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## Evaluation of the ecological characteristics of the natural resources Karabakh

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**Abstract:** Karabakh is an area with rich fauna and flora. Karabakh is distinguished by its mountains, valleys, rivers, lakes, canals, trees, and horses. There are reserves for the protection of various, rare and endangered animals in Karabakh. There are many beautiful places to visit in Karabakh. Karabakh also has lands suitable for agriculture. Although these lands were polluted during the war, various measures are being taken to revive and develop those lands again.

**Keywords:** Fauna and flora of Karabakh.

### 1. INTRODUCTION

Karabakh, also known as Karabakh, is characterized by a rich and diverse biodiversity despite its relatively small size. Here are some key aspects of the biodiversity of Karabakh: Flora: The region is home to a variety of plant species, ranging from alpine meadows and forests to wetland habitats. The vegetation of Karabakh includes deciduous and coniferous trees such as oak, beech, pine, and chestnut. The region's diverse landscapes support a wide array of plant communities, contributing to its overall biodiversity.

Fauna: Karabakh supports diverse wildlife, including mammals, birds, reptiles, amphibians, and insects. Common mammal species in the region include deer, wild boar, bears, wolves, and various small mammals. Birdwatching is popular in Karabakh, with numerous species of birds inhabiting its forests, wetlands, and mountains.

Endemic Species: The region is known to harbor several endemic plant and animal species found nowhere else in the world. These endemic species are often adapted to the unique environmental conditions of Karabakh and play a vital role in maintaining the region's ecological balance.

Protected Areas: Karabakh is home to several protected areas and reserves aimed at conserving its biodiversity. These include national parks, nature reserves, and wildlife sanctuaries that provide habitat

for rare and endangered species and promote ecological research and education [1-5].

### 2. EXPERIMENTAL DETAIL

**2.1 Habitat Diversity:** The diverse topography of Karabakh, which includes mountains, valleys, rivers, and wetlands, creates a mosaic of habitats that support a wide range of plant and animal life. These habitats vary in altitude, climate, and vegetation, contributing to the overall biodiversity of the region.

**2.2 Threats and Conservation:** Despite its biodiversity, Karabakh faces threats from habitat destruction, pollution, climate change, and human activities such as deforestation and unsustainable agriculture. Conservation efforts in the region aim to mitigate these threats through habitat restoration, sustainable land management practices, and community engagement.

Overall, the biodiversity of Karabakh is a valuable asset that contributes to the ecological, cultural, and economic well-being of the region. Protecting and conserving this biodiversity is essential for maintaining the health and resilience of Karabakh's ecosystems for future generations.

Karabakh, also known as Karabakh, has a significant amount of agricultural land that supports various crops and sustains the livelihoods of local

communities. Here are some key aspects of the agricultural land of Karabakh:

**2.3 Fertile Valleys:** The region is characterized by fertile valleys and plains that are suitable for agriculture. These areas have rich soils and access to water sources from rivers and irrigation systems, making them ideal for cultivation.

**2.4 Crop Diversity:** Karabakh's agricultural land supports a diverse range of crops, including grains, fruits, vegetables, and fodder crops. Common crops grown in the region include wheat, barley, maize, rice, apples, pomegranates, grapes, and nuts.

**Traditional Farming Practices:** Agriculture has been a central part of Karabakh's economy and culture for centuries, with traditional farming practices handed down through generations. Small-scale family farms are common in the region, where farmers cultivate crops using sustainable methods and manual labor.

**2.5 Livestock Rearing:** In addition to crop cultivation, livestock rearing is an important component of agriculture in Karabakh. Sheep, cattle, goats, and poultry are raised for meat, milk, wool, and eggs, contributing to the region's food security and rural economy.

**Irrigation Systems:** Given the semi-arid climate of Karabakh, irrigation is essential for agriculture in the region. Traditional irrigation systems, including canals, channels, and qanats (underground tunnels), are used to distribute water from rivers and reservoirs to agricultural fields.

**2.6 Challenges and Opportunities:** Agriculture in Karabakh faces challenges such as water scarcity, land degradation, and market access issues. However, there are also opportunities for sustainable agricultural development, including the adoption of modern irrigation techniques, soil conservation practices, and diversification of crops.

**2.7 Role in the Economy:** Agriculture plays a significant role in the economy of Karabakh, providing employment opportunities for rural communities and contributing to food production and self-sufficiency. The agricultural sector also supports related industries such as food processing and agrotourism.

Overall, the agricultural land of Karabakh is a vital resource that sustains the livelihoods of its inhabitants and contributes to the region's food security and economic development. Efforts to promote sustainable agriculture and address environmental challenges are essential for ensuring the resilience and prosperity of Karabakh's agricultural sector.

Karabakh, also known as Karabakh, is rich in cultural and historical sites that reflect its diverse heritage and turbulent past. Here are some notable cultural and historical sites in the region:

**Gandzasar Monastery:** Located in the Martakert District of Karabakh, Gandzasar Monastery is a medieval Armenian monastery dating back to the 10th century. It is renowned for its architectural beauty, intricate stone carvings, and historical significance as a center of religious and cultural life.

**Shusha Fortress:** Shusha, the cultural capital of Karabakh, is home to a historic fortress that dates back to the 18th century. The fortress played a strategic role in the region's defense and is a symbol of Karabakh's resilience and cultural heritage.

**Dadivank Monastery:** Situated in the Kalbajar District of Karabakh, Dadivank Monastery is an ancient Armenian monastery founded in the 9th century. It is known for its architectural splendor, frescoes, and religious significance as a pilgrimage site for Armenians.

**2.8 Aghdam Mosque:** The city of Aghdam in Karabakh is home to several mosques, including the Aghdam Mosque, which dates back to the 18th century. It is a notable example of Islamic architecture in the region and serves as a cultural and religious landmark.

**2.9 Ghazanchetsots Cathedral:** Located in the city of Shusha, Ghazanchetsots Cathedral is a prominent Armenian Apostolic cathedral built in the 19th century. It is renowned for its stunning architecture, ornate interiors, and historical importance as a symbol of Armenian identity in Karabakh.

**Khankendi (Stepanakert) Cultural Complex:** Khankendi, also known as Stepanakert, is the capital of the self-proclaimed Republic of Artsakh, which includes parts of Karabakh. The city is home to various cultural institutions, museums, and galleries showcasing the region's history, art, and culture.

**Ancient Settlements and Fortresses:** Throughout Karabakh, there are numerous ancient settlements, fortresses, and archaeological sites that bear witness to the region's rich history and diverse cultural influences. These include Tigranakert, a Hellenistic-era city, and various medieval fortresses such as Askeran Fortress.

These cultural and historical sites of Karabakh are not only important for their architectural and artistic value but also serve as reminders of the region's complex past and cultural identity. Despite the challenges posed by conflict and displacement, efforts are being made to preserve and protect these sites for future generations.

Karabakh faces several challenges related to environmental degradation, cultural preservation, and sustainable development. Here are some of the key challenges and conservation efforts in the region:

**2.10 Conflict and Displacement:** The ongoing conflict between Azerbaijan and Armenia over the status of Karabakh has resulted in significant human

displacement, loss of life, and destruction of infrastructure. This instability hinders conservation efforts and exacerbates environmental challenges.

**2.11 Environmental Degradation:** Years of conflict and neglect have led to environmental degradation in Karabakh, including deforestation, soil erosion, pollution of water sources, and loss of biodiversity. Uncontrolled exploitation of natural resources and inadequate waste management contribute to these problems.

**Cultural Heritage Preservation:** The cultural heritage of Karabakh, including historic monuments, archaeological sites, and religious landmarks, is at risk due to the conflict and neglect. Efforts to preserve and protect these cultural assets are essential for maintaining the region's identity and promoting tourism and economic development.

**2.12 Water Scarcity and Management:**

Karabakh faces challenges related to water scarcity and inefficient water management practices, exacerbated by the semi-arid climate and competing demands for water resources. Sustainable water management strategies, including improved irrigation techniques and conservation measures, are needed to address these challenges.

**2.13 Sustainable Agriculture:** Agriculture is a vital sector in Karabakh's economy, but unsustainable farming practices, including overuse of agrochemicals and inefficient irrigation methods, contribute to soil degradation and water pollution. Promoting sustainable agriculture through organic farming, crop diversification, and soil conservation practices is crucial for long-term environmental and economic sustainability.

**2.14 Community Engagement and Capacity Building:** Engaging local communities in conservation efforts and building their capacity to participate in sustainable development initiatives is essential for achieving lasting change in Karabakh. Empowering local stakeholders to take ownership of conservation projects and promoting environmental education and awareness are key components of successful conservation efforts.

**2.15 International Support and Collaboration:** Given the complex political and security situation in Karabakh, international support and collaboration are essential for advancing conservation efforts and promoting sustainable development. Multilateral initiatives, partnerships with non-governmental organizations, and diplomatic efforts can help mobilize resources and expertise to address the region's challenges effectively.

**2.16 Hydropower Potential:** In addition to supporting agriculture and ecosystems, the rivers of Karabakh have potential for hydropower generation. Small-scale hydroelectric projects have

been developed along some rivers, contributing to the region's energy needs and reducing reliance on fossil fuels.

**2.17 Jabrayil Reservoir:** The Jabrayil Reservoir is an artificial water body created by damming the Tartar River near the town of Jabrayil. It serves multiple purposes, including irrigation, hydroelectric power generation, and water supply for agricultural and domestic use.

### 3. CONCLUSION

The rivers and water resources of Karabakh play a vital role in supporting agriculture in the region. Irrigation systems, including canals and channels, are used to distribute water from rivers to farmlands, enabling the cultivation of crops such as grains, fruits, and vegetables.

The restoration and development of agriculture in our lands freed from occupation is one of the main tasks facing us now. An overview of the world's experience in the restoration of agricultural damage caused by conflicts / wars is given. Based on this, the directions of agricultural restoration in the territories freed from occupation of Azerbaijan were determined, as well as the production indicators expected as a result of the agricultural restoration in these areas were predicted.

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