

**I dedicate this book to the  
memory of two my teachers, Professor  
Nadim Nizharadze and Associate  
Professor Nadia Djibouti.**

## **Introduction**

Ajara is one of the oldest regions of Georgia with peculiar natural conditions and abundant resources. Its natural diversity is fascinating giving the region a rare beauty that mesmerizes visitors. The beauty of the seashore, foothills, and mountains all blend together.

Ajara is a part of the southern mountainous region of Georgia and is a mountainous region. Consequently, it has a clear vertical zoning. There is hardly any other region in the Caucasus with the degree of variation of terrain, air, soil, and vegetation cover from the seacoasts to high mountains over a short distance as Ajara is. The climate along the coast is extremely humid, with warm winters and hot summers. Alpine meadows are distanced by 30 or 40 km from it (the Alpine meadows of Mount Hino are at a distance of 35 km (along a straight line) from the city of Kobuleti). The distance from Gonio coast to Ghoma-Tsinaveli alpine meadows is 42 km.

Mid-height mountains surround the Seacoast from the east. Citrus fruits on the hills are harvested in early winter (December), when the coastal mountains are covered with snow. Loquat and mimosa (wattles) bloom in the winter. Such a contrast of nature over such a short distance creates a rare beauty, and has no analog in the Caucasus. The landscape of evergreen subtropical crops in winter is stunning.

The local climate is peculiar. The climate is a critical resource for the development of subtropical agriculture. The coastal zone of Ajara is the best environment in the Caucasus to grow southern and subtropical crops. Subtropical crops with economical value grow best there.

Ajara has played an important role in the formation and development of subtropical vegetation growing. The first industrial plantations of tea, citrus and other crops in the Caucasus were planted here. The tea seeds and seedlings of other subtropical crops from Ajara were used to breed industrial plantations in Western Georgia, in the environs of the city of Sochi and Lenkhoran (Azeibarjan). The foundations were laid for the processing industry of subtropical crops. Studies to develop these crops, obtain rich and stable harvest and address topical issues of the processing industry were initiated. The technology of growing subtropical and tropical medicinal plants to make medicines was developed. Thus, Ajara in the Caucasus is home to the development of subtropical crops and processing industry of their harvest.

Alpine meadows of Ajara highlands are used for recreation and as summer pastures. For decades, so-called mountain villages have existed in many alpine meadows, where the people are engaged in cattle-breeding and production of various types of dairy products, in addition to recreation.

The wonderful beach of same-diameter wide rocks on the seashore near the pine forest is noteworthy. The beach is a one-of-a-kind natural healing savanna for vascular and heart patients. People with a heart attack anamnesis rarely need medicines during their stay here. The beach has magnetic sand, which has a beneficial impact on a human body. There are numerous health and recreational facilities

along the beach, all of which are unfortunately closed today. Many of them can still be built. Some of them have been abandoned nearly finished.

Ajara has many forests and plants with valuable timber. Some of them, such as chestnut, beechnuts, cherry laurel, blueberry, cranberries, forest berries, and others, give nutritious and medicinal fruits.

The rivers with numerous tributaries originating from springs and all with a positive chemical composition are noteworthy. The rivers are rich in unique fish species. Black Sea salmon enters all major rivers during spawning. Most rivers provide opportunities for salmon farming and building micro-hydropower plants. All regions have mineral waters long used by the local people for treatment, and if there is a market for them, they can be bottled in large quantities.

Many useful mineral resources have been discovered recently in the region, of which oil and natural gas on the Black Sea shelf, copper, lead, zinc, molybdenum, alunites, non-ferrous and jewelry stones, construction materials: syenites, gabbro-diabase, firestone, brick clay and others are noteworthy.

In terms of today's market economy, it is very important to find the right solution to the crisis in the agrarian sector of Ajara, as well as to study the natural conditions in order to develop new sectors of agriculture to meet the market needs. At the same time, attention should be paid to the rational use and protection of natural resources.

The development of intense agriculture requires the rational use of natural resources and sustainable development of the area. Overpopulation has increased the anthropogenic load on nature, especially on the intermountain landscape of Ajara having resulted in

the formation of a number of landslide-mudflow sites and the activated erosion-denudation processes recently. Many residential areas and families are within the natural danger zone.

The recent activation of landslide and erosion processes was promoted by improper anthropogenic impact in addition to the local climatic and morphological conditions, such as: chaotic forest felling, use and overloading of steep slopes with plots and other structures, road construction using explosive works, overloading of roads by heavy vehicles, etc.

The restoration of the disturbed balance in nature and the development of a comprehensive scientific program to combat natural hazards are very important.

The present book is the result of many years of research work by the author. It also analyzes the materials on the nature and agriculture of Ajara.

The author expresses sincere gratitude to the book editor Prof. T. Urushadze and reviewers Prof. N. Beruchashvili and Prof. Z. Seperteladze for their professional remarks and kind wishes.