



Global Presentation of Azerbaijan National Ecosystem Assessment



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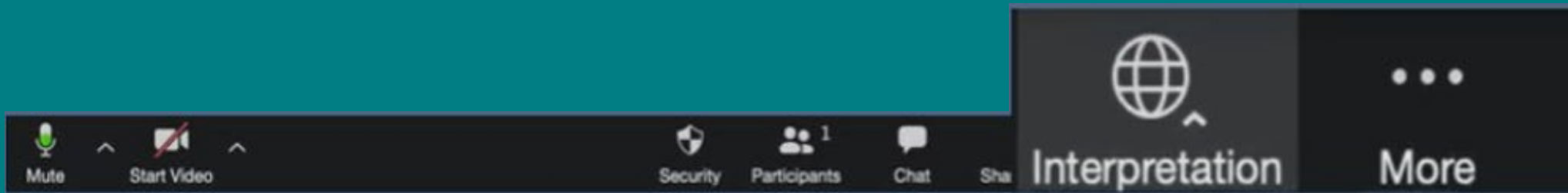
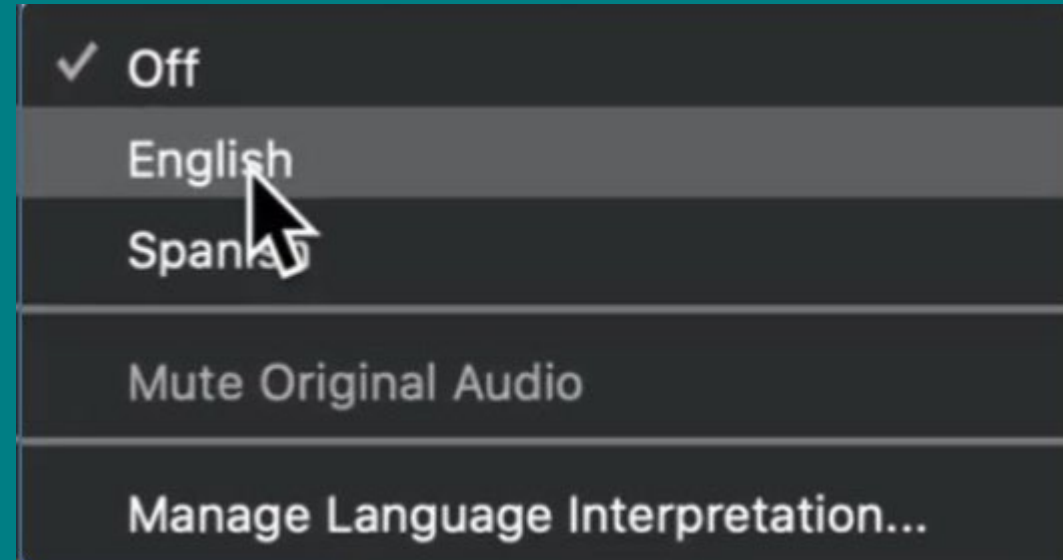
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INTERPRETATION

This session has live interpretation in French and Spanish.



Webinar Agenda



Session	Speaker
Welcome and Opening Remarks	Dr. Thiago Uehara
Introduction	Ms. Juanita Chaves
Keynote: Mainstreaming holistic analysis of biodiversity and ecosystem services in national decision-making	Mr. Rashad Allahverdiyev
Overview of the Azerbaijan National Ecosystem Assessment	Mr. Yashar Karimov
Main Findings, Lessons Learned and Best Practices	Dr. Rovshan Abbasov
Weaving Indigenous and Local Knowledge in the Azerbaijan National Ecosystem Assessment	Dr. Shahnaz Amanova
Q&A	UNEP-WCMC
Close	Ms. Juanita Chaves

Welcome and Opening remarks

Dr. Thiago Uehara

Head of Policy Innovation at UNEP-WCMC



A person is standing on a rocky mountain peak, looking out over a vast, rugged landscape. The scene is overlaid with a teal gradient, and a yellow horizontal bar is positioned below the title.

Introduction

Ms. Juanita Chaves
Senior Programme Officer at UNEP-WCMC

National ecosystem assessments



- Country driven process
- Participatory and inclusive
- Up-to-date, comprehensive and critical synthesis of knowledge on biodiversity and ecosystem services and interlinkages to people
- Address specific policy questions
- Close the gap of science, policy, society

Keynote speaker

Mr. Rashad Allahverdiyev

Project Coordinator of Azerbaijan NEA, Ministry of Ecology
and Natural Resources of Azerbaijan



REC CAUCASUS



Azərbaycan Respublikası
Ekologiya və Təbii Sərvətlər
Nazirliyi



NATIONAL
ECOSYSTEM
ASSESSMENT
INITIATIVE

**REPUBLIC OF
AZERBAIJAN
NATIONAL BIODIVERSITY PLATFORM**

Rashad Allahverdiyev

The Ministry of Ecology and Natural Resources

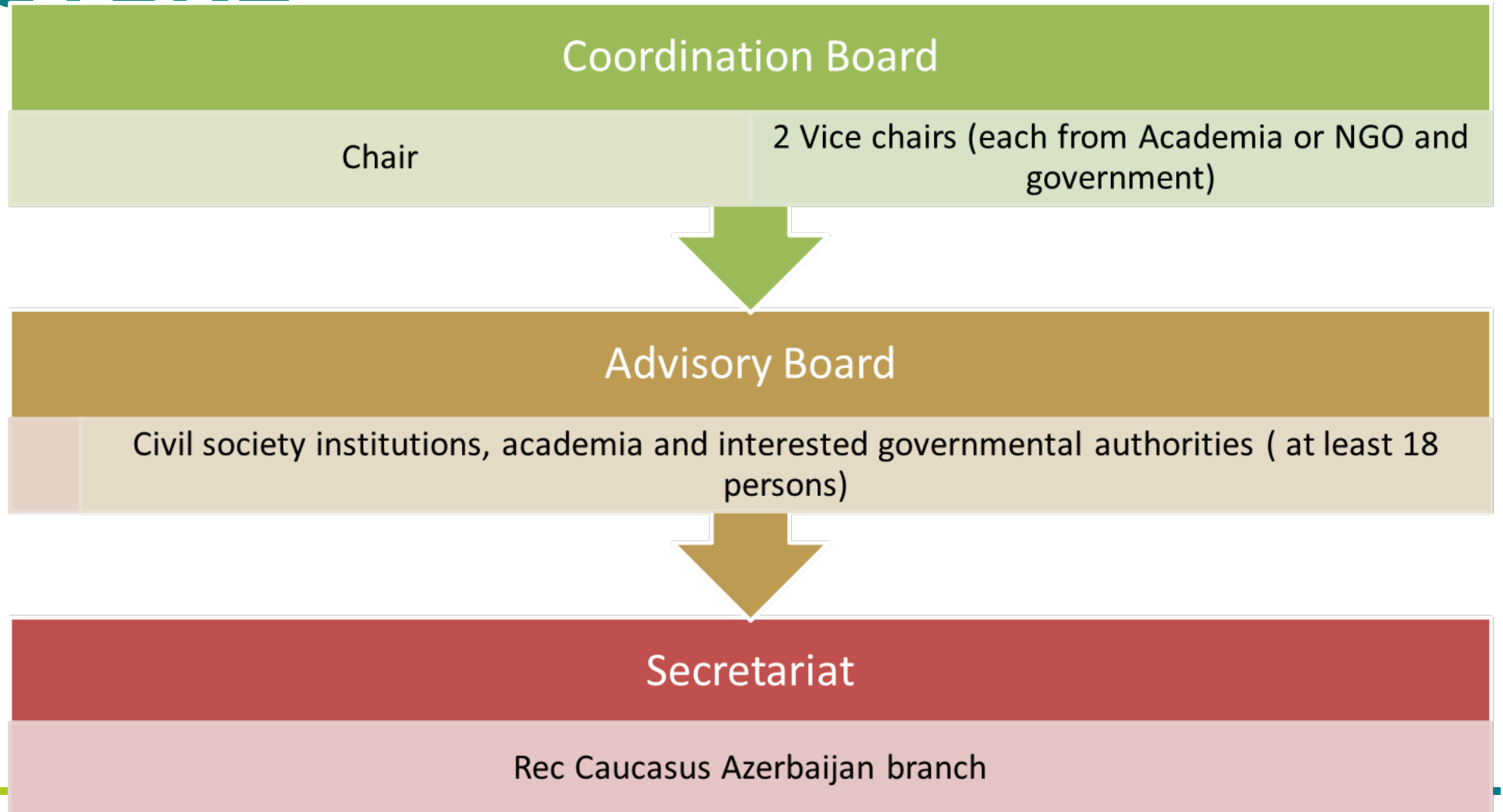
NATIONAL BIODIVERSITY PLATFORM

HOW WAS IT ESTABLISHED / SELECTED?

- To have a crucial role in actively connecting the resident expert communities on biodiversity and ecosystems services, **Ministry of Ecology and Natural Resources**, which is main coordinating authority on environment, and in particular, on biodiversity and ecosystems services, launched the establishment of National Biodiversity Platform.

- Azerbaijan Branch Office of REC Caucasus** is main coordinating and implementing unit for National Biodiversity Platform and will appoint the secretary on partly paid basis for National Biodiversity Platform

NATIONAL BIODIVERSITY PLATFORM STRUCTURE



NATIONAL BIODIVERSITY PLATFORM

HOW WAS IT ESTABLISHED / SELECTED?

Coordination Board establishes permanent and temporary working bodies (expert groups, working groups, commissions)

Coordination Board consisting of the Chairman of NBP and two vice-chairs. Chairman and two vice-chairs are selected from the representatives of Advisory Board.

NATIONAL BIODIVERSITY PLATFORM

HOW WAS IT ESTABLISHED / SELECTED?

Advisory Board is consisted of representatives of civil society institutions, academia and interested governmental authorities. Minimum requirement to the number of members – the number should be at least 18 persons

Advisory Board is open for scientists, civil society and policy makers, they could join to Advisory Board, just having official letter from the institutions which they are representing

NATIONAL BIODIVERSITY PLATFORM

KEY CHALLENGES & QUESTIONS

- **A face-to-face meeting with the Ministry of ecology and Natural Resources**
 - **To find a way of the legal status of NBP**
 - **Structure of NBP**
-

NATIONAL BIODIVERSITY PLATFORM

HOW WILL THE AZERBAIJAN NEA CONTRIBUTE TO SHAPING DECISION-MAKING AT NATIONAL LEVEL?

Informing Policy Development: The NEA provides comprehensive data and analysis on the status and trends of ecosystems, biodiversity, and ecosystem services in Azerbaijan. This information can inform the development of policies related to environmental conservation, land use planning, and sustainable development.

Identifying Priority Areas for Conservation: By identifying key ecosystems, habitats, and species of conservation concern, the NEA helps prioritize areas for protection and restoration efforts. Decision-makers can use this information to allocate resources effectively and implement targeted conservation measures. This is very important in the revision of NBSAP.

Engaging Stakeholders: The NEA process involves engaging a wide range of stakeholders, including government agencies, NGOs, academia, and local communities. By fostering collaboration and dialogue among these stakeholders, the NEA can help build consensus around environmental priorities and facilitate more informed decision-making processes.

NATIONAL BIODIVERSITY PLATFORM

HOW WILL THE AZERBAIJAN NEA CONTRIBUTE TO SHAPING DECISION-MAKING AT NATIONAL LEVEL?

Enhancing Resilience to Climate Change: The NEA assesses the vulnerability of ecosystems and biodiversity to climate change impacts. Decision-makers can use this information to develop adaptation strategies and build resilience to climate change, ensuring that ecosystems can continue to provide essential services in a changing climate.

Promoting Sustainable Development: By highlighting the importance of ecosystems and biodiversity for human well-being, the NEA can help mainstream environmental considerations into national development planning. Decision-makers can use this information to promote sustainable development practices that support both economic growth and environmental conservation

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THANK YOU

Overview of the Azerbaijan National Ecosystem Assessment process

Mr. Yashar Karimov

Project Manager of Azerbaijan NEA, Director of RECC Azerbaijan



Main Findings, Lessons Learned and Best Practices

Dr. Rovshan Abbasov

Khazar University, Coordinating Lead Author on Freshwater Ecosystems and Indigenous and Local Knowledge of Mountain Ecosystems



AZERBAIJAN NEA:

Main Findings, Lessons Learned and Best Practices

Rovshan Abbasov, PhD

REC Caucasus, Azerbaijan
Khazar University

INTRODUCTION TO NEA

- The Azerbaijan NEA aims to form an essential knowledge ground for the management, use and protection of biodiversity and ecosystem services that is important in national and subnational level. NEA will help policy makers to improve existing ecosystem management policies and create new grounds for management approaches. Key information about the national ecosystem assessment
- Established NBP supports science-policy dialogues on issues related to biodiversity and ecosystem services, foster the dialogue between science and policy and thereby seeking to stimulate the biodiversity research community to address policy or user relevant questions, inform national stakeholders on IPBES processes.
- Land degradation, habitat fragmentation, unsustainable use of ecosystems, pollution, excessive water withdrawals, invasive alien species and climate changes are the main drivers that reduce quality of ecosystems

POLICY QUESTIONS

Policy question 1

How assessed ecosystems contribute to the life of people and economy of the country?

Policy question 2

What are the main drivers of transformative changes?

Policy question 3

How ILK may contribute to the nature-based managements of ecosystems? How ILK can be mainstreamed into the national policies?

Policy question 4

How identified knowledge and investment gaps should be filled?

Policy question 5

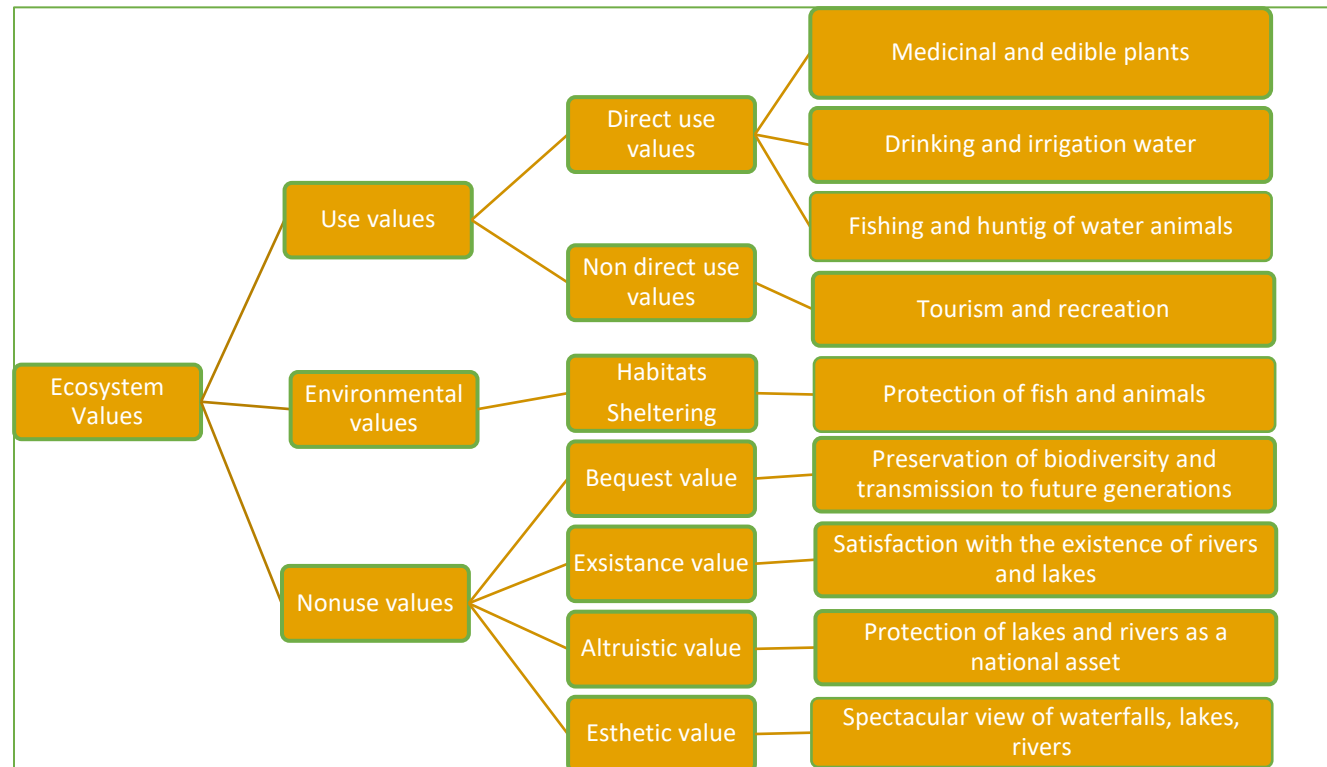
How NEA findings and recommendation should be integrated into the national policy?

Selected ecosystems

- Freshwater Ecosystems
- Forest ecosystems
- Summer pastures
- ILK in Mountain regions



AZERBAIJAN KEY FINDINGS FROM ASSESSMENT REPORT



Main findings

- The lakes and wetlands of Azerbaijan support high numbers of waterfowl species that migrate through or winter here, including the White-Headed duck and the globally threatened Lesser White-fronted Goose. Fifty-one Important Bird Areas (IBAs) –hosting 31 globally threatened species, 9 biome-restricted species and 15 congregator species - and one Endemic Bird Area (EBA) have been identified.
- The territory of Azerbaijan is a center of origin for several globally important food crops, including wild rye, wheat, barley, millet, wild pears, cherry, and more than 200 varieties of grapes.
- Azerbaijani watercourses are the preferred spawning grounds for valuable Caspian sturgeons, which account nearly 90% of the world's sturgeon populations.
- Rivers and small streams are under extreme pressure at present due to intensive water withdrawals for agriculture. Intensive water withdrawals in many small streams have led to significant changes in flow regime.
- Threats to ecosystems have reached large scales and require urgent actions from environmental managers and policy makers. These threats include climate changes, environmental pollution, degradation of ecosystems and deforestation. These changes happen against the backdrop of rapid population growth, characterized by increasing urban growth and increased demand for ecosystem resources.

Main findings

- Land degradation is being further exacerbated by the weak regulation of building and construction activities and illegal urbanization in Azerbaijan, as well as the limited capacity for effective controls on mitigating the environmental impacts of industrial developments.
- The conversion of the lowland pastures into agricultural land, through ploughing and scrub removal, is fragmenting many remaining areas of natural steppes. Several steppe ecosystems are also being further fragmented by the extensive network of irrigation channels, particularly in the central lowland part of the country.
- Local and transboundary pollution in the Kura Basin one of the main causes of pollution in the country's main waterways. Municipal, industrial, and agricultural wastewaters from neighboring countries are being drained into Azerbaijan.
- Forests of Azerbaijan have significant ecosystem services. These services may play a key role in supplying sustained sources of long-term gains, if proper approaches will be applied. These approaches may ensure not only sustained gains, but also protection of forest resources. Broad range of problems exist that prevent shifting from traditional approaches to sustainable management in the forestry sector.
- Illegal timber production, unsustainable tourism and overgrazing are the major threats to sustainable forestry. These factors notably reduce quality of ecosystem services provided by forests.

Recommendations

- Mainstreaming nature-based solutions into the policies, strategies, and development programs of the government institutions. The current issues should be mainstreamed across all the relevant sectors which in turn would reduce vulnerability of ecosystems human-driven factors.
- Developing a stakeholder engagement strategy including information and advocacy materials to build understanding and demand for proper budgeting in ecosystem finance within international donors and finance institutions.
- Azerbaijan has already provided its contribution to the global efforts to cope with climate change and the submitted Intended Nationally Determined Contribution (INDC) presents a very ambitious commitment. However, the presented INDC has no adaptation component. It is very necessary to set clear adaptation goals in the next INDC for all sectors.
- Conducting capacity building projects and trainings for government representatives on ecosystem-based solutions. The projects should involve international donors and local business to provide nature-based solutions in ecosystem management.

Recommendations

- Encouraging sustainable integrated planning and management of landscapes and seascapes
- Encouraging the use of sustainable farming methods, such as agroecology, multifunctional landscape planning, and cross-sectoral integrated management.
- Utilizing genetic resources sustainably in agriculture includes protecting species, landraces, breeds, cultivars, varieties, and gene diversity.
- Promoting the application of biodiversity-friendly management techniques in the production of crops and livestock, forestry, fisheries, and aquaculture, including the application of customary management techniques connected to local communities and Indigenous peoples when appropriate.
- Promoting natural or seminatural habitat areas inside and outside of intensively managed production systems, as well as repairing or reuniting damaged or fragmented habitats as needed.

Key Messages

Making changes to existing legislation to strengthen public and community-based management, implementing incentive solutions to expand community-based ecosystem management; Improve legal and institutional ground for Biodiversity and ecosystem management, Increase protected areas and launch new forms of biodiversity and ecosystem protection.

Encouraging sustainable integrated planning and management of landscapes and seascapes, Encouraging the use of sustainable farming methods, such as agroecology, multifunctional landscape planning, and cross-sectoral integrated management. Utilizing genetic resources sustainably in agriculture includes protecting species, landraces, breeds, cultivars, varieties, and gene diversity.

Incorporate biodiversity considerations into trade agreements, public procurement policies, and corporate social responsibility frameworks. Negotiate and establish bilateral agreements with upstream countries in the Kura-Araz basin to regulate transboundary pollution and water withdrawals. Strengthen community-based approaches to forest governance through the creation of participatory decision-making processes.

Supporting community-based participatory ecosystem management schemes that take into consideration community interests and interests of marginalized groups. Institutionalizing the use ILK and promoting the use of this knowledge through different management approaches

PRIORITIES: DISSEMINATING THE NEA FINDINGS

- **Priority 1:** SPM is available online
 - **Priority 2:** Final workshop is going to be organized
 - **Priority 3:** Both NEA main document and SPM is publicly available and will be distributed to organizations
 - **Priority 4:** NEA findings is mainstreamed and used in government policies, strategies and plans
-

Target audiences

Priority audiences/stakeholders we want to reach and/or to use the assessment?

- The Ministry of Ecology and Natural Resources of Azerbaijan
- Ministry of Economy
- Ministry of Agriculture
- Ministry of Education
- NGO and SCOs
- Women organizations
- Local representatives of UN (UNDP, FAO, UNICEF)
- Business representatives
- Local communities and municipalities
- Mass Media

Template - Section 2 & 3: Outcomes and Objectives

AIMS: What is the overall aim of the ecosystem assessment?

Make comprehensive and multidirectional evaluation of the state and value of the Azerbaijan's natural environment and ecosystem services.

OUTCOMES: What are the desired *outcomes for the dissemination & use of the assessment?*

Outcome 1: The Ministry of Ecology and Natural Resources, Ministry of Agriculture and the Ministry of Economy receive the assessment report and understand its findings.

Outcome 2: Representatives from the Ministry of Ecology and Natural Resources use the assessment report and its findings to update the NBSAP-GBF plan/report/strategy.

Outcome 3 : Representatives from the Ministry of Economy and Agriculture use the assessment findings to update Strategy of socio-economic development of the Republic of Azerbaijan in 2022–2026

OBJECTIVES: What are the step-by-step *objectives* to reach each outcome?

Example: *Organize 4 awareness workshops across 4 regions to promote the assessment's findings to local government officials. More examples below*

- Objective 1: Organize 3 workshop for regional and 1 national workshop for government representatives
- Objective 2: Produced summarized list of key messages and recommendations tailored to the government (Ministry of Ecology and Natural Resources, Ministry of Agriculture and Ministry of Economy)

Global Biodiversity Targets

- Findings of the NEA is currently being used in updating NBSAP and developing Biodiversity targets of Azerbaijan for 2024-2030

1. REDUCING THREATS TO BIODIVERSITY				
Target 1: Plan And Manage All Areas To Reduce Biodiversity Loss				
Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.				
1.1	Further expansion of the area of protected areas across the country and in the Azerbaijani sector of the Caspian Sea	<ul style="list-style-type: none"> • Area of the protected areas reached 20% of the total areas. • At least two new protected areas are established in Karabakh and Eastern Zangezur 	MENR	2024-2030
1.2	Establishing and improving the management of protected areas located in Karabakh, East Zangezur economic regions	<ul style="list-style-type: none"> • Development of the Management of the Protected lands and species (Basitchay and Garagol reserves). 	MENR	
1.2	Creation of at least one biosphere reserve to ensure participatory management of protected areas	<ul style="list-style-type: none"> • Zaqatala Biosphere Reserve is established. 	MENR	2024-2030
1.3	Development of Emerald Network areas within European Neighborhoods Policy framework.	<ul style="list-style-type: none"> • Hirkan, Zagatala and Giziagach reserves included into the Emerald Network of the EU neighborhood policy framework. 	MENR	2024-2030
1.4		<ul style="list-style-type: none"> • 		
1.4	Reconciling human activities with biodiversity conservation in unprotected areas	<ul style="list-style-type: none"> • Implementation of biodiversity protection measures in winter pastures of Karabakh, Mugan, Shirvan, Mil and other areas, summer pastures of the Great Caucasus and Small Caucasus • Implementation of activities related to the protection of biodiversity in urban and rural areas, on state, municipal and private lands. • Prevention of pollution of oxbow lakes around Kura and Araz rivers with nutrients and hazardous pollutants • Further tightening of restrictions on hunting activities in all non-protected areas 	MENR, MoA,	2024-2030

Template – Action Plan

Objective #1 To form an essential knowledge ground for the management, use and protection of biodiversity and ecosystem services that is important in national and subnational level.	Deliverables	Budget	Responsible Party	Partners	INDICATORS
Promote NEA findings in all levels	SPM and NEA technical report is printed and distributed		RECC Azerbaijan	Government, academia and SCOs	
Delivery of NEA knowledge to the state and society	National workshop conducted, NEA findings promoted through social media (Facebook and Instagram)		RECC Azerbaijan	Ministries, Academia, SCOs	Yes YES;
	Meetings with the staff of the Biodiversity Department to promote NEA findings		RECC Azerbaijan	Ministry of Ecology and natural Resources	YES
Objective #2 NEA will help policy makers to improve existing ecosystem management policies and create new grounds for management approaches. Key information about the national ecosystem assessment will be considered in current environmental management policy of the country					INDICATORS
NBSAP of Azerbaijan is updated	Updated NBSAP		RECC Azerbaijan, UNEP		
	Updated list of actions for 2023-2026		Government of Azerbaijan, FAO, UNEP, UNDP		YES
NEA finding is used in preparation of the nomination of Zagatala Biosphere Reserve	Nomination file of the BR considered NEA findings		Ministry of Ecology and Natural Resources, UNESCO		
Objective #3 Representatives from the Ministry of Economy and Agriculture use the assessment findings to update Strategy of socio-economic development of					INDICATORS

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THANK YOU



Weaving Indigenous and Local Knowledge in the Azerbaijan National Ecosystem Assessment

Dr. Shahnaz Amanova

Author, Research Institute of Crop Husbandry

Weaving Indigenous and Local Knowledge in the Azerbaijan NEA

Dr. Shahnaz Amanova

BAKU - 2024

Greater Caucasus

Mountains in Azerbaijan

Lesser Caucasus



Talysh Mountains

Indigenous and local knowledge in mountain areas

Tinov-Rosso (3374 m)

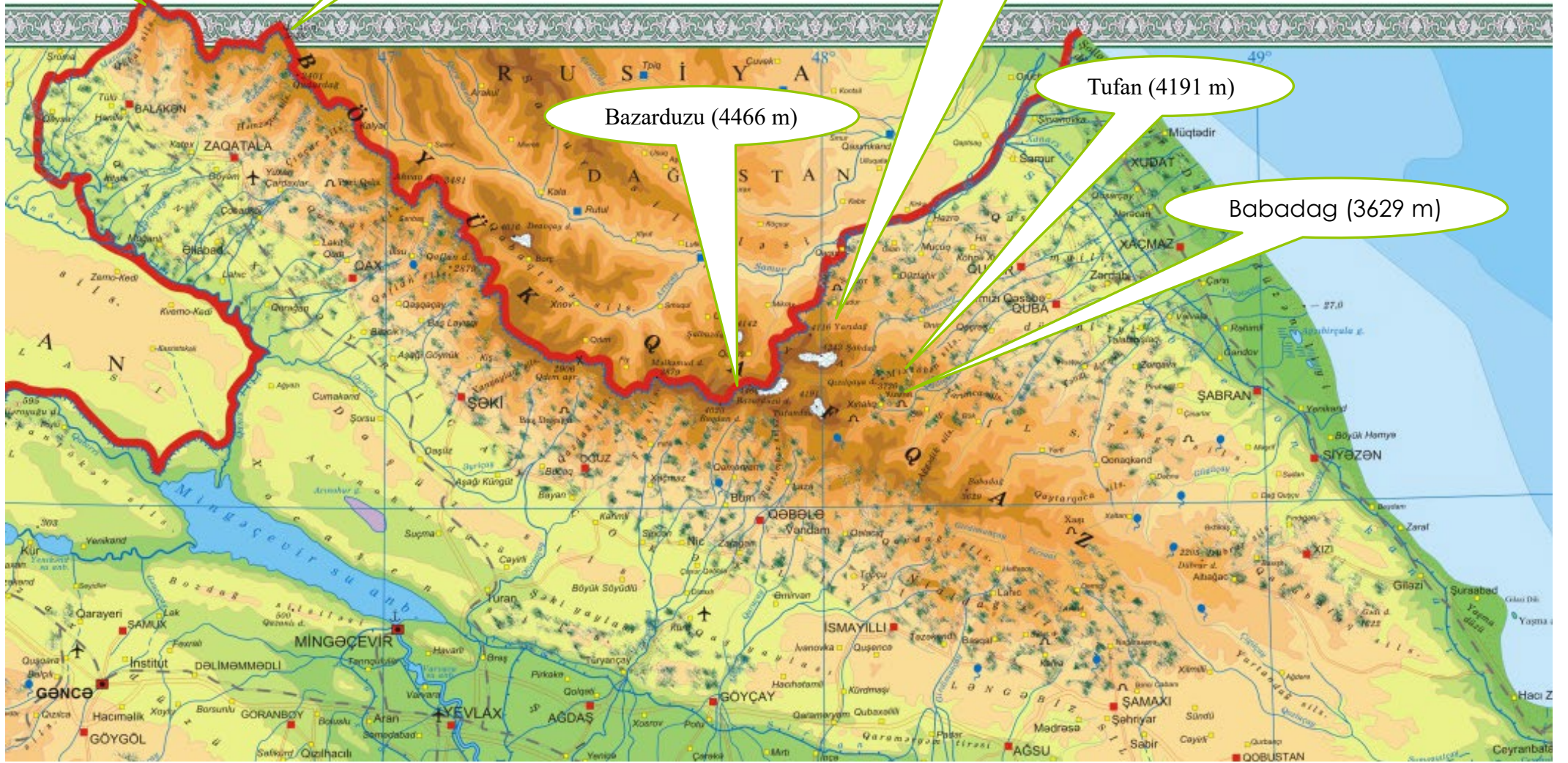
Guton (3648 m)

Shahdag (4243 m)

Bazarduzu (4466 m)

Tufan (4191 m)

Babadag (3629 m)



View of Shahdag peak from the west side



Kapaz (3036)

Gamish (3724)


Hinaldagh (3361 m)

Boyuk Ishigli (3552 m)

Kukudag (3120 m)

Gapijig (3905 m)



 Dövlət paytaxtları
 Capitals of countries
 Столицы государств
 Naxçıvan Muxtar Respublikasının paytaxtı
 Capital of the Nakhchivan Autonomous Republic
 Столица Нakhchivanской Автономной Республики
 Rayon mərkəzi olmayan iri şəhərlər
 Large cities without district centers

 Dövlət sərhədi
 State border
 Границы государства
 Dəmir yolu
 Railway line
 Железнодорожная линия
 Avtomobil yolları
 Highways
 Автомагистрали

Human-Nature Relationships in mountain areas

Utilized



- Pastures
- Forests
- Rivers and springs
- Soil
- Rocks and Minerals

Produced



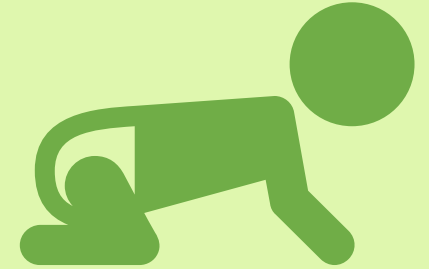
- Milk
- Cheese
- Butter
- Meat
- Wool
- Leather
- Fuel
- Construction materials
- Paints
- Carpets
- Dresses

Used



- Plants
- Water
- Animals
- Mushrooms
- Berries

Beleived

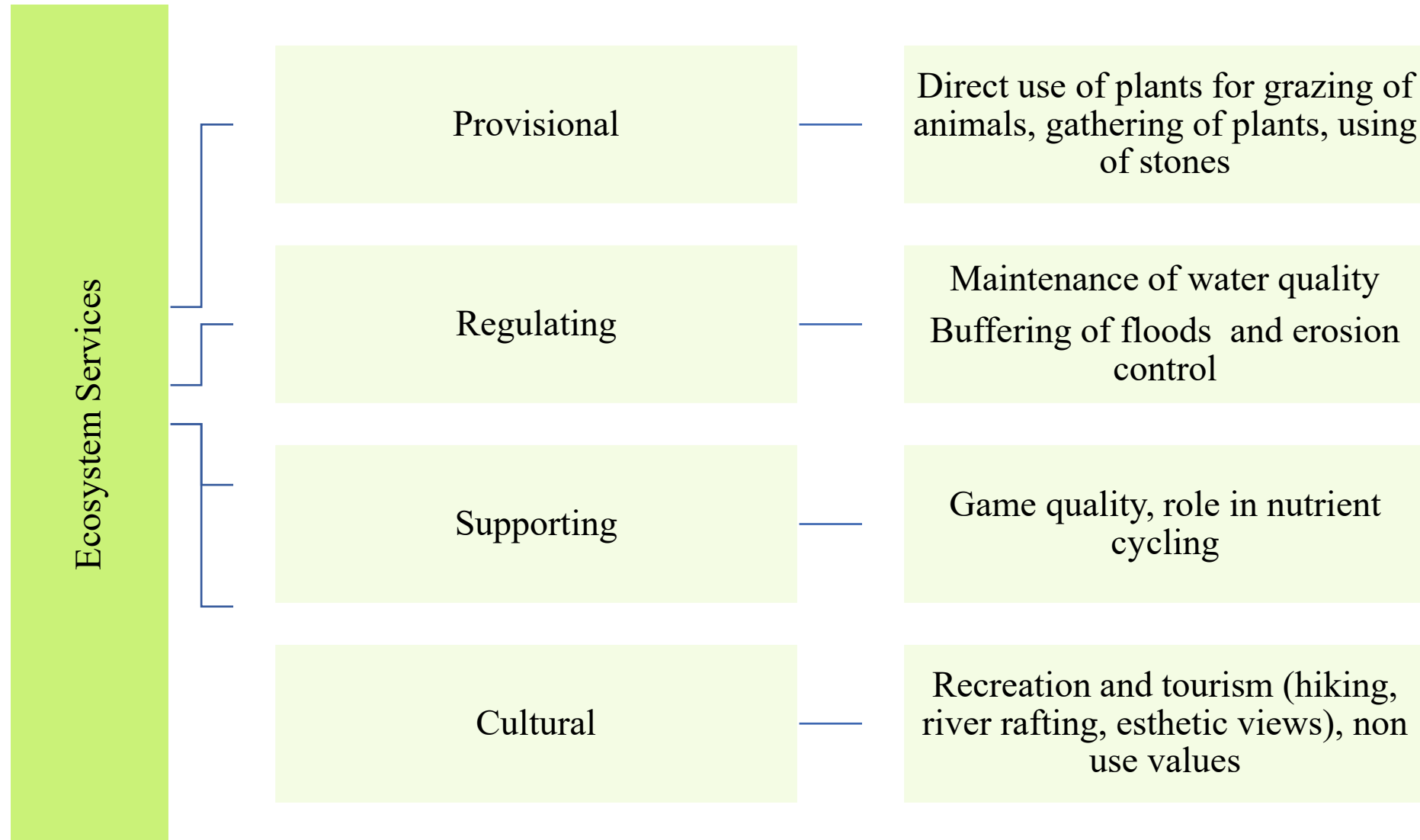


- Caves
- Mounts
- Lakes
- Animals
- Sun
- Rivers
- Fire temples
- Lake Tufan

Natural values associated with traditional life in mountain areas

		Natural values associated with traditional life in mountain areas		
		Water	Fresh air, springs, rivers in the village, yaylaks and kishlaks	Direct use of springs, waterfalls, and rivers
TOTAL NATURAL VALUE	USE VALUES	Pastures	Grazing areas for sheep Habitat for wild goats, bears, birds etc.	Direct use of pastures, use of animal manure as a heating source
		Plants and mushrooms	Medicinal and food plants Gathering of mushrooms and wild berries	Use of plants and mushrooms as a food and medicinal remedies; use of plants for making colors in carpetmaking
		Subalpine grasslands	Grassland and plants	Haymaking, production of plant-based colors
		Wild animals	Hunting of East Caucasian tur (<i>Capra cylindricornis</i>), mountain goat	Game meat, use of leather
		Rocks and stones	Construction materials, clays	Construction of houses, fences, colors from rocks, household use of clays
		Inspiration	Reflection of natural monuments in local traditions	Worship in Qirkhabdal and Gari caves, local beliefs in Caucasian snowsock, Fire temples, Muchos forested place etc.
	NON-USE VALUES	Bequest value	Preservation of existing natural resources and the way of life associated with these resources for future generations (e.g. preservation of pastoral lifestyle, protection of summer pastures, wild animals, plants etc.	Although hunting for Caucasian tur is allowed, the sale of its meat is prohibited in the community; Hunting Caucasian hawks is a taboo, and this species are not hunted; Forested areas are strictly protected
		Option value	The value that is placed on private willingness to contribute for maintaining or preserving an environment even if there is no likelihood of the individual ever using it.	Recognition by people of the great importance of Khinalig culture for the country and world.
		Existence value	The value associated with existence of traditional lifestyle, natural environment, wild species.	Protection of local forest fragments, turs, Caucasian snowcock
		Altruistic value	Contributing to the protection of the natural environment without expecting anything in return	Readiness of people to spend their time and material resources to preserve the culture of mountains
		Spiritual value	Indigenous beliefs about nature and the benefits of these beliefs	The belief of the mountain people in fire, soil and animals and birds

Ecosystem services of mountains



Summer and winter yataks and road between them

- Winter-pastures
- Summer-Winter-Route
- ★ Khinalig
- Summer pasture farms

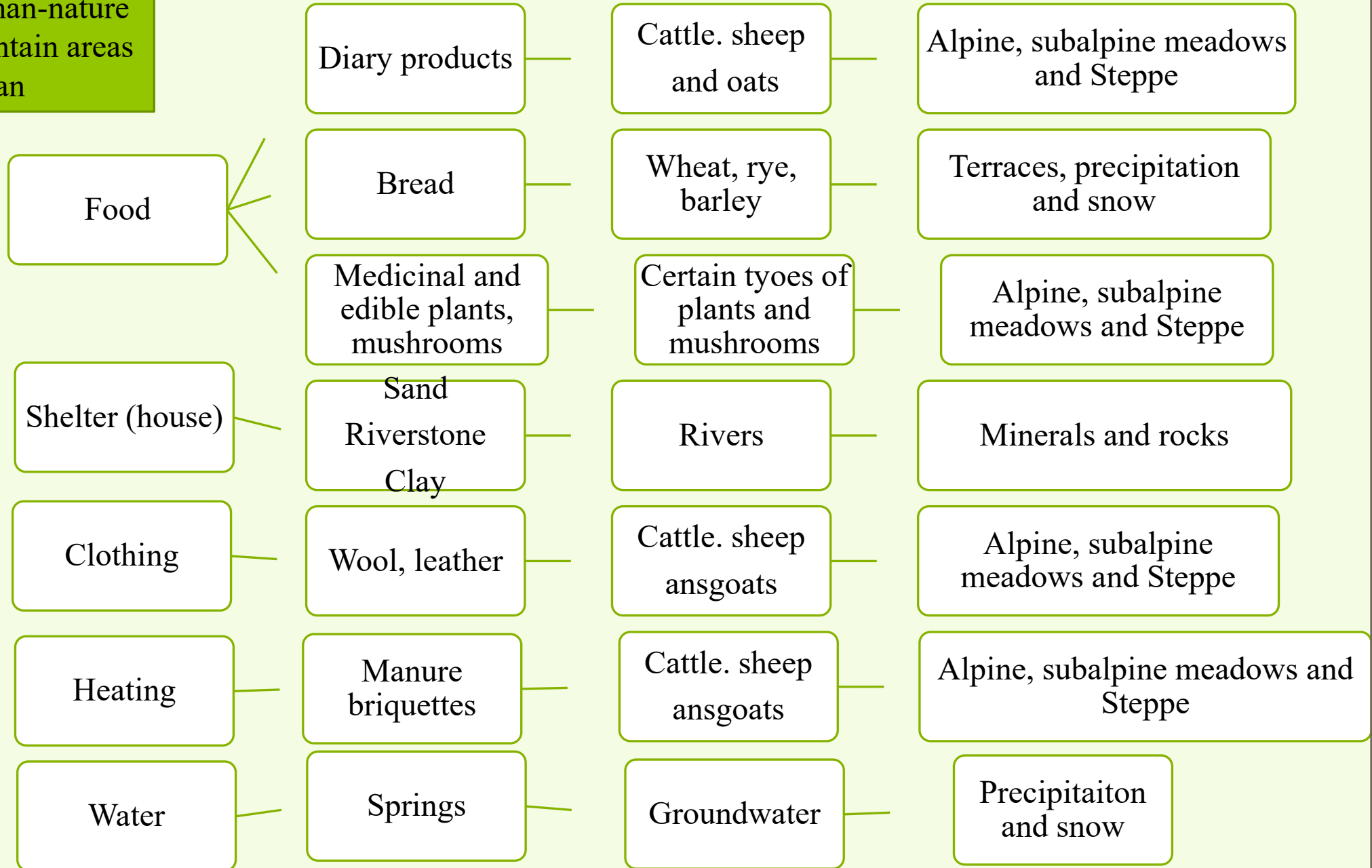
Bing maps

0 10 20 km

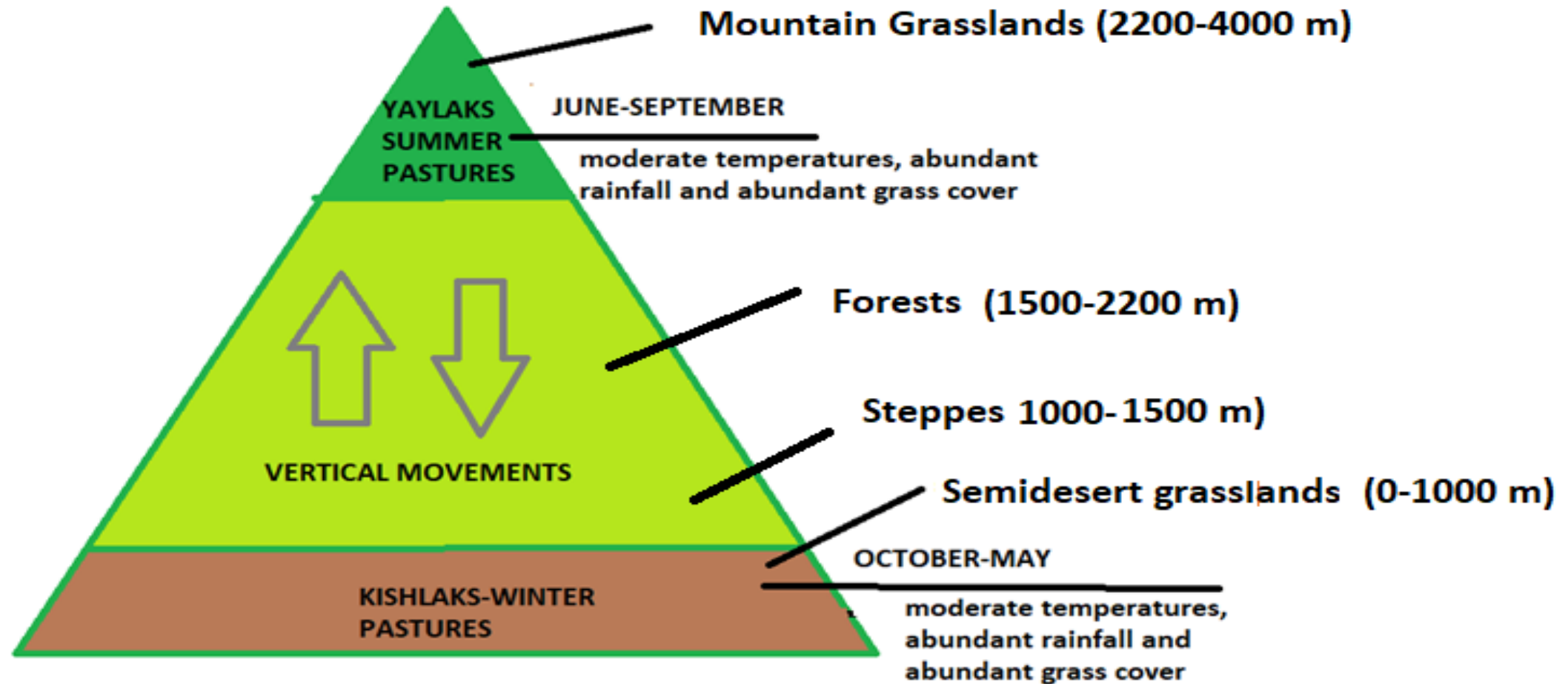


Peculiarities of human-nature relationship in mountain areas of Azerbaijan

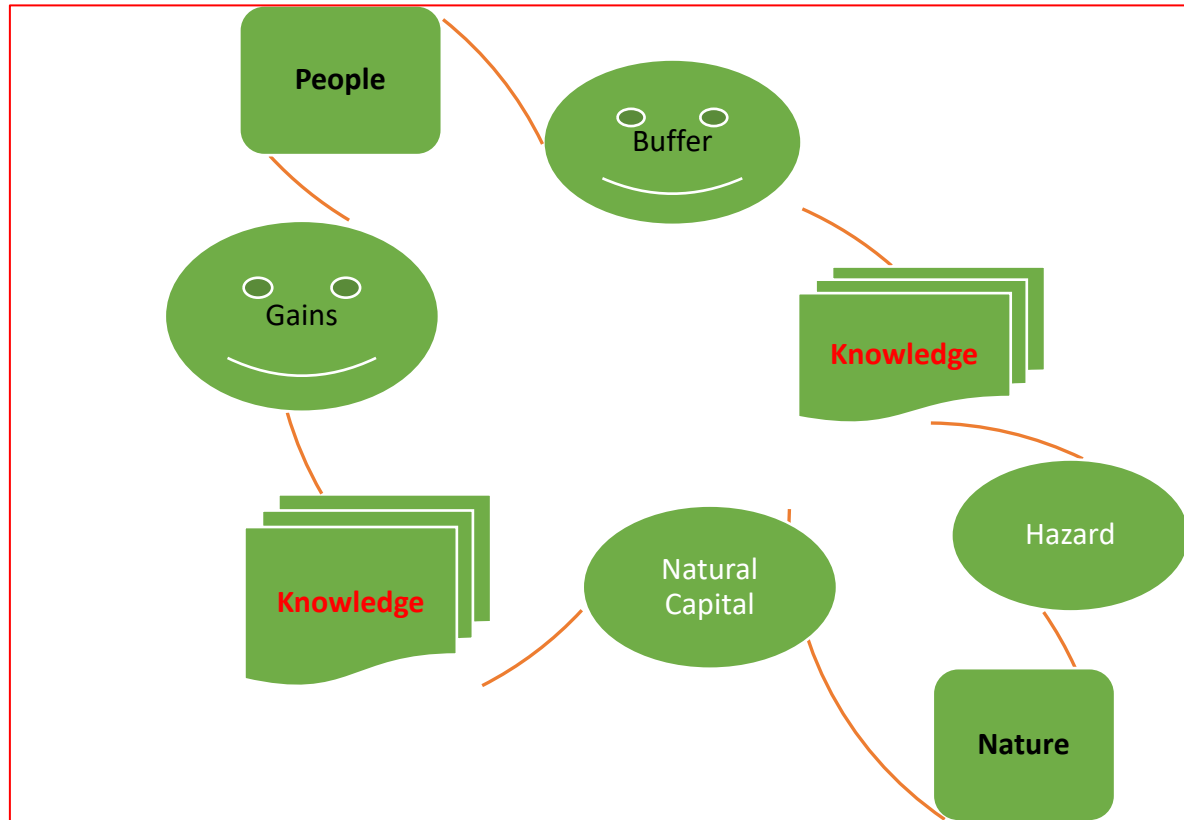
Mountain community



Constant motion in mountain areas



Vertical movement and timing of mountain communities through ecosystems



Emergence of knowledge in connection with nature

Examples of Indigenous and local knowledge in mountain areas of Azerbaijan

Knowledge	Benefits	Notes
Land use	Management of terraces, management of pastures, terraces, taboos related to forest fragments	Applied only in Khinalig and some neighboring villages
Wildlife	Taboos related to hunting of certain wild animals in certain periods	Taboos belong only to Khinalig
Food	Production of motal cheese, grud, butter, cream, medicinal plants, local tea production	The methodology of making dairy products belongs to all pastoral communities in Azerbaijan
Clothing	Production of all types of clothes and footwear, leather and wool materials, felts (keçə), carpet, palaz, wool socks	Applied in all mountain villages
Energy	Production of manure briquettes, use of water energy in mills	Applied only in Khinalig and neighbouring villages
Construction materials	Production of all types of construction and bleaching materials from riverstone, sandstone, rocks and clays	Applied in all mountain villages
Spiritual	Caves, natural fires, taboos and beliefs	Applied only in Khinalig and some neighboring villages
Flood protection	Special dams built in watercourses prevented flash floods	Applied in Sheki city



*Thank You
For Your
Attention*

Question and Answer session





Closing remarks

Ms. Juanita Chaves

Senior Programme Officer at UNEP-WCMC



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Our upcoming webinars:

24 April 2024,
11:30 – 13:00 BST



Global Presentation of Bosnia and Herzegovina National Ecosystem Assessment



Upcoming Webinar

Global Presentation of Bosnia and Herzegovina National Ecosystem Assessment

24 April 2024, Wednesday from 11:30 – 13:00 BST

Thank You!

