

Political Administrative Region: Racha-Lechkhumi

Total Area: 4. 56 thousand km². 8% of all territory of Georgia.

Administrative Borders: To the East borders on Shida Kartli region.

To the West surrounded by the Svaneti range and Egrisi range borders on Samegrelo and Zemo Svaneti.

To the North surrounded by the Greater Caucasus mountain range borders on the Russian Federation.

The South surrounded by the Nakerala range and Racha range borders on Imereti region.

Administrative Districts: **Ambrolauri district** – Administrative Centre of the region with the population of 2500. The town is situated on the left bank of the river Rioni on the elevation of 550 m above sea level.

Oni district - Town Oni with the population of 3300 is situated on the left bank of the river Rioni on the elevation of 830 m above sea level.

Tsageri district – Town Tsageri with the population of 2000 is situated on the right bank of the River Tskhenistskali on the elevation of 475 m above sea level.

Lentekhi district – Small town Lentekhi with the population of 1700.

Climate Types

Moderately humid and warm.

Average temperature in January is below 0, decreasing with increase of altitude.

Average temperature in July is +20, +22 °C at the lowest altitudes, decreasing gradually at middle (+ 15.6°C Shovi 1507m above sea level) and high (+7.6 °C Mamisoni 2854m above sea level) altitudes.

Annual average precipitation 800-1000 mm that is the lowest index for the west of Georgia is typical to Racha-Lechkhumi and Kvemo Svaneti depressions. With the increase of elevation amount of precipitation first increases and then decreases.

Hydrographic Data

Main Rivers: Rioni - total length 327 km, main river in Racha (115 km)

Tskhenistskali – total length 184 km, main river in Kvemo Svaneti

Lukhuni – total length 38 km

Lajanuri – total length 32 km

Tchantchakhi – total length 21.6 km

Laskadura – total length 20 km

Zeskho – total length 19 km

Lektareshi – total length 16 km

Krikhula – total length 15.2 km

Kheoristskali – total length 14 km

Leuseri – total length 6 km

Main Lakes: Shaori reservoir (constructed for power generation)

Lajanuri reservoir (constructed for power generation)

Landscapes and Soils

Landscape diversity: Well demonstrated vertical zoning of landscapes

Colchis lowland and low-mountain landscapes (Racha - Lechkhumi depressions 600-800 m above sea level)

Colchis middle-mountain landscapes with forest and middle-mountain landscapes with composite forest (1000-1200m above sea level)

Caucasian middle-mountain landscapes with dark coniferous forests

Caucasian upper- mountain landscapes

High-mountain subalpine landscapes (2000m above sea level)

High-mountain alpine landscape (2500-2600m above sea level)

Nival -Glacial landscapes (3300-3500m above sea level)

Soil types: Mountain forest soils

Mountain meadow soils

Protected Areas of Racha-Lechkhumi –Kvemo Svaneti

Racha-Lechkhumi – Kvemo Svaneti Planned Protected Areas

Location: Racha-Lechkhumi – Kvemo Svaneti Planned Protected Areas are located on the southern slope of main watershed of the Caucasus range, in Lentekhi, Tsageri, Ambrolauri and Oni districts at 500-4600 m above sea level.

General description: Racha-Lechkhumi – Kvemo Svaneti Planned Protected Areas totals 229 532 ha and include: National Park, 12 Natural Monuments, 4 Managed Nature Reserves and Protected Landscape.

Flora: Among the plants found on the Planned Protected Areas 164 species are endemic to Caucasus, 26 – are endemic to Georgia and 5 – are endemic to Racha-Lechkhumi – Kvemo Svaneti flora.

Low mountain forests is dominated with oak (*Quercus iberica*; *Quercus hartwissiana*), Hornbeam (*Carpinus caucasica*), chestnut (*Castanea sativa*). Beech (*Fagus orientalis*), pine (*Pinus sosnovski*), field maple (*Acer campestre*), ash (*Fraxinus excelsior*), lime (*Tilia caucasica*), elm (*Ulmus carpinifolia*), alder (*Alnus barbata*) are also met. Sub forest is presented by Hazelnut (*Corylus colchica*), hawthorn (*Crataegus kyrtostilla*), boxwood (*Buxus colchica*), yew (*Taxus baccata*), medlar (*Mespilus germanica*), rhododendron (*Rhododendron luteum*), bladder nut (*Staphylea colchica*), elderberry (*Sambucus nigra*), barberry (*Berberis vulgaris*). Forests are rich in wild fruits pear (*Pyrus caucasica*), dogwood (*Cornus mas*), rowan (*Sorbus torminalis*), apple (*Malus orientalis*), viburnum (*Viburnum oulus*), whortleberry (*Vaccinium artostraphylos*) etc. Middle mountain forest is presented by oriental beech (*Fagus orientalis*) with hornbeam (*Carpinus caucasica*), chestnut (*Castanea sativa*), fir (*Abies nordmanniana*), spruce (*Picea orientalis*), mulberry (*Morus alba*), common aspen (*Populus tremula*), acacia (*Acacia delbata*). Sub- forest is presented with blackberries (*Rubus caucasicus*, *Rubus haceralicus*), bilberry (*Vaccinium arctostaphylos*), hazels (*C. avellana*, *C. iberica*), cherry laurel (*Laurocerasus officinalis*), Black Sea holly (*Ilex colchica*) etc. On the altitude of 1400- 1500 m above sea level forests are formed by the following three species: oriental beech (*Fagus orientalis*), Nordmann fir (*Abies nordmanniana*) and oriental spruce (*Picea orientalis*).

Evergreen sub-forest here is presented with holly (*Ilex colchica*), rhododendron (*Rhododendron ponticum*), cherry laurel (*Laurocerasus officinalis*) etc. On the elevation of 1800-1900 m high mountain forests are met with oriental beech (*Fagus orientalis*), maples (*Acer trautvetterii*, *Acer pseudoplatinus*); willow (*Salix caprea*), mountain-ashes (*Sorbus cracea*, *Sorbus subfusca*, *Sorbus colchica*) etc.

Sub-alpine and alpine ecosystems are presented here at 2200-3300 m above sea level by birch (*Betula pendula*, *Betula litwinowii*), willow (*Salix caprea*), beech (*Fagus orientalis*), maple (*Acer trautvetterii*), rhododendron (*Rhododendron caucasica*), bilberries (*Vaccinium Myrtillus*, *Vaccinium vitis-ideae*).

In Svaneti forest ecosystem on 450 -1300 m above sea level is presented with mixed broadleaf forests composed of beech (*Fagus orientalis*), oak (*Quercus iberica*) and Chestnut (*Castanea sativa*) and coniferous and mixed coniferous and broadleaf forests with oriental spruce (*Picea orientalis*), Nordmann fir (*Abies nordmanniana*) oriental beech (*Fagus orientalis*).

Among the species of plants found in the Planned Protected Areas the following are included in the Red List of Georgia are yew tree (*Taxus baccata*), chestnut (*Castanea sativa*), Imeretian oak (*Quercus imeretina*), Hophornbeam (*Ostrya carpinifolia*).

Fauna: Fauna of the Racha-Lechkhumi – Kveda Svaneti Protected Areas is poorly researched.

According to the existing data in the Planned Protected Areas 51 species of mammals and 152 species of birds can be found.

From the species of mammal included in the Red List of Georgian here inhabit: Chamois (*Rupicapra rupicapra*), Brown Bear (*Ursus arctos*), Linx (*Lynx lynx*) etc.

The species of tur found here the East Caucasian Tur (*Capra cylindricornis*) and West Caucasian Tur (*Capra caucasica*) are endemic to Caucasus.

Among birds of the Protected Areas following representatives of ornithofauna are included in the Red List of Georgia: Bearded Vulture (*Gypaetus barbatus*), Griffon Vulture (*Gyps fulvus*), Golden Eagle (*Aquila crayaetus*), Caucasian Black Grouse (*Tetrao mlokosiewiczzi*), et al.

Endemic species: *Capra cylindricornis*, *Capra caucasica*

Relict species: *Buxus colchica*, *Taxus baccata*, *Laurocerasus officinalis*, *Ilex colchica*, *Quercus iberica*, *Abies nordmanniana*, *Picea orientalis*

Species of the Red List of Georgia: *Taxus baccata*, *Castanea sativa*, *Quercus imeretina*, *Ostrya carpinifolia*, *Rupicapra rupicapra*, *Ursus arctos*, *Lynx lynx*, *Gypaetus barbatus*, *Gyps fulvus*, *Aquila crayaetus*, *Tetrao mlokosiewiczzi*

Natural Resources

Ferrous Metallurgy

Iron

Occurrence region	Deposit
Ambrolauri,	Iron (siderite horizon in the coal layer)

Manganese

Occurrence region	Deposit
Oni, Ambrolauri	Manganese

Non-Ferrous Metallurgy

Copper, zinc and their accompanying metals (gold, silver, etc)

Occurrence region	Deposit
Lentekhi	Copper, zinc, cobalt
Lentekhi	Copper, zinc, lead
Tsageri, Lentekhi	Copper, zinc
Lentekhi	Copper, lead
Oni	Lead, copper, zinc
Tsageri	Copper, cobalt

Molybdenum and its accompanying metals

Occurrence region	Deposit
Oni	Molybdenum, copper, gold
Oni	Molybdenum

Lead, zinc and their accompanying metals

Occurrence region	Deposit
Lentekhi, Oni	Ore, lead, zinc

Oni	Ore, lead, stibium, zinc, gold, silver
Ambrolauri	Barium, lead, zinc
<i>Arsenic and its accompanying metals</i>	
Occurrence region	Deposit
Ambrolauri	Ore, arsenic, gold
Lentekhi	Ore, arsenic, gold, silver
Lentekhi, Oni, Ambrolauri	Ore, arsenic
<i>Stibium and its accompanying metals</i>	
Occurrence region	Deposit
Lentekhi, Ambrolauri, Oni	Ore, stibium, gold, silver
<i>Mercury and its accompanying metals</i>	
Occurrence region	Deposit
Oni	Mercury, stibium, arsenic, lead, zinc
Lentekhi, Oni	Mercury
Oni	Mercury, arsenic
Oni	Mercury, arsenic, stibium
<i>Gold placer</i>	
Occurrence region	Deposit
Lentekhi	Gold
<u>Building Industry</u>	
<i>Facing stones- magmatic layers</i>	
Occurrence region	Deposit
Ambrolauri, oni	Basalt
Oni	Andesites
Oni	Albite-tophyrs
Ambrolauri, Oni	Diabase moraines
<i>Facing stones – limestone</i>	
Occurrence region	Deposit
Lentekhi, Tsageri, Ambrolauri, Oni	Limestone
<i>Building sand gravel</i>	
Occurrence region	Deposit
Lentekhi, Tsageri, Oni	Building sand gravel
<i>Run-of-quarry limestone</i>	
Occurrence region	Deposit
Lentekhi, Tsageri, Ambrolauri, Oni	Run-of-quarry limestone
<i>Brick clays</i>	
Occurrence region	Deposit
Tsageri, Ambrolauri, Oni	Brick clays
<i>Cement manufacturing gypsum</i>	
Occurrence region	Deposit
Oni, Ambrolauri	Gypsum
<i>Raw quartz</i>	
Occurrence region	Deposit
Oni	Raw quartz
<u>Chemical Industry</u>	
<i>Barite, quartzite – for lithopone production</i>	
Occurrence region	Deposit
Tsageri, Oni, Ambrolauri	Barite, calcite
<i>Pyrite</i>	
Occurrence region	Deposit
Tsageri	Pyrite

Agriculture

Mineral fertilizer – phosphorites

Occurrence region	Deposit
Tsageri	Phosphorites

Food Industry and Healthcare

Therapeutic mineral and balneal waters

Occurrence region	Deposit
Oni	carbonic acid-hydrocarbonyl-sodium artesian waters
Oni	carbonic acid-hydrocarbonyl-chloride sodium artesian waters
Lentekhi, Tsageri	carbonic acid-hydrocarbonyl-calcium artesian waters
Tsageri - Carbonic acid	hydrocarbonyl-calcium-sodium artesian waters

Therapeutic minerals and layers

Occurrence region	Deposit
Oni	Crystal pyrite
Oni	Mountain crystal

Jewelry-Jobbing Industry

Jobbing stone

Occurrence region	Deposit
Tsageri	Striped agate, Fumed wood

Economy

Industry - 12% of the production of the region

Agriculture - 59 % of the production of the region

The major activities of industrial production include: electricity generation and supply (Ltd. “Ritsulhesi” and Joint Stock Company “Lajanurhesi”) and water supply that accounts 76% of the whole production of the region. Food manufacturing comprises 20% with the winemaking (9%) as the major activity, soft drink making (8%), and bread manufacturing (3%). Wood manufacturing (4%) mainly for a construction is also the part of the region’s economy.

The largest part of Racha-Lechkhumi is a mountainous area and the economy heavily relies on agriculture. The total area of agricultural plots in the region amounts to 112 259 ha of which arable plots cover the territory of 8 555 ha. The area of 3172 ha is assigned to perennial trees, 25 230 ha - to natural mow lands and 75302 ha - to pastures. Main activities of the region are potato growing and animal farming, especially cattle. Vine is also cultivated in some areas, especially in lowlands of Tsageri and Ambrolauri, where the most part of production is concentrated.

Population

Quantity: 48 525 - the most sparsely populated region in the country. Population density is 10people/km².

National structure: Georgians, Ossetians, Russians, Azeri.

State of the Environment

Responsible body for the regular monitoring of chemical and radiological pollution of air, soil and surface waters is **the National Environmental Agency**. The Agency is the legal entity of public law in the system of the Ministry of Environment Protection and Natural Resources of Georgia.

One of the main duties of the Agency is to prepare and disseminate information on the pollution levels to both state and non-governmental organisations.

The contact information of the National Environmental Agency:
150 Agmashenebeli Ave.
Tbilisi 0112, Georgia
Tel.: (995 32) 43-95-43; (995 32) 43-95-03;
Fax: (995 32) 43-95-02;
E-mail: info@environment.ge
<http://www.meteo.itdc.ge/>

According to the law on Environment Protection and Presidential decree # 389 of 25 June, 1999 **Ministry of Environment Protection and Natural Resources of Georgia** is responsible to prepare and make publicly available reports on the state of the environment once in three years. These reports summarise information on the main directions in environmental policy-making of the country and on the quality of the environment, give overview on ongoing environmental projects and the results of the completed ones.

The contact information of the Ministry of Environment Protection and Natural Resources of Georgia:
6 Gulua Str.
Tbilisi 0114, Georgia
Tel.: (995 32) 72 72 24,
Fax: (995 32) 72 72 34
E-mail: press@moe.gov.ge
<http://www.moe.gov.ge>

Main concerns related to the state of the environment of the region

Monitoring of the air pollution is not carried out in Racha-Lechkhumi and Kvemo Svaneti. Only available data are those of stationary sources provided by the industry sector to the Ministry of Environment Protection and Natural Resources of Georgia. According to the data emissions from the stationary sources are insignificant.

Data on the quality of the region's surface waters is extremely limited due to the infrequency of monitoring. Drinking water in the region is provided through centralized systems mostly in towns. However, the outdated system is often a reason for interrupted supply of drinking water with poor quality. The responsible bodies for ensuring adequate supply of drinking water to population are the Local Municipalities.

Pollution of rivers is related basically with discharge of untreated wastewater from sewer collectors. No municipal wastewater treatment is taking place in the region. River and underground water pollution is also caused by arsenic mining tails. In addition soil, air and water pollution is the result of waste dumping that is a common practice in the region. Though there are 3 legal landfills none of them comply with sanitary norms.

Environmental Organizations:

Central Regional Office of Environment Protection and Natural Resources of West Georgia
Address: 31 Ilia Chavchavadze Str.
Kutaisi, 4600 Georgia
Tel.: (995 231) 2-31-82

Municipalities:

Ambrolauri Municipality

Address: 1 Tamar Mepe Str.
Ambrolauri, Georgia
Tel.: (995 239) 2-19-34

Lentekhi Municipality

Address: 24 Tamar Mepe Str.
Lentekhi, Georgia
Tel.: (995 237) 9-10-13

Oni Municipality

Address: 1 Aghmashenebeli Sq.
Oni, Georgia
Tel.: (995 99) 409 407

Tsageri Municipality

Address: 64 Rustaveli Str. 64
Tsageri, Georgia
Tel.: (995 238) 20-35, 20-25