

Development of the Zoning for the Aragvi Protected Landscape

Technical report



Prepared by: Jindřich Chlapek, Michael Hošek, Eva Knižátková, Jiří Flousek

October, 2020

Introduction

Zoning of any protected area reflects differences in land use and distribution of natural as well as cultural values in its territory, classifies their relative importance and suggests a level of protection. Division of the large-scale protected area into zones represents a basic tool of differentiated approach towards effective, transparent and comprehensible nature conservation.

Usually four zones are distinguished within a protected landscape (hereinafter PL) in Georgia according to their character and needs of appropriate protection of natural, landscape and cultural heritage.

The zoning is not hierarchic, each zone plays its specific and unreplaceable role. The aim of each zone is, in general, as follows:

- 1) The 1st (protection) zone covers unspoiled/preserved areas with very low level of human impacts or with non-intervention approach in the long run.
- 2) The 2nd (traditional use) zone usually encompasses the largest proportion of a PL, including ecologically stable while traditionally used parts.
- 3) The 3rd (historical cultural) zone is composed of relatively small segments of landscape with the highest cultural and spiritual values, such as villages with well-preserved architecture and settlement structure, or complexes of sacred places.
- 4) The 4th (sustainable development) zone is designed for development of activities not disrupting character of a PL and its values.

A detailed knowledge of the overall character of a PL is necessary precondition for any division of particular territory with respect to its natural values and use of natural resources. Field visits are a must. In case of the Aragvi PL, tens of days have been spent in the field in a cooperation with local experts and communities in 2017-2019.

Technical delineation of particular zones and basic habitat distribution and land use assessment was made above aerial pictures, with help of the geo-referenced Soviet maps in the scale of 1:10 000 and using GIS software.

Very similar approach as described below, based on the extensive experience from the Czech Republic, was also used for elaboration of zoning for the Tusheti Protected Landscape and the Machakheli Protected Landscape. This approach ensures the same standard of zoning in all Georgian protected landscapes.

Definition of particular zones and process of their delineation

In each of the following chapter, the process leading to the delineation of the individual zone as well as its basic characteristics are described. For more information about individual segments see the Management Plan for the Aravi Protected Landscape (hereinafter AMP).

Protection zone (the 1st zone)

In standard condition, the habitat mapping and knowledge of key species occurrence would serve as a basis for delineation of the protection zone. In case when such data do not exist, detailed field observations and evaluation of the habitat distribution and habitat quality from the nature

protection point of view was used as a key source of information to delineate the protection zone in the Aragvi PL (14.7 %).

Inaccessible or hardly accessible areas without any traces of human activities (or with very low impact of them) and with high level of natural values (taking into account potential occurrence of umbrella species; GIZ 2016) were included into the protection zone. Natural habitats of the Caucasian chamois, Caucasian snowcock, Caucasian black grouse and brown bear, based on the best knowledge of their habitat preferences, were distinguished as areas with the highest natural values within the PL. Presence of well-preserved (almost) untouched forests, large complexes of subalpine *Rhododendron* shrubberies, easternmost occurrence of the oriental spruce within the Greater Caucasus, and relatively small but unique peat-bog site were other decisive reasons for including those areas into the protection zone. The aim was to cover all typical and representative ecosystems of the Aragvi PL in the best natural quality, from the lowest to the uppermost parts of the area and in large enough segments.

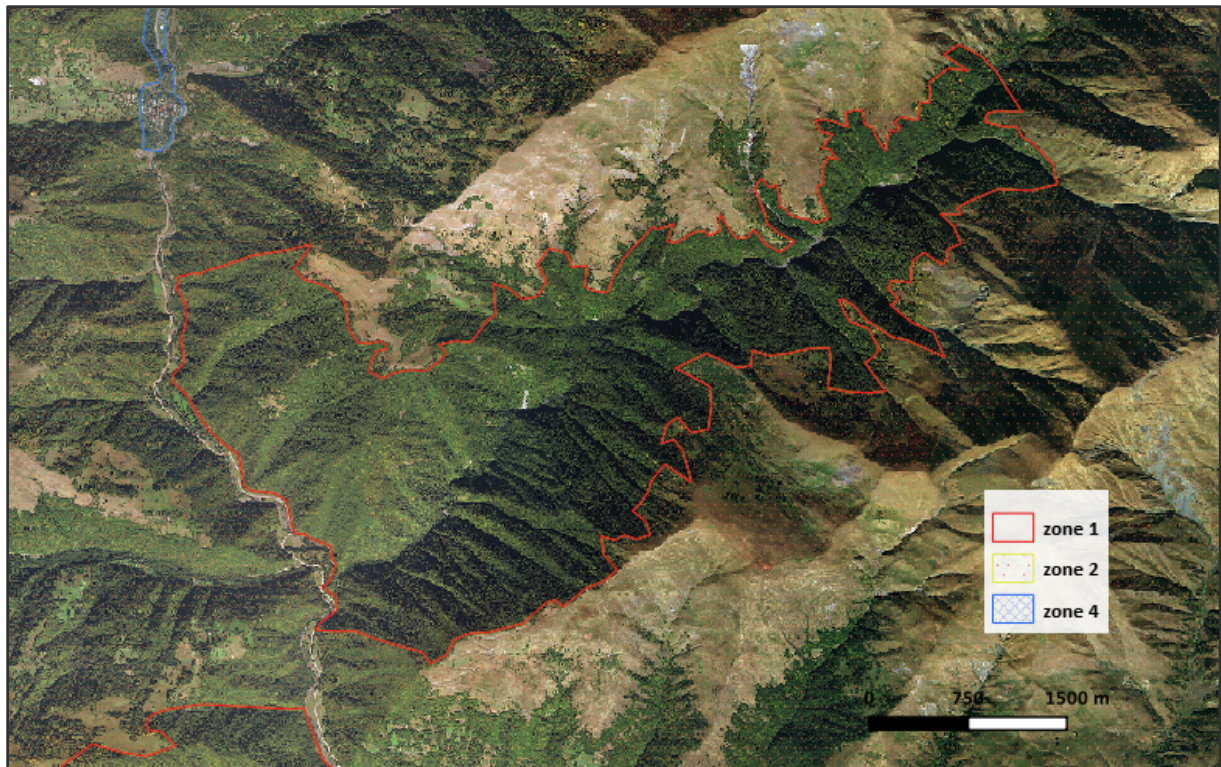
The Aragvi rivers and their floodplains as a separate ecosystem were not included into the protection zone despite their highly specific value, because of their position (oftentimes close to settlements and roads), shape and length and also because of recent local gravel mining. The only exception is an excellent example of the floodplain ecosystem along well-preserved forests on steep rocky slopes in the length of approximately 7 km (Segment 11 – Kaldovani, just above the confluence with Charglula).

The detailed description of individual segments is provided in the AMP.

The zoning plan of the adjacent Pshav-Khevsureti National Park (hereinafter NP) was another important aspect taken into account, as well as distribution of other large mammals and important species.

As the protection zone entails significant limitations for use of natural resources, special stress was put on this issue during meetings and public discussions. Several comments led to certain modifications in delineation of this zone resulting in a consensus on the final delimitation. Thus, no conflicts between needs of local communities and nature protection are expected.

It is recommended to keep the delineation of the protection zone for future to ensure consistent approach necessary for effective protection of natural values of the Aragvi PL. As the landscape character is slowly changing (e.g. due to growing forest cover) and aerial images used for the delineation were rather outdated, small changes up to 10 % of the area of individual segments might be acceptable when updating the AMP.



Example: Part of the 1st zone in the Akushoskhevi valley.

Traditional use zone (the 2nd zone)

The majority of the PL is covered by the traditional use zone (2nd zone, 84.4 % of the territory). This zone was not delineated specifically and represents the major part of the PL – traditionally used landscape with montane pastures, hay meadows, small settlements, sacred places, forests and rivers, that will be used with respect to their natural values and landscape character to support sustainable livelihood of local people, their unique traditions and lifestyle.

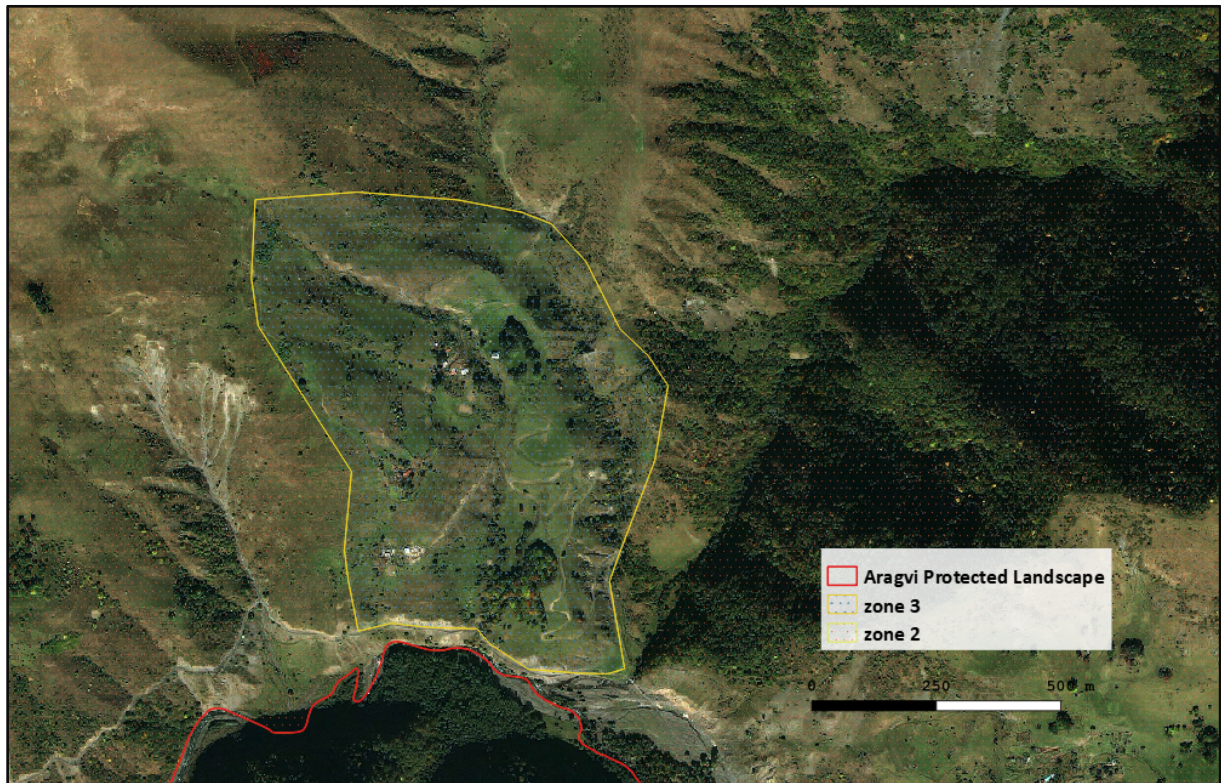
Because of generally well-balanced use of natural sources based on the traditional management patterns in this part of the Greater Caucasus, the whole territory of the PL has high ecological value. As a consequence, the 2nd zone of the PL represents an excellent example of traditionally used mountain environment with high level of ecological stability as well as biological diversity.

Historical cultural zone (the 3rd zone)

The historical cultural zone covers the smallest proportion of the PL (0.3 %), but its spiritual importance for both local community and larger region is immense. The 3rd zone was proposed to support representatives of local communities in conservation of the most important architecture values and sacred places. However, it is impossible to cover all sacred places within the PL due to high fragmentation of segments of the 3rd zone. In major, they are too small in their coverage in a combination with long distances among them. The traditional use zone also includes historically and spiritually valuable places as an important quality and target features of the PL, too.

Selected well-preserved undisturbed settlements and the area of Vazha Pshavela birth place, all representing an important part of regional cultural heritage, were also included into the historical culture zone.

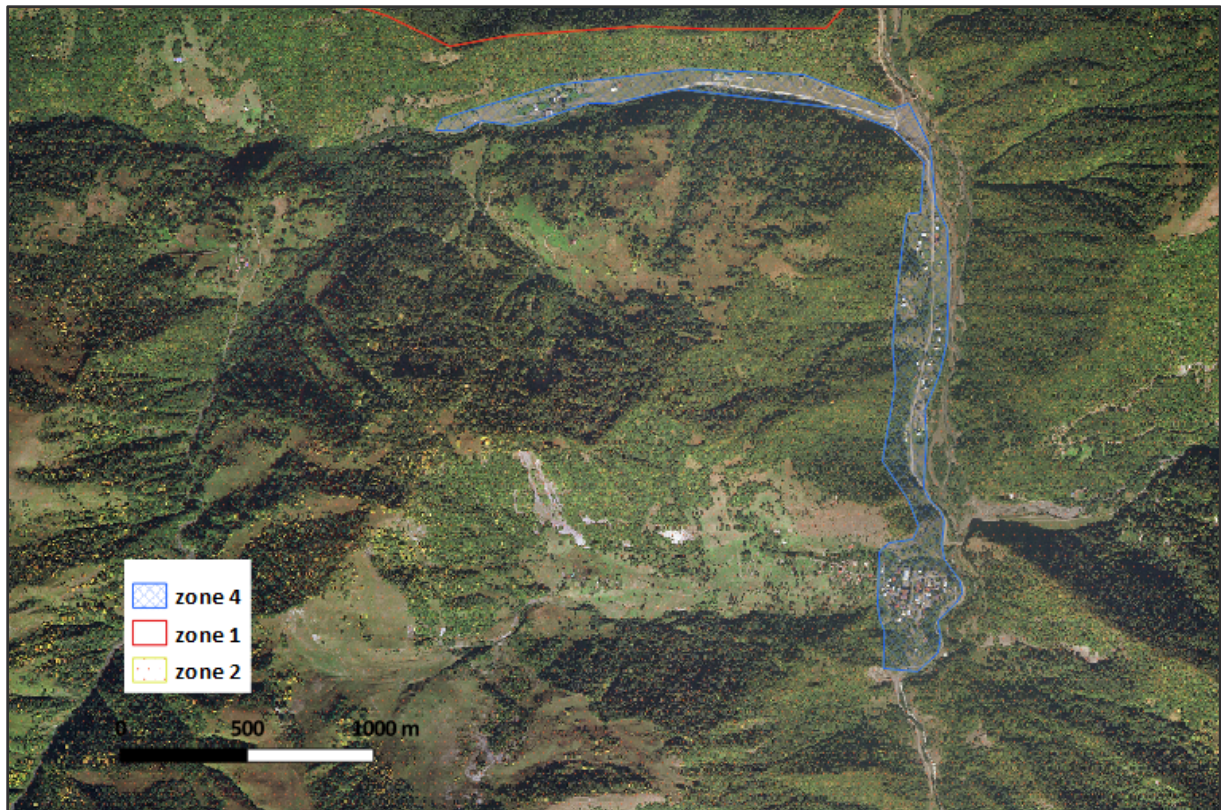
In the future update of the AMP, it is possible to amend this zone with areas of selected local sacred sites, based on an updated inventory.



Example of the 3rd zone in Muko.

Sustainable development zone (the 4th zone)

This zone (0.4 %) is aimed to define development activities that are sustainable in the long run while also used traditionally in the area of the PL. The local agricultural production - processing facilities, placing of new constructions and buildings for local services including tourism facilities, accommodation etc. would be a good example for such development activities. All development activities must respect general rules of sustainable development as defined by the valid AMP. In recent times, the sustainable development zone has been significantly influenced by the development of various activities which often spoil the landscape character to a certain extent. This fact enables further reasonable development under the condition not to continuously decrease values of the PL. Discussions with local representatives, long-term experience with managing protected areas in Czechia and other EU countries, and field observations/assessment of suitable places served as the most important base data and information source for delineation of this particular zone.



Example of the 4th zone in the area of Barisakho and Korsha.

Public discussions

As the zoning specifies ways of use and development limits within the PL, and delineation of individual zones should be kept for a long time to protect natural and cultural values in a long-term time scale, repeated and thorough discussions with local people and their representatives are inevitable part of the process of the zoning elaboration. All segments of the protection zone, historical cultural zone and the sustainable development zone were presented and printed maps distributed at several community meetings and discussed many times with local communities and their representatives. Local project coordinator gathered their comments which served for subsequent modification with respect to the relevant requests. No rejections from any side have been recorded after several presentations and discussions, only comments leading to the more precise delineation in accordance with the particular needs of local people and their knowledge.

Acknowledgements

Special thanks belongs to Gaga Shetekauri, who interpreted all presentations and community meetings, collected all the relevant comments and suggestions and shared them with the project team.