points inside and outside the Park,
* visits of the Park infrastructure connected to the water supply system and where the tractor purchased through the project was parked,
* pilot farms where the project has supported renovation work to support innovative measures
* enclosure experiments and meteorological stations.

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| **Watering point based on natural flow system** | **Rehabilitation farm equipped with solar power** |

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| **Automatic meteorological station** | **Tractor small tractor as mulcher and sprayer** |

# Annex 4. List of documents reviewed

**Project Management Reports:**

* Project Document. Initial (2013) and Amended (2014)
* Inception Report. July 2013
* Annual Progress Reports for 2013 and 2014
* Quarterly Reports for 2013-2016
* EU Monitoring Report. December 2013
* TORs for key contracts and consultancies
* Minutes of the PEB meetings
* Minutes of the Pasture Stakeholders Coordination meetings

**Project technical reports (in chronological order):**

* Assessment of Pastures in Vashlovani National Park. Prepared by NACRES. May- June, 2013
* Review of historical data on pasture vegetation in Vashlovani national park. Prepared by NACRES. 2013
* Legal and institutional aspects for the use of pastures in the Traditional Use Zone of Vashlovani National Park. Prepared by NACRES. 2013
* Assessment for the Feasibility of Targeted Pastures as Comparable Alternatives for Currently Used Pastures. Prepared by GIS-Lab. December 2013- February 2014
* Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures. Prepared by the Biological Farming Association ELKANA. December 2013 - April 2014
* Preparation of ToRs for developing general guidelines for Pasture Management Planning. Prepared by an International Expert. 2014
* Recommendations on Pilot Activities and Sites. Prepared by NACRES. 2014
* Provision of water supply for the farms on Samukhi Valley, which use the territory of Vashlovani Protected Areas for sheep watering. Prepared by GEO LTD. 2014 (in Georgian).
* Research Analysis for Identifying Veterinary Needs and Planning Veterinary Service for Tush Shepherds. Prepared by the Association Management Center. October-November 2014
* Recommendations for Planning Required Veterinary Services for Tush Sheep Breeders. Prepared by the Association Management Center. December 2014
* Grassland Carbon Stock Calculation and Preparation of Water Balance Model for Vashlovani Protected Areas. Prepared by GIS Lab. 2014
* BSR Report. 2015 (in Georgian)
* Development of General Guidelines for the Pasture Management Planning. Prepared by NACRES. 2015
* Development of the Pastures Management Plan for VNP. Prepared by NACRES. 2016 (in Georgian)
* Reporting on Pasture Rehabilitation, Scheme Developed for Active Management Measures and other activities. Prepared by NACRES. 2016
* Strengthening Policies for Pastures Management in Georgia: Gap Analysis, International Good Practice, and Proposed Roadmap. Prepared by an International Expert. July 2016.

**Visibility material:**

* Information regarding the project available on the Ministry of Environment and Natural Resources Protection of Georgia website:

<http://moe.gov.ge/index.php?sec_id=119&lang_id=ENG&project_id=84>

* Information regarding the project available on UNDP Georgia website:

<http://www.undp.org/content/georgia/en/home/operations/projects/environment_and_energy/pastures.html>

* Short documentary “Sheep, Grass and Water”:

<http://www.ge.undp.org/content/georgia/en/home/ourwork/environmentandenergy/successstories/ClimaEastGeorgia.html>

* TV report on opening the watering points in near Vashlovani National Park:

<https://www.facebook.com/protectedareas.ge/videos/946635468736391/>

* Pasture management stakeholders coordination meeting:

<https://www.facebook.com/media/set/?set=a.881120535269277.1073742082.319570924757577&type=3>

1. All criteria marked with (\*) must be rated [↑](#footnote-ref-1)
2. Project report: Assessment of Pastures in Vashlovani National Park. Prepared by NACRES. May- June, 2013 [↑](#footnote-ref-2)
3. Project report: Assessment of Pastures in Vashlovani National Park. Prepared by NACRES. May- June, 2013 [↑](#footnote-ref-3)
4. Project report: Grassland Carbon Stock Calculation and Preparation of Water Balance Model for Vashlovani Protected Areas. Prepared by GIS Lab. 2014 [↑](#footnote-ref-4)
5. Project report: Assessment for the Feasibility of Targeted Pastures as Comparable Alternatives for Currently Used Pastures. GIS-Lab. 2014 [↑](#footnote-ref-5)
6. Project report: Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures. Prepared by the Biological Farming Association ELKANA. December 2013 - April 2014 [↑](#footnote-ref-6)
7. Project report: Provision of water supply for the farms on Samukhi Valley, which use the territory of Vashlovani Protected Areas for sheep watering. Prepared by GEO LTD. 2014 (in Georgian). [↑](#footnote-ref-7)
8. Project report: Recommendations on Pilot Activities and Sites. Prepared by NACRES. 2014 [↑](#footnote-ref-8)
9. Project report: Research Analysis for Identifying Veterinary Needs and Planning Veterinary Service for Tush Shepherds. Prepared by the Association Management Center. October-November 2014. [↑](#footnote-ref-9)
10. Project report: Recommendations for Planning Required Veterinary Services for Tush Sheep Breeders. Prepared by the Association Management Center. December 2014 [↑](#footnote-ref-10)
11. Project report: Legal and institutional aspects for the use of pastures in the Traditional Use Zone of Vashlovani National Park. Prepared by NACRES. 2013 [↑](#footnote-ref-11)
12. Project report: Strengthening Policies for Pastures Management in Georgia: Gap Analysis, International Good Practice, and Proposed Roadmap. Prepared by an International Expert. July 2016. [↑](#footnote-ref-12)
13. Project report: Assessment of Pastures in Vashlovani National Park. Prepared by NACRES. May- June, 2013 [↑](#footnote-ref-13)
14. Project report: Grassland Carbon Stock Calculation and Preparation of Water Balance Model for Vashlovani Protected Areas. GIS Lab. 2014 [↑](#footnote-ref-14)
15. Jonathan Etzold, Tubukhanim Gasimzade, Aferin Hasanova, Regina Neudert, and Michael Rühs, under supervision of Garib Sh. Mammadov. 2014. Monitoring Manual for Winter Pastures in the Transcaucasus. [↑](#footnote-ref-15)
16. Project report: Reporting on Pasture Rehabilitation, Scheme Developed for Active Management Measures and other activities. Prepared by NACRES. 2016 [↑](#footnote-ref-16)
17. Project report: Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures. Prepared by the Biological Farming Association ELKANA. December 2013 - April 2014 [↑](#footnote-ref-17)
18. Project report: Recommendations on Pilot Activities and Sites. Prepared by NACRES. 2014 [↑](#footnote-ref-18)
19. Project report: Local livelihood assessment of Tush Shepherds traditionally using Territory of Vashlovani Protected Areas for winter pastures. Prepared by the Biological Farming Association ELKANA. December 2013 - April 2014 [↑](#footnote-ref-19)
20. Project report: Recommendations on Pilot Activities and Sites. Prepared by NACRES. 2014 [↑](#footnote-ref-20)
21. A study conducted by Alberta Agriculture and Rural Development, 1970. [↑](#footnote-ref-21)
22. Gonashvili et al, 2013. Perspectives on Sheep Farming & the Sheep Market System in Georgia.Prepared with the support of the Swiss Confederation and MercyCorps. [↑](#footnote-ref-22)
23. G. Gintzburger, 2012. Rangelands Condition and Assessment: Vashlovani national park and associated project areas. Prepared for Georghia Carnivore Conservation Project, FFI/NACRES. [↑](#footnote-ref-23)
24. Research Analysis for Identifying Veterinary Needs and Planning Veterinary Service for Tush Shepherds. Prepared by the Association Management Center. October-November 2014 [↑](#footnote-ref-24)
25. Recommendations for Planning Required Veterinary Services for Tush Sheep Breeders. Prepared by the Association Management Center. December 2014 [↑](#footnote-ref-25)