**General ecological features:**

The Javakheti Plateau where proposed Ramssr-site is located contains high mountain freshwater lakes, bogs and damp meadows, rivers. Main vegetation types found in the area: mountain steppe, meadows and wetland vegetation.

***Mountain steppe***

In the Caucasus, mountain steppes are found only in the Lesser Caucasus Range (south-western parts) and Javakheti uplands. Javakheti maintain steppes are similar to those of the Middle East but they are also influenced by northern and Mediterranean biogeographical regions. Consequently the flora of Javakheti mountain steppes includes Palaearctic, Asia minor, central Asian as well as endemic species. All mountain steppes in Javakheti are secondary and have developed on formerly cultivated lands or in areas used for grazing or mowing.

Javakheti mountain steppes are generally dominated by *Festuca valesiaca* and to a larger extent by Stipa spp. (*Stipa tirsa, St. capillata*). Main plant associations include: *Festucetum valesiacae mixtoherbos; Stipa tirsa-Festuca valesiaca-mixtoherbosa; Stipa capillata-Festuca valesiaca-Carex humilis; Festuca valesiaca-Carex humilis-Thymus rariflorus*. *Festucetum valesiacae mixtoherbos* is most common. The other associations have fragmented distribution and occur on stony areas in form of small patches. These communities occur on chernozem soils.

Most of the above plant communities in addition to dominant species also include a number of atypical species. This indicates that these communities are not fully developed yet (i.e. have not yet reached the state of climax) and are at various stages of secondary succession. Although in certain areas real steppe communities are also found.

### *Meadows*

There are several variants of meadow vegetation in Javakheti plateau. Local environmental variables apparently determine exact form and composition of meadow vegetation. For example bogy meadows with characteristic vegetation are found in wet areas around the lakes. This vegetation is dominated by grasses and sedges (*Poa longofolia, Alopecurus armenus, Phleum pratense, Brompsis veriegata, Carex diandra, Carex dacica*, etc.).

### *Wetland vegetation*

Swamp vegetation is dominated by sedges. These habitats occur at lakes with seasonal fluctuation in water level. Typical sedge swamps are found up to the altitude of 2200 m.a.s.l. *Carex acuta* communities are the most common variant of sedge swamps in Javakheti. Characteristic elevated patches in sedge swamps are typically formed by sedges and associated water plants. There are also swamps with pure sedge communities (*Canicetum acatea purum*). However, they are more often mixed with aquatic plants (*Potamogeton gramineus, Utricularia vulgaris, Lemna minor*) that grow between the sedge patches.

Tall and dense patches of grasses are found on swampy shores of the lakes. Most important species of these communities include: *Beckmannia eruciforme, Calamagrostis neglecta, Digraphis arundinacea, Scolochloa festucacea, Poa palustris, Dactylis glomerata, etc.*