



**DEMONSTRATING NEW APPROACHES TO PROTECTED AREAS AND BIODIVERSITY  
MANAGEMENT IN THE GISSAR MOUNTAINS AS A MODEL FOR STRENGTHENING  
THE NATIONAL TAJIKISTAN PROTECTED AREAS SYSTEM**

# Narrative Report

on  
Local Government  
Sustainable Land-Use Survey

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# 1. Introduction

## Background

The protected areas (PA) system of Tajikistan consists of four Strict Nature Reserves (zapovedniks – IUCN Category I), two National Parks (IUCN Category II), thirteen nature reserves (zakazniks IUCN Category IV), twenty-six Natural Monuments (IUCN Category III), and a limited area of tourism /recreation zones. In total the protected areas system covers approximately 31,000 km<sup>2</sup>, an impressive 21% of total country area. However, in terms of strictly protected areas (IUCN Category I) coverage is approximately 1.2%. A lack of an ecosystem approach during design of the protected areas has resulted in a reduction of conservation effectiveness in many cases (too small, inappropriate borders, absence of wildlife corridors, etc).

Tajikistan's current PA system is a legacy from the Former Soviet Union (FSU). While a lot has been done to establish and maintain this system, it is now outdated and in many respects irrelevant to the new social and economic realities of Tajikistan that is emerging from years of conflict and is in transition to a market economy. Most PAs in Tajikistan suffer severe barriers to effective conservation and sustainable management of biodiversity, including: fragmented institutional and management responsibilities, reduction of capacity due to qualified staff losses, severe cuts in funding, policy and legal inconsistencies and weaknesses, inadequate information and monitoring, and an absence of mechanisms for participation, benefit sharing and conflict resolution with local communities. Demonstrating new approaches to Protected Areas and Biodiversity Management in the Gissar Mountains as a model for strengthening the national Tajikistan Protected Areas System (the project) is focusing on demonstrating improved, holistic management in at least three target PAs, and the productive areas in their periphery, that represent a cross section of the PA categories of Tajikistan. The project will: introduce new people-oriented management practices; strengthen capacity in terms of ecological, technical, socio-economic, and financial planning; reach out to, and involve, “non-traditional” PA stakeholders; include a focus on the wider landscape context of the reserves and not just the reserves themselves; clarify and rationalize policies affecting PA management; and resolve resource-use issues that negatively affect PA management and biodiversity conservation.

The project demonstration area includes protected areas of three categories, specifically a Nature Historical Park, a Strict Nature Preserve (Zapovednik) and a State Nature Reserve (Zakaznik). These three categories of PAs constitute 99% of the actual coverage of the PA system in Tajikistan. Furthermore, analysis indicates that the threats and barriers to their effective functioning are the key issues faced throughout the system. Thus, the project area represents an excellent demonstration site for the overall PA system and an outstanding basis for providing models and lessons which can be replicated and applied across the system

**Project Objective:** To catalyze the improved conservation of globally significant biodiversity in Tajikistan through demonstration of new mechanisms and approaches to achieving the effective management of protected areas and natural resources adjacent to them.

**Project Purpose:** To strengthen the effectiveness and sustainability of management within and around three protected areas on the southern slopes of the Gissar Mountains, thereby provide models and best practices replicable throughout the national PA system.

The project is designed to build capacity and improve management effectiveness in the three selected protected areas in Tajikistan with the total area of 25,000 ha. The project will also strengthen the overall enabling environment for the PA management in Tajikistan and disseminate lessons learned and best practices and introduce those in the remaining Protected Areas – as such, the project will indirectly benefit an additional 3,1 mln. ha of the PA system. In addition, the project will develop robust approaches to biodiversity conservation by integrating conservation with the sustainable use of natural resources and livelihoods of rural communities.

## Framework of the study

Outcome 1 of the updated project logical framework, **“Strengthened environmental governance provides a more sustainable land-use context for the PA system”** has been set to reduce law and policy barriers hampering effective PA management, sustainable use of resources, and enforcement of the regulatory framework. For this outcome, performance indicators, relevant to this survey, are:

### **Performance Indicator: Local policies on sustainable land-use designed and supported by the selected local governments**

Activities under this output will focus specifically on working with local stakeholders including local government, community-based organizations and conservation agencies on sustainable land-use management policies such as: land tenure issues, grazing and forestry management / regulation, arable farming and water access regulation and control, enforcement mechanisms and compliance incentive measures, and institutional management arrangements. Activities will also include targeted workshops and follow up initiatives to introduce stakeholders to international and regional experiences and best practices with regard to the new roles and responsibilities of various natural resource actors under the changed political and economic environment of Tajikistan. The project will also build the knowledge and capacity of relevant stakeholders, both users and regulators, on how to effectively translate legislation into practice.

### **Performance Indicator: Amendments to the existing or new versions of the: Protected Areas Law and the Forest Code prepared and submitted to the Parliament**

Tajikistan’s policy, legal and regulatory framework attempts to provide management direction for biodiversity conservation professionals, both in terms of revenue streams and mandates to guide institutional activity. However, this legal and regulatory framework – composed of more than 120 legislative documents - is frequently contradictory and rarely clear or comprehensive. As a result, management is poorly executed, with resource access largely ungoverned and biodiversity adversely impacted. Therefore, activities to achieve this output will focus on identifying the current gaps in the policy, legal and regulatory framework relevant to sustainable land and natural resource use. The project will focus specifically on tightening the existing protected areas legislation and regulations to improve the PAs’ ability to conserve biodiversity effectively and in a culturally appropriate and scientifically rigorous manner. Protected Areas Law and the Forest Code will be the main target of the project activities.

## Goal of the survey

The main goal of this survey is **to review land-use management practices that affect biodiversity conservation and use of natural resources in and around PAs employed by local governments including local conservation authorities.**

The focus of the survey has been on clarifying existing policy/legal/regulatory framework for natural resource management and conservation in the project areas. The results of the survey will be discussed with the project stakeholders and be used to remove frequent contradictions, reduce conflicts and make the policy, legal and regulatory framework more comprehensive. Specific project activities will target land management practices, clarify land-use and resource access regimes, improve regulation of activities adversely impacting biodiversity, help introduce changes into local planning documents and enforce legislation.

## 2. Methodology of Data Collection

This survey has followed the existing CARE survey procedures and is based on the organization's multi-year experience in Tajikistan. The survey was implemented in stages: questionnaire<sup>1</sup> development, translation and pre-testing, interviewing and facilitation, recording and note taking, physical handling of survey instruments and data, data entry and data analysis.

The project used structured individual survey methodology to collect individual level quantitative data from the selected local government representatives. The questionnaire was logically structured based on the project framework and indicators.

M&E Assistant ensured that the project indicators and the conceptual framework of the survey are well addressed through these instruments. As required, the data collection instrument was reviewed by the Project Staff and Management to ensure that the target indicators are not overlooked and local realities are reflected. Finally, the relevant field instruments and procedures were translated into local languages and pre-tested in the field. Based on the results of the pre-test the survey instrument was revised and updated to ensure quality of the data.

M&E Assistant thoroughly trained the field enumerators and their supervisor on the objectives of the survey, questionnaire administration and tools applied to the survey. Project staff was among those enumerators with the direct supervision of the Project Manager.

**Sampling methodology:** Due to a small size of the sample of target interviewees representing relevant local government agencies, a universe sample was used to represent sample size. Four local government units located next to the project PAs were selected as a sampling frame. Total of 12 representatives from Jamoats of Gissar, Shahrinav, Tursunzoda and Vahdat Hukumats, State Committee on Environmental Protection and Forestry (SCEPF)<sup>2</sup> and Land-Management Committee were among interviewees. See the details below:

District	Jamoat	# Respondents			Total
		Jamoat/ Hukumat	SCEPF	Land- Management Committee	
Gissar	Honakoi Kuhi	1	1	1	3
Shahrinav	Selbur	1	1	1	3
Tursunzoda	Rabot	1	1	1	3
Vahdat	Romit	1	1	1	3
<b>Total</b>		<b>4</b>	<b>4</b>	<b>4</b>	<b>12</b>

**Data entry and analysis:** The M&E Assistant developed a database using Microsoft Excel. Before entering the data, all the questionnaires were checked for consistency, legibility and post coding. In addition, all entered data was visually checked to identify outlier entries. The data analysis results were presented using descriptive statistics and cross tables.

**Data/information quality control:** The M&E Assistant developed and implemented a standard data quality control procedures at each critical stage of the survey design and implementation. In addition, M&E Assistant together with the project staff carried out intensive field follow-up and supervision during the early stages of data collection that allowed a real-time feedback to the Project Management Team in order to take corrective action to address field constraints on a timely manner. The field supervisor oversaw data collection and data quality control on a day-to-day basis in each district until the last representative of local government was interviewed.

<sup>1</sup> The questionnaire is attached

<sup>2</sup> Ministry of Agriculture and Nature Protection since December 2006

### 3. Major Findings

The age of respondents varies from 36 to 56 years old, 75% of them have higher education. Most of the interviewees occupy high positions in the respective local government units.

#### Descriptive statistics used to calculate results per question of the questionnaire:

##### 1. Total land area (ha) by category per district:

District	Agricultural	Pastures	Lands allocated to other districts*	PAs	Forestry	Reserve	Community	Ministry of Defense	Industry
Vahdat	190,419	68,110	50,138	16,100	42,685	19,269	1,984		170
Tursunzoda	246,058	99,782	76,672	3,000	55,512	1,129	876	753,5	753,5
Shahrinav	88,620	43,822	22,255	3,500	13,987	664	278		444
Hissor	111,964	46,776	17,200	2,500	20,000	2,547	985	2	
<b>Total</b>	<b>637,061</b>	<b>258,490</b>	<b>166,265</b>	<b>25,100</b>	<b>132,184</b>	<b>23,609</b>	<b>4,123</b>	<b>755,5</b>	<b>1367,5</b>

\*Lands temporarily (up to 10 years) allocated to different districts as pastures

2. Type of land-use in the area?	
Private land-use	100%
Collective	92%
Government	100%
<b>Others:</b>	
Temporary land use based on lease agreements	25%
Forestry agency	8%
Pastures	17%
Land lease for 5-10 years	8%

3. Has land registration (cadastre) and monitoring of land-use been conducted?	
Yes	92%
No	8%
<b>If YES, when</b>	
Annual	9%
Between 1993-1994	27%
Between 2001-2004	45%

4. Terms of land-use taxation	
Land-use taxation is charged in accordance with rates approved by the government depending on land category	100%
The land-lease is paid in:	
Cash	36%
Produce	36%
Other	73%
Per agreement	75%

5. Are there any programs on land use and protection?	
Yes	83%
No	17%
Programs are implemented at that moment:	
	Terms
Government program on ecology	10
National strategy on "Desertification"	15
Program on using herbs	8
Forestry Development	10
Re-organization of agricultural enterprise	10
Land use concept	20

**Comment:** Existence of programs was mentioned by local forestry and land management committees. An average length of programs is 10 years. Most programs approved by the Government of Tajikistan (GoT).

6. How distribution of hayfields and pastures is taking place among community members, farmers and government organizations?	
Depending on livestock availability	75%
Depending on availability and condition of pastures	42%
Tender based	0%
<b>Other</b>	
In 2003 in accordance with the law of the GoT, pasture land was allocated for 10 years Forestry lands are distributed by foresters, but pastures were allocated according to the law Local Forestry Unit provided community with the land Agreement based Proposed by the Ministry of Agriculture, approved by the GoT GoT allocated pasture land Seasonal distribution	

7. Is opinion of environmental agencies considered during the land distribution?	
Yes	75%
No	25%

8. What land tax and land lease fees are used for?	
to improve pastures (seedling cultivation)	58%
to conduct land registration (cadastre) and monitoring of lands	75%
to provide salary for workers	0%
<b>Others</b>	
Collected money is transferred to the account of local budgets, but don't know how it is used	8%
Depends on the decision of hukumat and land committee	8%

<b>9. Is crop rotation and land use controlled on slopes?</b>	
Yes	<b>75%</b>
No	<b>25%</b>
<b>if YES, how:</b>	
State monitoring of lands	<b>58%</b>
Examination of land condition	<b>8%</b>
<b>Other</b>	<b>50%</b>
With the assistance of land committee's specialists	<b>13%</b>
Based on standards	<b>13%</b>
Regular checks by specialists on quality of lands from the State Committee on Environmental Protection and Forestry	<b>25%</b>

<b>10. What kind of activities are implemented to avoid land erosion?</b>	
tree planting	<b>92%</b>
cultivation of perennial grasses	<b>8%</b>
ban on tree and brush cutting	<b>92%</b>
ban on cultivation of annual crops on hillside with slope over 15 degree	<b>58%</b>
Nut	<b>50%</b>
Poplar	<b>50%</b>
Almond	<b>50%</b>
Juniper Spruce	<b>33%</b>
Cherry plum	<b>25%</b>
Apple-tree	<b>25%</b>
Pine	<b>25%</b>
Elm	<b>25%</b>
Brier	<b>17%</b>
Hawthorn	<b>17%</b>
Trees with deep roots	<b>8%</b>

<b>11. What kind of information on land use is documented (protection, use and control)?</b>
Information on rain-fed and irrigated lands
Boundaries of land
Pasture degradation
Land-use
Cadastral
Cadastral land assessment
Annual and quarterly reports
Land quality
Land availability and land categorization by type and land-users
Land assessment
Eroded areas of land
Timely collection of land tax
Condition of ground water
Reduction in forest cover
Land area by land-users
Land area by type and category
Land area under water bodies
Land area under Kitchen Gardens
Quality of land
Expertise on changing quality of land

<b>12. Are there any identification marks per land category?</b>	
<b>Yes</b>	<b>33%</b>
If YES, what?	
Only in the territory under Forestry Agency	
On the territory of local forestry, strict nature reserves and nurseries	
<b>No</b>	<b>67%</b>
Some on lands under Forestry Agency	

<b>13. What kind of administrative measures are available for violating land use conditions?</b>	
Penalty	<b>92%</b>
120 somoni	<b>33%</b>
360 somoni	<b>58%</b>
600 somoni	<b>8%</b>
Cancellation of a land-use agreement	<b>58%</b>
Other: Criminal cases	<b>8%</b>

<b>14. How many individuals were fined or their land-use lease canceled in 2006?</b>	
	<b>50%</b>
2 individuals	<b>8%</b>
9 individuals	<b>17%</b>
13 individuals	<b>8%</b>
62 individuals	<b>8%</b>
250 individuals	<b>8%</b>
<b>Comments:</b>	
Illegal livestock grazing and land use on hillside	
Illegal land use and crop cultivation	
Illegal tree cutting	

<b>15. What documents determine land users' rights and responsibilities?</b>	
Certificate	<b>100%</b>
Agreement	<b>17%</b>
Hukumat's decision (district, jamoat, or government)	<b>25%</b>

<b>16. Are you aware about government programs on Forestry for the period until 2014 and Protected Areas for the period until 2015?</b>	
Yes	<b>75%</b>
No	<b>25%</b>
<b>If YES, what activities have been implemented so far?</b>	
Allocation of land for reforestation	
Tree planting to prevent soil erosion	
Tree planting on hillsides	
Community mobilization for tree planting along roads and canals	
Planting of Ferula on 200 ha	
According to the land cadastre, over the last 12 years there are no lands under forest fund in Hissor district *	
Hashar (subbotnik) for tree planting	
Environmental awareness campaign	
Protected Areas' days	
Ban overgrazing	

Help during tree planting campaigns  
 Protection of flora and fauna on the territory of protected areas  
 Awareness campaign on protection of flora and fauna  
 Environmental awareness campaign for communities  
 Land allocation for protection of flora and fauna  
 Enlarging area under PA  
 Amendments to law on Protected Areas of RT

*\* According to a Government Resolution Land of the Hissor forestry have been given to a number of cooperatives as pastured until 2013. Even though the State Forest Fund with the Hissor Forestry stands at 20,000 ha, based on the Government resolution, officially there are no lands on the balance of the Hissor forestry.*

**17. What natural disasters caused the most damage in your community especially in the areas located on mountain slopes?**

Mudflow	100%
Hail	67%
Earthquake	0%
Drought	0%
Frost	42%
Wind	0%
Other: Areas experiencing land erosion have increased	8%

**18. Are there any dual land use practices in your area (primary and secondary land users)?**

Yes	75%
No	25%

**19. What agricultural activities caused main and long-term damage to land fertility?**

Cultivation on hillside	92%
Grazing	83%
Harvest of hay	0%
Other	83%
Tree cutting	90%
Planting of annual crops	10%

**20. Recommendations on sustainable land-use:**

To increase tree planting	58%
Distribution (allocation) of land based on tender	8%
Ban on goat grazing in forests	8%
Ban on growing of annual crop	25%
Ban on tree cutting	33%
Continuous awareness on sustainable land use among community members	25%
Regulate number of livestock per land unit	42%
To create job opportunities for local population	8%
To reduce level of poverty	8%
Maintain/enforce crop rotation	17%
Strict control over remaining lands	8%
Reliable electricity supply	8%

#### **4. Conclusions & Recommendations**

1. Close check of land use by all enterprises, organizations, institutions regardless of governance and type of property, as well as by individual and corporation in accordance with the target usage of land.
2. Development and implementation of government programs related to anti erosion campaign.
3. Development and approving by government of rules related to grazing animals in the protected area land with the limitation of animal grazing on that area.
4. Development and approval of ecological indicators of land use.
5. Development of camps in PAs to interest tourists and create job opportunities for community.
6. Increased work on reforestation with the involvement of community, consider planting of spruce and nut trees.
7. Community Awareness Rising on Biodiversity Implications and Vulnerabilities (to conduct trainings and provide with lectures).
8. Development of long-term management plans on land use in PAs.
9. Development of poverty reduction strategies in PAs.

## **5. Lessons learned**

During the Local Government Survey on Sustainable Land-Use the project encountered problems because the project was not able to notify local authorities about the upcoming survey. Therefore, local authorities were not always available when the project staff visited their offices. This caused disruption of the planned survey and delays with data collection and submission to DME.



**4. Condition of land-use taxation:**

- 1.  The land-use taxation is charged in accordance with wage rate approved by government depending on category of land.
- 2.  The land-use tax is charged:
  - a.  By cash
  - b.  By product
  - c.  Other \_\_\_\_\_

**5. Are there any program/project on land protection and using?**

- 1.  Yes
- 2.  No

If YES, please fill in table below:

Program/ Project	Proposed by	Date	Term	Approved by

**6. How distribution of hay harvest and pasture is taking place among community, farmers and government organizations?**

- 1.  depending on livestock availability
- 2.  depending on pasture availability and condition
- 3.  tender based
- 4.  other \_\_\_\_\_

**7. Is opinion of protected area organizations considered during distribution?**

- 1.  Yes
- 2.  No

**8. What purpose of land tax and land lease is used for?**

- 1.  for improving pasture land (seedling cultivation)
- 2.  to conduct land registration (cadastre) and monitoring of lands
- 3.  to provide with salary for workers

**9. Is crop rotation and land use controlled in mountainside?**

- 1.  Yes
- 2.  No

**If YES, how:**

1.  to conduct government monitoring of lands
2.  to conduct an examination of land condition
3.  Other \_\_\_\_\_

**10. What kind of activity is implemented to avoid land erosion?**

1.  planting trees (enumerate main type of trees) \_\_\_\_\_  
\_\_\_\_\_
2.  cultivation of multiyear plants (enumerate main type of plants) \_\_\_\_\_  
\_\_\_\_\_
3.  prohibition of cutting trees and brush
4.  prohibition of cultivation of multiyear plants on hillside with slope of 15 degree

**11. What kind of documentation available for land use (protection, using and control)?**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**12. Are there any identification marks for category of lands?**

1.  Yes
2.  No

**If YES, what?** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**13. What kind of administrative measures are available for violence of land users' rights?**

1.  charging penalty from \_\_\_\_\_ somoni
2.  exclusion on land-use
3.  others \_\_\_\_\_

**14. How many people were fined or excluded for land-use in 2006?** \_\_\_\_\_

**15. What documents are used for land user's rights and responsibilities?**

1.  Certificate
2.  Agreement
3.  Hukumat's decision (district, jamoat, or government)

**16. Are you aware about government program on Forestry Development for the period till 2014 and program for Development of Protected Areas for the period till 2015?**

- 1.  Yes
- 2.  No

**If YES, what kind of activities has been implemented so far?** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**17. Mostly what kind of natural disaster caused damage for your community located in mountainside area?**

- 1.  Mudflow
- 2.  Hail
- 3.  Earthquake
- 4.  Drought
- 5.  Frost
- 6.  Wind

**18. Is there any double land use in your territory (primary and secondary land users)?**

- 1.  Yes
- 2.  No

**19. What, in your opinion, agricultural activities in your territory caused main and long term damage for land fertility?**

- 1.  cultivation in hillside
- 2.  grazing
- 3.  haying time
- 4.  other \_\_\_\_\_

**20. Recommendation on sustainable land-use** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Name of interviewer, position and signature** \_\_\_\_\_