Environmental and Social Management Plan

for

Preparing Text of the Possible Draft Law on the Establishment of Pontic Oak (Quercus pontica) Protected Area in Chokhatauri Municipality, Georgia

Prepared by Agency of Protected Areas of Georgia
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FLEG II Program

The European Union-(EU) funded European Neighborhood and Partnership Instrument (ENPI) East Countries Forest Law Enforcement and Governance (FLEG) II Program is aimed to support the participating countries strengthen forest governance through enhancing their forest policy, legislation and institutional arrangements, and implementing sustainable forest management models on a pilot basis. The Program is implemented in seven countries of the EU ENPI East region: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine, and the Russian Federation.

The Program builds on initiatives undertaken under the first EU funded FLEG Program. It is carried out over a four-year period, ending December 31, 2016. The Program is supported by the European Commission (EC) contributing to a single-donor trust fund administered by the World Bank (WB). Implementation of the Program is led by the World Bank (WB), working in partnership with the International Union for Conservation of Nature (IUCN) and the World Wide Fund for Nature (WWF).

Austrian Development Cooperation (ADC) provides additional funds to support Program activities in Armenia and Georgia. This is based on the Administration Agreement for the Trust Fund between the WB and ADC. The objectives of this Trust Fund are to support Armenia and Georgia in strengthening forest governance through enhancing forest policies, legislation and institutions, participating in international forestry-related processes, and developing and testing sustainable forest management models at the local level for future replication.

The Trust Fund will support these two countries in designing and implementing activities that complement their existing portfolios in forestry projects. This includes activities already developed within the framework of FLEG II Program trust fund supported by the EC mentioned above.

Main Program activities which will be implemented by WWF-Caucasus Programme Office (WWF-CauPO) with the support of ADC in Georgia will include evaluation of biodiversity and ecosystem functions of forests, promoting sustainable forest management, restoration of natural forest landscapes and conservation of forest biodiversity. Initiation of formal designation of a Protected Area (PA) for the protection of Pontic oak (Quercus pontica) is one of the very important components of the FLEG II Program in Georgia. This component is financially supported by the ADC.

The target area is located in Chokhatauri Municipality, Georgia. Pontic oak is a tertiary relict, which has a Red List status in Georgia. Individual trees of Pontic oak or small tree groups grow in the mountains along the eastern Black Sea coast. There is only one location in Georgia (in Chokhatauri Municipality), where it is naturally concentrated in a relatively large area (a few hundreds of hectares). This area surrounding the potential PA is under significant anthropogenic pressure in terms of logging and cattle grazing. It is necessary to assign a formal protection
status to the area, to maintain and improve the remaining unique oak stands. The idea of designation of Pontic oak PA is supported by the Agency of Protected Areas (APA) of the Ministry of Environment and Natural Resources Protection of Georgia. The next stage was to discuss this idea with key stakeholders and prepare recommendations on a text of the possible draft law on the establishment of this PA.

WWF-CauPO hired the Association of Friends of Tusheti Protected Areas, a consulting organization, for conducting a feasibility study and preparing the text of the possible draft law on the establishment of Pontic oak PA (based on the outcomes of this study). The feasibility study included the collection of information about natural conditions of the target site and meetings with local population and self-governing authorities in Chokhatauri Municipality. The information presented below is largely based on the outcomes and outputs of this feasibility study.

This activity was classified as category B after the screening process (in consultation with the WB) based on the guidance provided in the Environmental Assessment and Management Framework (EAMF) and Process Framework (PF) prepared for the purposes of implementing FLEG II Program and its supplemental activities financed by ADA. Application of the WB’s relevant safeguard policies will ensure sustainability of this activity and its outputs. The entire process (feasibility study, meetings, drafting the text of the possible law) started in July 2015 and completed in December of the same year.

APA prepared an Environmental and Social Management Plan (ESMP) for this activity. The ESMP consists of a set of mitigation and monitoring measures to be taken during the establishment of the PA in order to eliminate possible adverse environmental, economic and social impacts, or reduce them to acceptable levels or offset them, as applicable. The ESMP will become an integral part of contract(s) to be concluded for any works under this activity and its implementation will be monitored by APA. WWF will oversee adherence of works financed from FLEG Program to the ESMP.

Location and natural conditions of the site

Chokhatauri Municipality (where the target site is located) is located in the eastern part of Guria Region of Georgia (see Figures 1 and 2). About 60% of the Municipality is occupied by hills and mountains. The highest elevation (Mt. Mepistskaro) reaches 2,850 m above sea level (a.s.l.), while the resort Bakhmaro is located at 1,926 m a.s.l. The administrative center is the town of Chokhatauri. The total population in Municipality is about 24,000 inhabitants, living in one town, 60 villages and 16 communities. The distance from Chokhatauri to Tbilisi is 288 km. Total area of municipality is 825 sq. km (or 82,500 ha, of which 34,772 ha are covered with forests).

The climate in the Municipality is subtropical. Average annual temperature is about 12 °C (in high mountains – 0-4 °C), while average annual precipitation – up to 1,870 mm. Main river is Supsa, and rivers Bardzmistskali and Gubazouli are main inflow rivers to it. Red and Yellow Soil as well as alluvia are major soil types in the lowlands, while dark-brown forest soils are predominant in the mountains. Mineral waters (Nabeghlavi, Kokhnari and Zoti) are very important natural resources in the Municipality.
Vegetation types are distributed by the elevation. The lowest belt (0-500 m a.s.l.) is mainly occupied by settlements, orchards, corn, tea and citrus plantations. The elevation range 500-1,000 m a.s.l. is represented by Chestnut (*Castanea sativa*) and respective forest types. Beech (*Fagus orientalis*) is dominant at 1,000-1,600 m a.s.l. The conifer belt (spruce and fir – *Picea orientalis* and *Abies Nordmanniana*) is dominant at the elevation range between 1,600-2,000 m a.s.l. Rhododendron, box, hazelnut and bilberry mainly occur as undergrowth. Low-density forest with twisted trees occurs in sub-alpine zone above 1,800-2,000 m a.s.l.

Within the forest belt, several wild fauna species can be encountered, including Roe deer (*Capreolus capreolus*), chamois (*Rupicarpa rupicarpa*), wild boar (*Sus scrofa*) wolf (*Canis lupus*), bear (*Ursus arctos*) and many others.

During the soviet period, tea production was major economy branch within the Municipality. Other branches included fruit and cereal production, wine growing and animal husbandry. At present, agriculture (the same product types as above) and tourism are main sources of income for the local population. There is a mineral water producing plant near the resort Nabeghlavi. Two mountain resorts are functioning – Bakhmaro and Nabeghlavi.
The target site (subject of this ESMP) within Chokhatauri Municipality has been selected on the basis of the following considerations:

- Relatively large concentration of the Red List species – Pontic oak (*Quercus pontica*, several hundreds of hectares), which needs protection due to its vulnerability (because of the existing anthropogenic pressure in the surrounding areas)
- This oak species occurs in other parts of western Georgia as well, but as individual trees or very small groups of trees, which increases the importance of the above-mentioned site supporting a relatively large stand
- The site is located within the West Lesser Caucasus Priority Conservation Corridor (for further details, see *Ecoregion Conservation Plan for the Caucasus* mentioned in the references); this biodiversity-rich priority area needs more protection by establishing and linking protected areas (in addition to other measures supporting sustainable development in general)
- In case of the establishment of Pontic oak PA (either as Sanctuary, or as Nature Monument, or any other form), the tourism development potential in the region will increase; this is reinforced by the fact that the target area is located near the high-mountain resort Bakhmaro and just at a few minutes’ walk from the motorway.

The total area of the site is 541 ha. The site is located in the high mountain zone, at:

- Location: Chokhatauri Municipality, Georgia. Longitude, Easting - X 278570 - 282944; Latitude, Northing – Y 4639567 - 4642993 (WGS 1984 UTM Zone 38N); near village Chkhakoura (about 400 meters from the site – see also the map in Annex 2).

- Forestry unit: LEPL National Forestry Agency of Georgia under Ministry of Environment and Natural resources Protection; Guria Regional Forestry Administration, Chokhatauri Forestry Unit, Compartments 18, 19, 20, 22, 24, 25, 26.

- Area: 541 ha

- Elevation: ranging roughly between 1,400 and 1,830 m a.s.l.

*Figure 3: View of a Pontic oak stand in the target area (WWF-CauPO, 2015)*
The soil type prevailing on the site is dark-brown mountain forest soil. Pontic oak grows on the southern slopes, which receive more sunlight throughout the year. Four major forms of Pontic oak stands are observed on the site:

1. Pure stands of Pontic oak.
2. Mixed forest of a Colchic type.
3. Beech forest (*Fagus orientalis*) with Colchic type undergrowth.
4. Mixed stands dominated by birch (*Betula medwedewii*).

Of these, the pure stand of Pontic oak is a major formation (see figure 3). During the feasibility study implemented at the end of July 2015 (see the references), only one endemic plant species (apart from Pontic oak itself) was seen - *Heracleum leskovii* (see figure 4). Heracleum is an endemic species for the Caucasus. In terms of wild fauna - the study area is so limited that it can only represent a small part of the wider habitats of mammals mentioned above.

*Figure 4. Heracleum leskovii seen in the study area (WWF-CauPO, 2015)*

**Local population, their impact and dependence on the target site**

The target site (where the Pontic oak PA proposes to be established) is located near the village Chkhakoura. The village was established in 1905 and is mainly populated by eco-migrants from Ajara. At present, about 40 households reside in that village. These villagers also possess summer houses in Muchuta Mountain (located a few kilometers away). The summer houses are used for residing and keeping livestock at the summer pastures from the end of May until the end of September. The village has about 510 ha of summer pasture land. These pastures are also used by the villagers from Nabeghlavi community (villages Kvabgha, Nasakirali, Buknari), about 2,000 heads of cattle, of which 800 belong to the residents of Chkhakoura village.

Neither cattle pastures, nor movement corridors (for the cattle moving from winter locations to the summer pastures) are located within the targeted PA boundaries. Such corridors are located in other areas. Cattle grazing within the potential PA boundaries occurs only occasionally and
has insignificant impacts on natural ecosystems. There is only one path running through the target area (see Annex 2), which is used by employees of Chokhatauri Unit of National Forestry Agency of Georgia to reach the forest cutting areas in the upper mountain zone. The use of this path does not have any impacts on Pontic oak stands or other elements of biodiversity within the area.

Other potential negative impacts such as noise, industrial waste, significant concentrations of pollution, etc. are not observed on the target site. The use of wood and non-wood products is limited and does not have any significant impact on the forests.

Nevertheless, it is essential to establish a PA on this site, because there might be a potential danger of converting the land occupied by Pontic oak to other land uses such as agriculture, infrastructure, housing, etc.

Meetings with local population were held in village Chkhakoura on 28 July 2015 (see Figure 5). The meeting was attended by the villagers Nodar Iremadze, Revaz Katamadze, Nugzar Beridze, Shukri Tunadze, Besarion Paichadze, Zurab Tunadze, Jaba Katamadze, Aliosha Iremadze, Murat Beridze, Mamuka Chelidze, Kakha Tunadze, Mikheil Beridze and Mamuka Katamadze. The villagers were informed about the objectives to establish Pontic oak PA, main underlying principles (i.e. protection of biodiversity), the potential benefits associated with the establishment of PA and related socio-economic issues. The villagers expressed their strong support to the establishment of the PA.

![Photo of the meeting with local population (WWF-CauPO, 2015)](image)

**Figure 5. Photo of the meeting with local population (WWF-CauPO, 2015)**

**Potential positive and negative impacts of the establishment of PA**

In terms of ecology and biodiversity, the establishment of the Pontic oak PA would create a number of considerable benefits. First of all, the protection and recovery of large and unique Pontic oak (as a Red List species) ecosystem is very important from the point of view of biodiversity conservation and maintenance of beautiful natural landscapes.

The potential threat of degradation or destruction of Pontic oak due to anthropogenic impacts (see above), would be eliminated. The status of Sanctuary (Managed Reserve, IUCN IV
Category) is most suitable for this area (see below). It will provide sufficient protection to the oak stand, if law enforcement is adequate.

Education and awareness-raising as well as the development and optimal land use in the surrounding areas would contribute to sustainable development in this area. These efforts would contribute to the development of eco-tourism in the region, which could become the significant source of income for local population (for instance, through the development of family-based guest house or small hotel business).

Special attention is given to Project Affected People (PAP). The latter include the entire population of village Chkhakoura – the only village potentially affected by the establishment of a PA. The initially expected potential significant impact on this population – the restriction of cattle movement – will not occur, as the existing cattle movement route bypasses the target area. This was confirmed during the meeting on 28 July 2015 mentioned above.

Another potential restriction is the possible limitation of use of wood and non-wood products within the boundaries of future PA. This impact is expected to be of a very low magnitude, due to the relatively small size of the target area (a few hundreds of hectares) and the availability of adjacent forests. Nevertheless, the potential negative impacts could be mitigated by the establishment of different zones within the PA. Any collection of forest resources, or cattle grazing would be prohibited within the core zone. In return, sustainable natural resource use could be allowed within buffer zone but limited to cattle grazing only and collection of forest resources/products (within the buffer zone) without affecting the environment shall be subjected the provisions in the Management Plan of the future PA.

The APA will be responsible for addressing these issues, once the process of actual designation of PA has started. Further consultations with the local villagers will be held by the agency in the run up towards management planning of the future PA.

**Public consultation process**

**Meeting in Ozurgeti** – On 21 December 2015, a further meeting was held by WWF-CauPO within the framework of this process (see Figure 6). The meeting was held in Ozurgeti (a main city of Guria Region, where Chokhatauri Municipality is located). The meeting was attended by around 30 people representing the local governmental and NGO sectors (including the Governor of Guria Region and Head of Chokhatauri Municipality), aiming to discuss and agree concrete steps of establishment of Pontic oak PA.

Mr. Gia Salukvadze, Governor of Guria Region, emphasized the importance of establishment of Pontic oak PA. Mr. Lasha Moistsrapishvili, Head of APA, spoke about the need for continuous support from the local authorities and stakeholders in general. The participants were informed about the importance of Pontic oak and the need to establish a PA. It was agreed that Sanctuary (Managed Reserve) was most suitable status for the future PA. The next step was agreed to be the submission of the possible draft law (by WWF-CauPO) to the APA.
Environmental and Social Impact Mitigation Plan

In general, only insignificant negative impacts are expected from the establishment of the PA. The most important issues were potential restrictions in cattle movement and collection of various forest products. Certain measures (e.g. zoning of the future PA) can help avoid potential problems or grievances. Efforts will also be made to maximize the environmental and socio-economic benefits. Table 1 lists all relevant measures. The mitigation measures are mainly targeted at the PAP. The cooperation and avoidance of conflicts with the latter are vital for the success of this activity.

Table 1: Environmental and Social Impact Mitigation Plan

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expected impact</th>
<th>Mitigation measure</th>
<th>Estimated cost of mitigation</th>
<th>Responsibility for mitigation</th>
<th>Responsible for supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA ESTABLISHMENT PHASE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapping the boundaries of future PA site</td>
<td>Restriction of cattle movement inside the PA boundaries; Restriction of resource extraction from the territory of PA</td>
<td>Conducting a feasibility study; Organizing meetings with PAP to agree on the boundaries of the future PA, draw up the map depicting clear demarcations and if needed (i.e. if the PAPs depend economically on</td>
<td>around 8000 US$¹</td>
<td>WWF-CauPO</td>
<td>APA</td>
</tr>
</tbody>
</table>

¹ These costs have been incurred by WWF-CauPO under FLEG II Program — a consulting firm was hired which conducted the feasibility study and held the meetings with locals (Chokhatauri Municipality and villagers from Chkhakoura)
<table>
<thead>
<tr>
<th>Activity</th>
<th>Expected impact</th>
<th>Mitigation measure</th>
<th>Estimated cost of mitigation</th>
<th>Responsibility for mitigation</th>
<th>Responsible for supervision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing a draft law on the establishment of Pontic oak PA</td>
<td>Resistance of the PAP to the draft law and later – to its enforcement</td>
<td>Conducting a stakeholder meeting to agree upon the status and management regime of the Pontic oak PA</td>
<td>around 5,000 US$²</td>
<td>WWF-CauPO</td>
<td>APA</td>
</tr>
</tbody>
</table>

**PA MANAGEMENT (OPERATION) PHASE**

<table>
<thead>
<tr>
<th>Enforcing management regime in the Pontic oak PA</th>
<th>Restriction of cattle movement; Restriction of use of wood and non-wood forest products</th>
<th>PA guarding and inspection by relevant PA staff</th>
<th>Administrative costs of PA and share of law-enforcement personnel costs – not feasible to estimate at this stage around 500 US$</th>
<th>PA administration</th>
<th>APA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Restriction of cattle movement; Restriction of use of wood and non-wood forest products</td>
<td>Allowing sustainable use of forest products in the buffer zone to make up for prohibited extraction of resources inside the PA</td>
<td>Publishing and disseminating leaflets on up to 1,000</td>
<td>Chokhatauri Municipality (jointly with PA administration)</td>
<td>WWF-CauPO (the banner and leaflets)³</td>
</tr>
</tbody>
</table>

² These costs have been incurred by WWF-CauPO under FLEG II Program – a consulting firm was hired which conducted the stakeholder meeting in Guria Region, where the target site is located

³ These costs have been incurred by WWF-CauPO under FLEG II Program – a consulting firm was hired which put up the banner and printed the leaflets
Mapping PA boundaries and subsequent measures – the contours of the future boundary of the PA were outlined and mapped (by means of GIS) during the feasibility study conducted by the Association of Friends of Tusheti Protected Areas – the consulting firm hired by WWF-CauPO under the FLEG II Program (see Annex 2). This contour (agreed with the villagers from Chkhakoura) is made in a way to incorporate all of the stands with concentrations of Pontic oak on one hand and to leave the cattle moving corridor open, on the other.

The potential conflicts and grievances (related to the use of forest products) could be avoided by functional zoning of the future PA territory. Core areas could be left for strict nature conservation (with prohibition of any natural resource use and restricted access in general), while other zones might have less strict regime (where the use of wood and collection of non-wood products would be allowed within defined sustainable limits). APA will be responsible for implementing these activities, while WWF-CauPO - for monitoring.

Monitoring plan

Environmental monitoring will be conducted by WWF-CauPO during the establishment of Pontic oak PA and initial period of its management. The aim is to ensure that environmental and social safeguards are duly applied and no unintended negative impacts are caused as a result of PA establishment. Should any problem or grievance emerge, these will be documented and measures to address them will be undertaken immediately. The monitoring plan is given in Table 2 below.
Table 2: Environmental and Social Monitoring Plan

<table>
<thead>
<tr>
<th>Activity</th>
<th>What (Is the parameter to be monitored?)</th>
<th>Where (Is the parameter to be monitored?)</th>
<th>How (Is the parameter to be monitored?)</th>
<th>When (Define the frequency / or continuous?)</th>
<th>What (Is the target value for a parameter?)</th>
<th>Who (Is responsible for monitoring?)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA ESTABLISHMENT PHASE</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mapping the boundaries of future PA site</td>
<td>Restriction of cattle movement inside the PA boundaries</td>
<td>Future territory of the PA, about 500 ha</td>
<td>Visual inspection</td>
<td>Before the establishment of the PA</td>
<td>Zero cattle movement paths are blocked; zero cases of grievances from the local villagers (from Chkhakoura)</td>
<td>WWF-CauPO</td>
</tr>
<tr>
<td>Preparing a draft law on the establishment of Pontic oak PA</td>
<td>Resistance and acceptance of the PAP to the draft law and later – to its enforcement</td>
<td>Future territory of the PA, about 500 ha</td>
<td>Revision of the possible draft law and amending it to prevent objections/resistance of PAP</td>
<td>Before the approval of the law on establishment of Pontic oak PA</td>
<td>Number of cases of resistance and acceptance from the local villagers (from Chkhakoura) to the draft law and commitment to cooperate in its implementation</td>
<td>WWF-CauPO</td>
</tr>
<tr>
<td><strong>PA MANAGEMENT (OPERATION) PHASE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enforcing management (operating) regime of the Pontic oak PA</td>
<td>Potential blocking of cattle movement paths</td>
<td>Future territory of the PA, about 500 ha</td>
<td>Site visits (if needed) for visual inspection of the area and communication with the locals</td>
<td>Site visits at least once per year (by APA and WWF); communication with representative(s) of the village Chkhakoura during each visit; if necessary, more frequent visits will be made to confirm compliance</td>
<td>Zero cattle movement paths are blocked; zero cases of grievances/violation from the local villagers (from Chkhakoura)</td>
<td>APA, WWF-CauPO</td>
</tr>
</tbody>
</table>
### Annex 1. List of actions for the establishment of Pontic oak PA (Chokhatauri Municipality, Georgia)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Time period</th>
<th>Responsible</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial meeting with the locals</td>
<td>Meeting with local villagers (from Chkhakoura) to discuss various aspects of establishment of Pontic oak PA</td>
<td>28 July 2015 (completed)</td>
<td>WWF-CauPO (through the contractor – Association of Friends of Tusheti Protected Areas)</td>
<td>The villagers expressed their firm support to the establishment of the PA</td>
</tr>
<tr>
<td>Drafting possible text of the law on the establishment of Pontic oak PA</td>
<td>The text has been drafted</td>
<td>September - November 2015 (completed)</td>
<td>WWF-CauPO (through the contractor – Association of Friends of Tusheti Protected Areas)</td>
<td>The text was drafted in line with the requirements and relevant templates of APA</td>
</tr>
<tr>
<td>Stakeholder meeting</td>
<td>Possible text of the draft law on the establishment of Pontic oak PA and other key aspects of the establishment of the PA (status of the PA, area, zoning, etc.) were discussed with the stakeholders; the meeting was held in Guria Region</td>
<td>21 December 2015 (completed)</td>
<td>WWF-CauPO (through the contractor – Association of Friends of Tusheti Protected Areas)</td>
<td>Key stakeholders from the state, private and NGO sector from Tbilisi and Guria Region as well as Head of Chokhatauri Municipality (as a representative of PAPs) have attended</td>
</tr>
<tr>
<td>Transfer of the possible text of the law on the establishment of Pontic oak PA (final draft) to APA</td>
<td>The text to be transferred to the APA</td>
<td>January 2016 (completed)</td>
<td>WWF-CauPO</td>
<td>The text was transferred to APA on 20 January 2016 (both an electronic version and a hard copy)</td>
</tr>
<tr>
<td>Subsequent steps aimed at actual establishment of the PA</td>
<td>Adoption of the law by the Parliament of Georgia; demarcation of the boundaries and various zones of the PA, recruitment of staff</td>
<td>Throughout 2016 (planned)</td>
<td>Agency of Protected Areas of Georgia</td>
<td>WWF-CauPO will monitor the process to ensure that the requirements of this document (socio-economic interests of the local villagers and ecological aspects) are met</td>
</tr>
</tbody>
</table>
Annex 2. Map of the target area (Chokhatauri Municipality, Georgia)

Note: the boundary indicates perimeter of the potential PA; village Chkhakoura is shown in the upper right corner