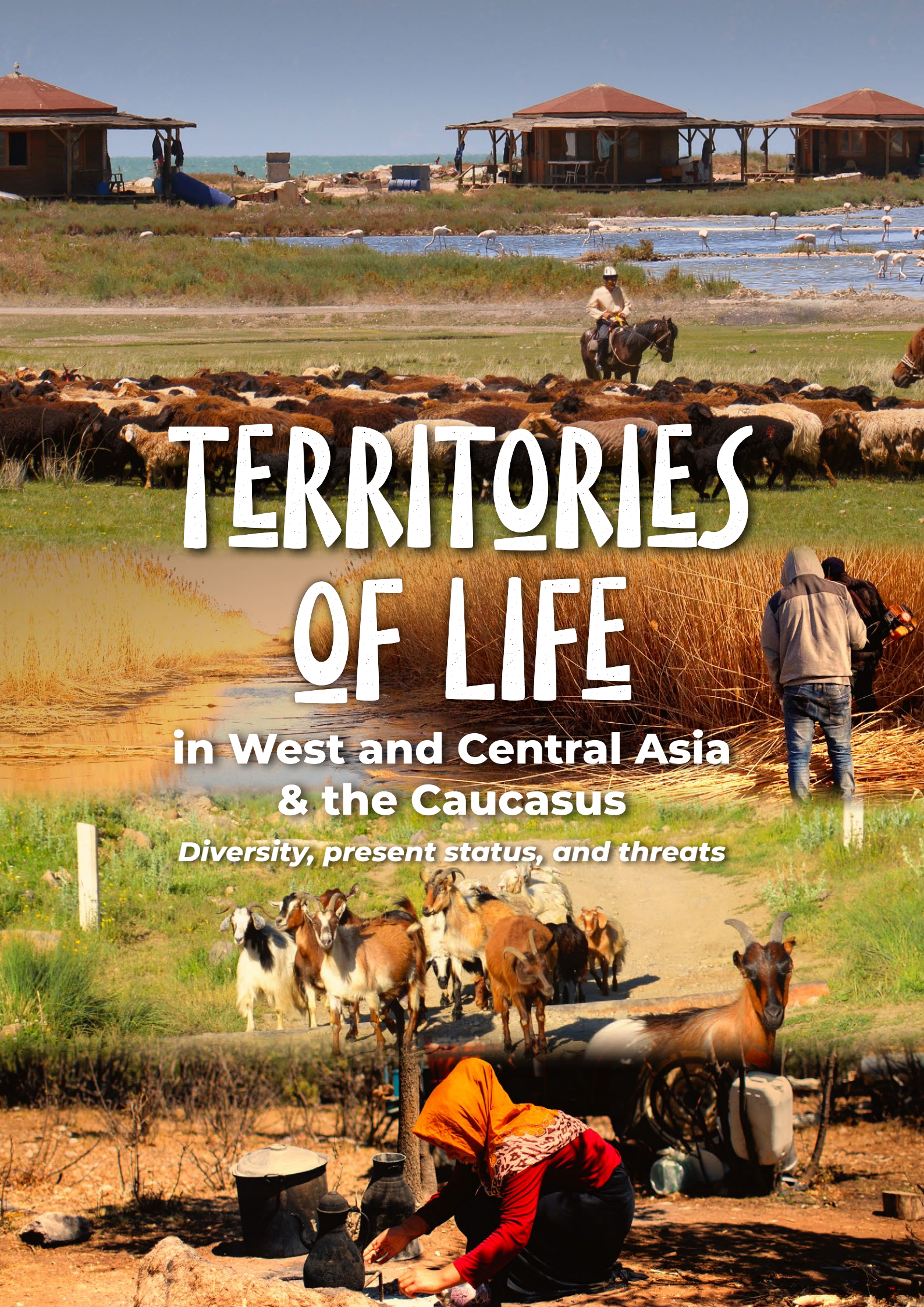

# TERRITORIES OF LIFE

## in West and Central Asia & the Caucasus

*Diversity, present status, and threats*

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# Abstract


Indigenous peoples and local communities govern and conserve vast *territories of life* across the breadth of West and Central Asia and the Caucasus. These territories are found in all geoclimatic and sociopolitical regions and are highly diverse in their ecological and cultural characteristics. However, in nearly all instances, people and land are intricately connected through people's livelihoods and their territories of life are intertwined with culture and sense of identity. Local communities and Indigenous Peoples who effectively govern, manage and conserve their land and biodiversity contribute not only to local affairs, but also to national and global goals as expressed, for example, in the Sustainable Development Goals (SDGs) as well as goals set out in the Convention on Biological Diversity (CBD) and future targets under the post-2020 Global Biodiversity Framework. Their lands, livelihoods and cultures also overlap substantially with globally recognized biodiversity hotspots and Key Biodiversity Areas (KBAs). In this document, the current status and condition of territories of life across the region are reviewed – drawing attention to the inherent richness and diversity of the region's territories of life as well as the many ways in which each of their current states and the unique threats they face and emerging opportunities vary significantly. Conversely, global trends such as climate change and economic globalisation are likely to affect all of them, adversely, in similar ways. While this report offers a long-overdue synthesis of the diversity of ICCAs or territories of life in West and Central Asia and the Caucasus, additional country-level participatory and community-led studies are also encouraged in order to more comprehensively identify locally pertinent status and trends as well as to highlight the most important threats and opportunities for each country's specific indigenous and local communities and their respective territories of life, for the benefit of all.

# Acronyms and Abbreviations

CBO - Community-Based Organisation
CENESTA - Centre for Sustainable Development and Environment (Iran)
FPIC - Free, Prior, and Informed Consent
FPWC - Foundation for the Preservation of Wildlife and Cultural Assets (Armenia)
GBAO - Gorno-Badakhshan Autonomous Oblast (province), Tajikistan
GIS - Geographic Information System
GREDO - Green Environment and Development Organisation (Afghanistan)
ICCA - Territories and areas conserved by Indigenous Peoples and local communities
ILO - International Labour Organisation
IPBES - Intergovernmental Science-Policy Platform for Biodiversity and Ecosystem Services
IPCC - Intergovernmental Panel on Climate Change
IPLCs - Indigenous Peoples and Local Communities
IUCN - International Union for Conservation of Nature
KBA - Key Biodiversity Area
LBO - Local Biodiversity Outlooks
NGO - Non-Governmental Organisation
NTFP - Non-Timber Forest Product
OECM - Other Effective area-based Conservation Measure
SDGs - Sustainable Development Goals
SGP - UNDP Small Grants Program
SNT - Shimshal Nature Trust (Pakistan)
SPNL - Society for Protection of Nature in Lebanon
TEK - Traditional Ecological Knowledge
UNDP - United Nations Development Programme
UNDRIP - United Nations Declaration on the Rights of Indigenous Peoples
UNEP - United Nations Environmental Programme
UNESCO - United Nations Educational, Scientific and Cultural Organisation
UNICAMEL - Union of Indigenous Camel Herders of Iran
UNINOMAD - Union of Indigenous Nomadic Tribes of Iran
USSR - Union of Soviet Socialist Republics
WCMC - World Conservation Monitoring Centre
YKBR - Ysyk-Köl Biosphere Reserve

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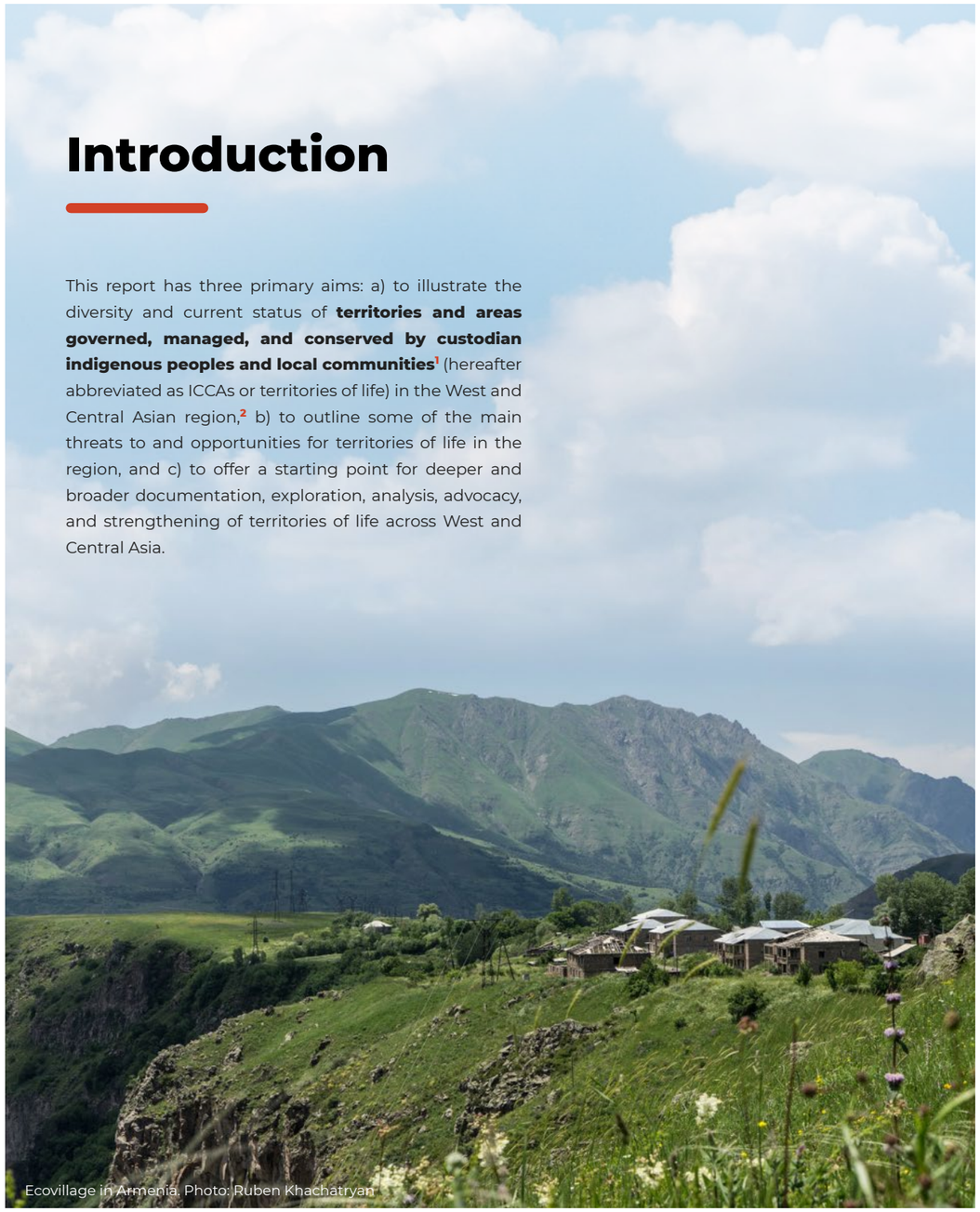
# Introduction

This report has three primary aims: a) to illustrate the diversity and current status of **territories and areas governed, managed, and conserved by custodian indigenous peoples and local communities**[1] (hereafter abbreviated as ICCAs or territories of life) in the West and Central Asian region,[2] b) to outline some of the main threats to and opportunities for territories of life in the region, and c) to offer a starting point for deeper and broader documentation, exploration, analysis, advocacy, and strengthening of territories of life across West and Central Asia.



Ecovillage in Armenia. Photo: Ruben Khachatryan

[1] See Sajeva et al. (2019). To further explore a range of key related definitions and meanings, please visit ICCA Consortium's website: **toolbox.iccaconsortium.org/meanings-and-more/iccas-territories-of-life**

[2] The ICCA examples in this report come from Iran, Iraq, Lebanon, Turkey, Armenia, Kyrgyzstan, Kazakhstan, Tajikistan, and Afghanistan. Information about ICCAs described herein has been provided by ICCA Consortium members in the region. Although the examples in this report are from a limited number of countries, this does not mean that other countries in the region lack ICCAs. In fact, many if not all of the countries in the region are very likely to have many and diverse ICCAs. It is for this reason that we envision this report simply as a starting point for a more extensive documentation and study of the ICCAs in the region.



# Indigenous peoples and local communities

The terms 'indigenous peoples' and 'local communities' require some clarification. This report relies on a set of characteristics outlined in the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), which guides in the identification of indigenous peoples, including: self-identification as indigenous nations and peoples; a shared history of suffering injustices, colonisation and land dispossession; a complex web of place-based relationships; language, traditional practices, knowledge, and legal and cultural institutions distinct from those dominant in the national state where they reside; and knowledge, culture and practices that contribute toward more sustainable governance and management of human relationships with the natural world.[3,4] When referring to 'local communities' this report means a self-identified human group that acts collectively in ways that contribute to defining territory and culture through time.[5] Since West and Central Asia represent an enormous region, some groups self-identify as indigenous (e.g., tribes and tribal confederacies in Iran), while others refer to themselves as local communities (e.g., in Central Asian countries). From the perspective of international law, none of the West and Central Asian countries joined the *ILO Indigenous and Tribal Peoples Convention 169* (1989), while quite a few of them are signatories to the *UN Declaration on the Rights of Indigenous Peoples* (2007). During the vote for the *UN Declaration on the Rights of Peasants and Other People Working in Rural Areas*, the majority of the states from the region supported the declaration. In contrast, some states such as Turkey, Georgia, Armenia and Russia abstained. With the exception of Iran,[6] there are no overviews of country-level legislation on indigenous peoples and local communities and their rights in West and Central Asia, which represents a huge knowledge gap.

# Introducing ICCAs - Territories of Life

ICCA is an abbreviation for territories and areas conserved by indigenous peoples and local communities, with a shorter version being *territories of life*. ICCAs represent a phenomenon with many diverse manifestations and names, present in nearly all cultures and locales around the world. In West and Central Asia[7] and elsewhere, they may also be known as *wilayah adat, al-hima, agdal, tagal, qoroq, yerli qorukh*, *yiyk jer*, and as sacred sites or ancestral domains known by their local names.

Over the course of its use, the term ICCA has often been perceived and used in connection to nature conservation. Although the concepts of 'territories of life' and 'ICCAs' are synonymous, with exactly the same definitions, the former seems to convey better the views and perceptions of indigenous peoples and local communities themselves in regard to their lands and territories. For example, the term 'territory of life' better highlights many of the cultural dimensions of local communities' interactions with their lands, thus being a positive step toward overcoming culture-nature, human-nature, conservation-livelihoods, and a range of other artificial dualisms. However, recognizing that both terms are still being used, this report uses them interchangeably.

[3] To further explore other possible definitions of 'indigenous peoples,' please visit the ICCA Consortium's website: **toolbox.iccaconsortium.org/meanings-and-more/indigenous-peoples**

[4] The potential of relational approaches for transformative nature conservation (as found among many indigenous peoples' and local communities' value systems and consequently within their livelihood practices) is further explored in *Thinking Like A Mountain*... (Foggin et al. 2021), available at **www.mdpi.com/2071-1050/13/22/12884**

[5] To further explore different definitions of local communities, please visit the ICCA Consortium's website: **toolbox.iccaconsortium.org/meanings-and-more/local-communities/**

[6] For a country-level review of the territories of life in Iran, see Azhdari et al. (2021)

[7] Reference to West and Central Asia in this document is shorthand for the larger geographic region of West and Central Asia *and the Caucasus*. This broader geography including the Caucasus is an area of the world where the ICCA Consortium has a substantial and active membership, including coordinated action under the Consortium's ongoing process of regionalization (see, e.g., ICCA Consortium, 2019).

ICCAs - territories of life often share three common characteristics:[8]

**1** There is a close and deep connection between a particular territory, area or wildlife species' habitat, on the one hand, and an indigenous people or local community, on the other hand. This relationship may be rooted in history, social and cultural identity, spirituality and/or people's reliance on the area for their material or non-material well-being. Furthermore, it must be recalled that the status of indigenous people and local communities stems from their self-identification and does not require recognition or depend upon 'approval' from the outside for their *de facto* existence.

**2** The custodian people or community makes and enforces decisions about the territory, area or species' habitat through a functioning governance institution.

**3** Governance decisions and management efforts of the concerned people or community contribute to the conservation of nature (ecosystems, habitats, species, etc.) as well as to their own well-being, regardless of original motivating factors or primary intent of the governance (decision-making) or practical management actions.

These three characteristics are found in many but not necessarily all ICCAs - territories of life. One or two of these characteristics may be *disrupted* for one reason or another. Further, in some instances, a local community may *desire* to create an ICCA even where it has not previously existed. Such diversity of forms or states of ICCAs may be conceptualised as defined, disrupted, or desired ICCAs (Box 1). While such a typology of ICCAs may be helpful for understanding them, one must also always recognise the *dynamic nature* of ICCAs and avoid attempts to fit any particular ICCA into a single predefined, unchanging category.

Shahsevan nomads in their summering ground in Iran. Photo: CENESTA

[8] See **toolbox.iccaconsortium.org/meanings-and-more/iccas-territories-of-life**

**Box 1.**

## Status and types of ICCAs – territories of life

Territories of life generally share three main characteristics, yet they also change over time in light of unique circumstances and in response to internal and external challenges. For example, these territories may be conceptualised as **defined** when they demonstrate their three defining qualities: (1) there is both a close and deep connection between the territory, area or wildlife species' habitat, and an indigenous people or local community, with their important relationships often rooted in history, social and cultural identity, spirituality, and with the indigenous people or local community relying on the area for their material and non-material well-being; (2) the custodian people or community make and enforce key decisions about the territory, area or habitat, through a functioning governance institution; and (3) the local governance decisions and management efforts of the concerned people or community contribute to the conservation of nature (ecosystems, habitats, species, etc.) as well as to their own well-being.

In other situations, the territories may have been under the long-term control of local communities or indigenous peoples, but they are now in a poor state of conservation, often due to a variety of reasons beyond their control. There are also instances of well-conserved areas where communities who traditionally lived in such territories have had to leave (sometimes forcefully removed) and thus are deprived of management control (e.g. due to development or conservation initiatives). Such ICCAs may be regarded as **disrupted**, since one or two of the defining qualities of ICCAs have been severed due to circumstances arising outside the local community. Disrupted ICCAs and their custodian communities should be supported as they reorganise, strengthen and recreate themselves and their territories of life.

For their part, **desired ICCAs** may relate to the life plan of new or recently reconstituted communities that decide to organise themselves and pull together in the same direction in relation to a shared environment, agreed socio-ecological principles, and a common vision. In so doing, they develop a common identity for themselves as a *community* and for their territory as an ICCA. Moreover, desired ICCAs may be envisioned either with reference to a pre-existing historical situation, or they may represent a fresh start on the basis of shared values and a strong commitment to the restoration of a specific territory. A helpful example of a desired ICCA would be the new territory of an indigenous community that has been relocated to new lands. In such a case, if for any reason the community were to decide that it accepts to live in the new territory, it may also consciously choose and work toward developing its bond with the land, together with forming or recreating relevant governing institutions and positive practices (cf. three defining characteristics of ICCAs).

Regardless of their status, all ICCAs should enjoy full recognition, support and protection from ongoing and emerging threats.

Where ICCAs-territories of life are present, there is also almost always a greater diversity of cultural expression and ecologically relevant livelihoods, richer biodiversity and functional ecological services, and enhanced socio-ecological resilience to local, regional, and global changes and pressures. The most recent spatial analysis[9] has indicated that 'Potential ICCAs' cover around 21% of the world's land area (UNEP-WCMC and ICCA Consortium 2021).

Other studies estimate that about 370 million people worldwide self-identify as indigenous and manage around 38 million km$^2$ - over 25% of the world's land area (excluding Antarctica) (Garnett et al. 2018).

In addition, there are significant areas managed by local and indigenous communities around the globe (IPBES 2019). When such communities are taken into account, it is estimated that up to 50% of the world's land area is either owned or used/managed by indigenous people and local communities (LBO-2 2020) (Box 2).

[9] This refers to the spatial data layer of potential and known ICCAs, created specifically for the analysis shared by UNEP-WCMC and ICCA Consortium in the 2021 report on territories of life. Many ICCAs are referred to as 'potential ICCAs' because they have not yet been self-reported by their custodian communities as such; the majority of the data layer was comprised of ICCAs that have not yet been self-reported by custodian indigenous peoples and local communities.

**Box 2.**

## The contribution of ICCAs to conservation globally and in West and Central Asia

By definition, one of the key characteristics of ICCAs is that they *de facto* contribute to the conservation of nature (Stevens et al. 2016). The contributions of ICCAs and IPLCs to achieving global biodiversity targets have been documented and showcased already in a range of global science-policy platforms (LBO-2 2020). On a global scale, although many direct and indirect pressures have led to reduced biodiversity at an alarming rate (Newbold et al. 2016, IPBES 2019), biodiversity is declining less rapidly in indigenous peoples' land compared to other lands (IPBES 2019).

At least 26% of the world's state- and privately-governed protected and conserved areas are overlapping on land that includes potential ICCAs (UNEP-WCMC and ICCA Consortium, 2021). Garnett et al. (2018) suggested an even larger percentage, claiming that over 40% of formally protected areas globally are located on indigenous peoples' lands. Additionally, ICCAs are estimated to cover about 22% of the world's terrestrial Key Biodiversity Areas (KBAs) (UNEP-WCMC and ICCA Consortium 2021).

Five of the world's 34 Biodiversity Hotspots (Brooks et al. 2006) are located within the focal region of this report, i.e. West and Central Asia. These five hotspots are the Mountains of Central Asia, Caucasus Mountains, Irano-Anatolian region, the eastern and northern portions of the Mediterranean Basin and the Horn of Africa (Figure 2).

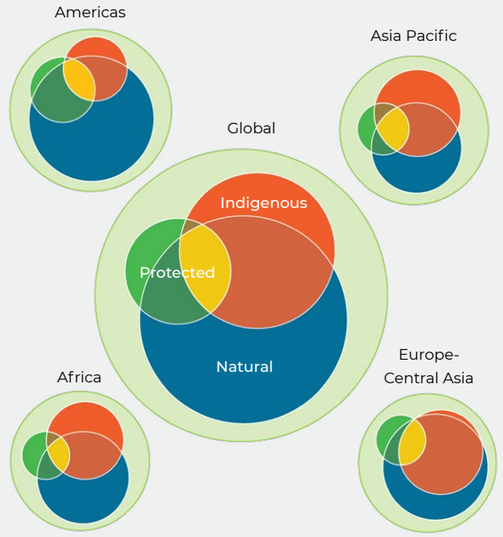



Figure 1. Intersections among indigenous lands, protected areas, and natural landscapes - both globally and for each IPBES region. Circles and intersections are shown proportional to area, with the largest circle scaled to the land area of the Earth (135.2 million km² excluding Antarctica). Source: Garnett et al. 2018.

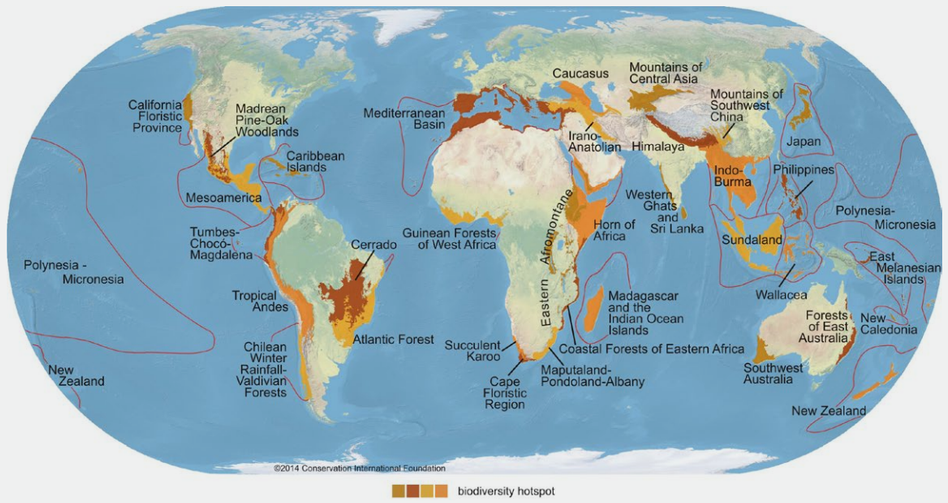



Figure 2. There are 34 Biodiversity Hotspots in the world, five of which are either fully or partially embedded within West and Central Asia.

# Geographical and biocultural diversity

The next section highlights the geographic and biocultural diversity of the region, serving as a backdrop for the great diversity of ICCAs in West and Central Asia.

### Countries and regions

Geographically, West Asia and Central Asia are often treated separately. Western Asia (also referred to as West Asia or Southwest Asia) is the subregion of the Asian continent stretching from the Black and Mediterranean Seas in the west to the Caspian Sea to the east. This vast area contains subregions such as Anatolia, Sinai Peninsula, Arabian Peninsula, Iranian Plateau, and South Caucasus. Around 20 countries are located fully or partially within Western Asia[10] including Turkey, Georgia, Armenia, Azerbaijan, Iran, Iraq, Syria, Lebanon, Cyprus, Israel, Palestine, Egypt, Jordan, Saudi Arabia, Kuwait, Bahrein, Qatar, UAE, Oman, and Yemen; with 13 of these countries including large Arab-speaking populations. As for Central Asia, this vast region stretches from the Caspian Sea in the west to China and Mongolia in the east, and from Russia in the north to Afghanistan in the South. It contains such countries as Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. At the same time, Afghanistan, Mongolia and Xinjiang (the westernmost provincial-level region in China) are sometimes also included in the Central Asian region. Grouping these two regions into one in this report arises pragmatically from the regionalization process of the ICCA Consortium.[11] The ICCA Consortium membership in the region decided in 2019 to regard West and Central Asia and the Caucasus together, in order to strengthen the networking and self-strengthening processes among the region's many widespread and diverse indigenous peoples and local communities.[12]


Figure 3. Map of Western Asia
Source: Wikipedia: https://upload.wikimedia.org/wikipedia/commons/thumb/1/1e/Western_Asia_2.png/550px-Western_Asia_2.png

[10] The number of states within West Asia may be debated, as there are some unrecognised countries and territories in the region.

[11] For more details, please see the report from the West and Central Asia Regional Assembly: **www.iccaconsortium.org/index.php/2019/06/30/reflecting-on-the-west-and-central-asia-and-the-caucasus-latest-regional-assembly**

[12] Full report is available here: **www.iccaconsortium.org/wp-content/uploads/2019/06/Report-of-West-Central-Asia-and-the-Caucasus-Regional-Meeting-Armenia-June-2019-final.pdf**


Figure 4. Map of Central Asia. Source: https://ec.europa.eu/info/events/sustainable-energy-central-asia-2019-apr-12_en

Thus, the *West and Central Asia* region extends around 7,000 km from west to east (i.e., from the Mediterranean and Aegean Seas in the west to the borders of China and Mongolia in the east), and about 5,000 km from north to south (i.e., from the northern borders of Kazakhstan to the Gulf of Aden). This enormous region of the world includes 8 main geographic, ecological and/or socio-cultural sub-regions: the Arabian Peninsula, Sinai Peninsula, Mediterranean Sea, Fertile Crescent, Anatolia, South Caucasus, Iranian Plateau, and Central Asia. Covering no less than 13,276,000 km² in total and with a human population of around 600 million people (Table 1), *West and Central Asia* is extremely diverse not only in its geography and ecology but also socially, culturally and linguistically.

Historically, many populations and geographic areas also have been influencing each other in many different ways – not least through the long-distance trade routes of the 'Silk Road' that have enabled a regular exchange of material goods as well as ideas, beliefs and knowledge over many centuries.

**Table 1.**

## Countries in the West and Central Asia region

| Geographic region<br>Country | Area (km²) | Population (2010) | Density (per km²) | Capital |
|---|---|---|---|---|
| **Anatolia**: | | | | |
| Turkey | 783,562 | 73,722,988 | 94.1 | Ankara |
| **Arabian Peninsula:** | | | | |
| Bahrain | 665 | 1,234,596 | 1,646.1 | Manama |
| Kuwait | 17,820 | 3,566,437 | 167.5 | Kuwait City |
| Oman | 212,460 | 2,694,094 | 9.2 | Muscat |
| Qatar | 11,437 | 1,696,563 | 123.2 | Doha |
| Saudi Arabia | 1,960,582 | 27,136,977 | 12 | Riyadh |
| United Arab Emirates | 82,880 | 8,264,070 | 97 | Abu Dhabi |
| Yemen | 527,970 | 23,580,000 | 44.7 | Sana'a |
| **South Caucasus:** | | | | |
| Armenia | 29,800 | 3,264,500 | 108.4 | Yerevan |
| Azerbaijan | 86,600 | 9,165,000 | 105.8 | Baku |
| Georgia | 69,700 | 4,636,400 | 68.1 | Tbilisi |
| **Fertile Crescent:** | | | | |
| Iraq | 438,317 | 31,672,000 | 73.5 | Baghdad |
| Israel | 20,770 | 7,653,600 | 365.3 | Jerusalem |
| Jordan | 92,300 | 6,318,677 | 68.4 | Amman |
| Lebanon | 10,452 | 4,228,000 | 404 | Beirut |
| Palestine | 6,220 | 4,260,636 | 667 | Jerusalem |
| Syria | 185,180 | 23,695,000 | 118.3 | Damascus |
| **Iranian Plateau:** | | | | |
| Iran | 1,648,195 | 74,700,000 | 45 | Tehran |
| **Mediterranean Sea:** | | | | |
| Cyprus | 9,250 | 1,088,503 | 117 | Nicosia |
| **Sinai Peninsula:** | | | | |
| Egypt | 61,000 | 850,000 | 82 | Cairo |
| **Central Asia:** | | | | |
| Kazakhstan | 2,724,900 | 16,004,800 | 6 | Astana |
| Kyrgyzstan | 199,900 | 5,482,000 | 27 | Bishkek |
| Tajikistan | 143,100 | 7,349,145 | 51 | Dushanbe |
| Turkmenistan | 488,100 | 5,110,000 | 10 | Ashgabat |
| Uzbekistan | 447,400 | 27,606,000 | 62 | Tashkent |
| Afghanistan | 647,500 | 31,889,923 | 49 | Kabul |
| Mongolia | 1,566,000 | 3,057,778 | 2.1 | Ulaanbaatar |

# Sociocultural and linguistic diversity

Many languages are spoken in the region, belonging to three major linguistic families: Semitic languages such as Arabic, Hebrew, etc.; Indo-European languages, which comprise a variety of Iranian and Slavic languages; and Turkic languages including Kyrgyz, Kazakh, and more.

The main religions present in the region are Islam (Sunni and Shia) (Zubaida 2009, Peyrouse 2007) and Christianity (predominantly Orthodox) (MacCulloch 2010). Many major religions' interpretations are also infused with local beliefs and practices that pre-date the arrival of the larger religious streams (Laruelle 2007).

Historically, Central Asia and the Caucasus have had closer ties with the Russian Empire and, later, the Soviet Union (Marshall 2010, Haugen 2003). In contrast, West Asia has been more affiliated with the Ottoman and Persian Empires (Agoston and Masters 2009, Lewis 1995). Following the collapse of these empires, nation-states have emerged as predominant political entities. Nonetheless, many cultural and linguistic affinities still stretch across borders and tie larger bodies of people together based on shared histories, values and aspirations, sometimes over and against more recent and shorter-term national or subnational goals and programmes.

Mountain farming in Yagnob Valley of Tajikistan.
Photo: Marc Foggin

Pastoralism in the Tianshan Mountains of Kyrgyzstan.
Photo: Institute for Sustainable Development Strategy

# Geography and ecology

The regions of West and Central Asia feature many major mountain ranges (e.g., Tianshan, Pamir, Caucasus, Hindukush), deserts (Kyzyl-Kum, Taklamakan, Dashte-Lut), steppes and grasslands (Eurasian steppe), riparian ecosystems (Tigris and Euphrates, Amu Darya and Syr Darya), as well as coastal ecosystems (Red Sea, Mediterranean Sea, Persian Gulf, Caspian and Aral Seas). The region comprises many important habitats for emblematic wildlife species such as snow leopard, saiga, camels, sturgeon, and flora such as walnut and fig trees. At the same time, the Aral Sea, located in Central Asia, is a notorious example of a man-made environmental catastrophe (Edelstein et al., 2012). As a result of the diversion of water from the Syr Darya and Amu Darya Rivers for irrigation of cotton and rice fields, the Aral Sea shrunk in just a few decades to 10% of its original size (Edelstein et al. 2012). Notably, many sub-regions within West and Central Asia have arid and semi-arid climates and are therefore prone to drought.



# Major livelihoods

The diverse geographic conditions in the region have led people and communities to adopt a wide range of livelihood activities, adapted to local ecological and climatic conditions and the natural resources available to them, also considering their variable spatiotemporal availability and predictability. Notable livelihood systems in the region include nomadic pastoralism, transhumant pastoralism,[13] settled farming, and fishing. People also commonly embrace either permanent or temporal combinations of such activities as a flexible risk-minimising strategy, enhancing their overall resilience (see, e.g., Sabyrbekov 2019).

### *Pastoralism*

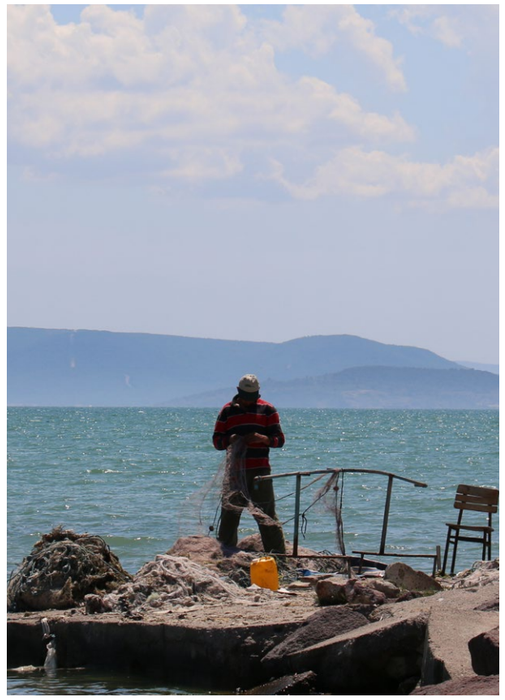
Pastoralism is one of the most common livelihoods across the region (Khazanov and Shapiro 2005, Farvar 2003). In many areas, local livelihoods have at least some pastoral components. Historically, this developed initially as an adaptive process through livelihood strategies that required seasonal migration, leading to emergence of indigenous nomadic pastoralism (Box 3). Seasonal migrations continue to have an enormous effect on cultural identity and ecology in the region (Undeland 2005). There are two main patterns of migration: horizontal and vertical. Horizontal migration over long distances is common in the steppes, and vertical or altitudinal migration is more common in mountainous areas (Dong 2016). Both aim to follow seasonal weather patterns and consequent changes in natural vegetation, to ensure continued access to and sustainable use of natural pastures and water resources.

### *Farming*

Farming is another common livelihood found widely across the region. Although many areas are prone to droughts, agriculture has flourished along all major rivers and in important oases since ancient times. Mesopotamia, Levant, and Anatolia were the earliest centres of agriculture in the world (Marston 2017) and traces of irrigated farming in Central Asia date back to the Bronze Age (Brite 2016). Farming and pastoralism are not mutually exclusive, as many communities engage in combinations of both (Kerven et al., 2011). However, soil degradation, erosion, and desertification are threats, especially for farming areas in the region (IPBES 2018, Squires et al. 2019). Further, projected population growth is likely to exacerbate pressures on the availability and quality of agricultural land (Osepashvili 2006).

### *Fishing*

West and Central Asia also includes major water bodies such as the Mediterranean, the Persian Gulf and the Black and Red Seas, as well as large inland water bodies such as the Caspian and Aral Seas, Ysyk-Köl and Balkhash Lakes, and major rivers such as the Amu Darya (Oxus), Syr Darya, Tigris, Euphrates, and others. Communities living in coastal and riparian zones engage to varying degrees in small-scale fisheries (e.g., Thorpe and Van Anrooy 2009).



Traditional fisherman of the coastal lagoons in Turkey.
Photo: Engin Yılmaz

[13] Transhumance is the practice of moving domestic livestock from one pasture to another in a seasonal cycle, mainly across elevational gradients (with lower winter pastures and higher summer pastures), while the term 'nomadic' refers to particular characteristics of pastoralism related to mobility and flexibility, necessary for herders to respond appropriately in contexts with irregular/unpredictable patterns of resource availability.

**Box 3.**

## Historical perspectives on pastoralism in West and Central Asia

***(by Taghi Farvar)***

The vast majority of nomadic pastoralist ICCAs in the region are found in Kazakhstan, Kyrgyzstan, Turkmenistan, Tajikistan, Afghanistan, Iran, Azerbaijan, Armenia, and Turkey. In Central Asia (and parts of West Asia), a majority of ICCAs became part of the Soviet Union after its creation in 1922 and were affected by imposed sedentarisation of the nomadic people within its territories from 1928 to 1934. This was part of abolishing private property and the forced collectivisation of the economy under centralist state control (Thomas 2015). Consequently, much of the nomadic territories were converted to agricultural land in the following years. Unfortunately, this policy did not stop after the fall of the Soviet Union and is still affecting many of the nomadic territories across West and Central Asia.

A similarity can be seen between the state of nomads during the Soviet Union period and post-1960s Iran when natural resources were deemed national property by the congress in Iran through the 1963 *Nationalisation decree*. Implementation of this law required sedentarisation of many Tribal Confederacies such as Qashqai, Bakhtiari, Shahsevan, Sangsari, and Bahmai. As a result, many of them have lost large parts of their territories to development plans. For example, some of the tribes of the Shahsevan Tribal Confederacy in Iranian Azerbaijan lost their wintering grounds to agricultural development. The dispute over the fate of their lands is still ongoing today.

To identify threats to ICCAs in the region, it is important to consider the countries' historical backgrounds. Some of the countries in West and Central Asia are recovering from or are affected by ongoing armed conflicts, such as in Syria, Afghanistan, Iraq, and Yemen. Past conflicts, wars and colonialism drew the political boundaries of West and Central Asian nations, in which process many territories of nomads were torn apart. Consequently, people could not access different portions of their territories. Major boundaries that disrupt nomadic territories exist, for example, between Iran and Turkmenistan, Iran and Afghanistan, and at the intersection of Afghanistan, Tajikistan and Uzbekistan.

Experts agree that nomadism as a way of life evolved approximately 12,000 years ago in the area between the Zagros Mountains (in today's western Iran) and the mountains of the Levant (the eastern part of the Mediterranean). At that time, our ancestors were gatherers and hunters. Given the ecological and climatic characteristics of the region, some of the wild animals which were sought by hunters, such as mountain sheep and goats, migrated seasonally up and down the topography of the region. Our ancestors thus learned seasonal migration and nomadism from these wild animals. Some 12,000 years ago, they began to domesticate these wild animals, and eventually also the dog, which allowed for the management of large herds of livestock during the migrations in the tribal territories.

Yagnob Valley of Tajikistan, moving livestock.
Photo: Marc Foggin



# Numerous ICCAs – territories of life are found all across the region

Many examples illustrate well how indigenous peoples and local communities across this vast West and Central Asian region have organised themselves and captured the benefits of their natural environments. Their practices protect the environment and ensure that their territories of life are used sustainably. Such conservation is often undertaken out of a respect for the intrinsic value of nature, though not always explicitly so. Nature friendly approaches also ensure people's continued well-being.

The following descriptions of territories of life across West and Central Asia were collected from the ICCA Consortium membership in the region. Cases have been grouped based on the ecosystems where these ICCAs exist.

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Qashqai Tribal Confederacy. Photo: CENESTA

GRASSLANDS & MOUNTAINS

# 1 Mobile pastoralists of Iran

***Tribal territories and migration routes of the* Mobile Pastoralists *of Iran: limited availability of forage resources requires seasonal migration of livestock***

**Source:** Taghi Farvar (cf. Farvar 2003), Ali Razmkhah, CENESTA

**Location:** Southern, Central, Northern and North-Western Iran

**Practice(s):** Nomadic pastoralism

There are almost 700 tribal formations in Iran, consisting of some 100 tribal confederacies and 600 independent tribes - including, among others, Qashqai, Shahsevan, Sangsari, Bakhtiari, Abolhassani, Abarsej, Chadorneshin, Zafaranlu, Gorji and Lorestan tribal confederacies, as well as Chodari, Baluchi and Rabi'i independent tribes, each of which has their own territories of life, i.e., migration realms (UNINOMAD n.d.). Generally, each tribal confederacy consists of social groups nested within one another, i.e., **tribal confederacy** (*el* or *i:l*), which is a union of several tribes and is the highest social structure of nomadic pastoralists; each tribe (*tayfa* or *tayefeh*) consisting of several **subtribes** (*tira* or *tireh*), which in turn consist of several **clans** (*Kheel, bonku, göbak, owlaad, hu:z,* or *tash*), and each clan consisting of several ***oba*** or ***maal***, the smallest unit of nomad's social structure, i.e. the nomadic camp with 5-10 households (tents). This smallest unit migrates and manages natural resources together.

Each tribal confederacy has its own terms denoting the elements of its social structure (Naghizadeh et al. 2012).

For example, the Sangsari Tribal Confederacy consists of 46 tribes, 95 families (*tireh*), 120 *kheyl* and 739 households. The tribes and tribal confederacies govern themselves according to customary law and have Elder Councils and/or so-called White Beard Councils. Some of the tribal confederacies have formal state registration and Sustainable Livelihood Councils.

## Social solidarity and coherence: Creating strong social organisations of nomads and camel herders of Iran

Since 2003, strong efforts have been made to promote ICCAs through solidarity among the mobile pastoralists and local communities of Iran. CENESTA has assisted 6 Tribal Confederacies (Qashqai, Bakhtiari, Shahsevan, Sangsari, Abolhasani and Abarsaj) and a number of independent tribes in different territories of indigenous peoples to establish their own social organisation (registered CBOs) at tribal confederacy, tribe and sub-tribe levels in the form of Council of Elders and of Sustainable Livelihood Funds of Nomadic Pastoralists.

The tribal confederacies recognize the importance of establishing a united legal identity at the national level to represent their common interests. That is why they established the Union of Indigenous Nomadic Tribes of Iran (UNINOMAD) and the Union of Indigenous Camel Herders of Iran (UNICAMEL). These formal entities representing the interests of mobile pastoralists interact with policymakers and government authorities for promoting better understanding, recognition and support of ICCAs - territories of life in the country.

The nomadic tribes possess camels, horses, sheep, goats, donkeys and cattle. The memories and documentation available testify that these tribal formations have been highly careful to conserve nature. Their livelihood practices are congruent with the three main conservation features: preservation, sustainable use, and restoration. For example, wildlife is considered a natural heritage of the tribes and they are allowed a fair share of water and natural resources. For example, Abolhassani Tribal Confederacy dedicates its water resources to its livestock at midday and wildlife at dawn and dusk. The Lazor people and many others lay bundles of feed on snow from which gazelles, wild goats and wild sheep may eat and survive the harsh winters. Most nomads consider that some portions of their livestock are meant to feed predators such as leopards and cheetahs. They consider this to be *zakat*, a religious tithe.

Most livelihood strategies are consistent with environmental processes and have been passed down from generation to generation. For example, tribal elders still recall how flocks of gazelles and deer would co-migrate with their flocks of domestic livestock during the day and mix in with their herds freely, separating from them only at night to sleep in their own safety and calm. Most tribal peoples would learn from their elders not to hunt female and young wildlife, especially during the mating seasons. In the 1950s, the elders of the Bahmaei Tribal Confederacy would send out scouts before spring migration to the intended summering grounds to bring back news of ecological, climatological and social indicators, upon analysis of which they would estimate quite accurately the carrying capacity of each micro-territory to which they intended to migrate. They would then estimate the number of women allowed to migrate to these territories, as women in this region were responsible for processing dairy products. It took one woman to process around 35 heads of lactating goats and sheep.

Nomadic herbarium workshop, 2004. Photo: CENESTA

The children would herd the lambs and kids, women would herd the nursing animals nearby, and men would take care of herding the dry animals (males and dry females) much further afield. Any leftover people would be on a 'waiting list' of nomads who would stay behind and do other chores for the tribe, such as cultivating wheat and barley for human and livestock use. If the weather and carrying capacity improved the next season, the nomads on the waiting list would gather up a herd of livestock and migrate. Otherwise, they would eventually migrate out of the system and settle in towns and villages near and far.

The nomadic tribes use several approaches and techniques for the conservation of natural resources, such as:

- Seasonal migration to prevent overgrazing;
- Exclusion of all except approved tribal peoples who are permitted to migrate;
- Declaration of certain rangelands, forests and wetlands as conservation areas or *qoroqs*;
- Re-seeding degraded rangelands with ingenious techniques such as women collecting desirable wild seeds in animal skins that are then pierced and hung under the belly of the lead goats of their flocks. The stored seeds disperse across the rangelands, get immediately ploughed into the soil, and are fertilised by animal droppings. With the first rains, the seeds sprout, driving the ecological restoration of rangelands.

More recently the tribal confederacies have taken up participatory GIS methods to map their pastures and migration routes, which has been helping to protect and sustain their territories of life.

Tribal confederacies in Iran have a strong social organisation, deep historic ties to their territories of life, and their management and governance institutions and practices contribute to the conservation of nature. These migratory routes and pastures can be considered to be emblematic, as they show a way in which ICCAs can be successfully governed and sustained.

Qashqai Tribal Confederacy. Photo: CENESTA

Mobile Pastoralists of Iran. Photo: CENESTA

Landscape. Photo: CENESTA

Mobile Pastoralists of Iran. Photo: CENESTA

Mobile Pastoralists of Iran. Photo: CENESTA

GRASSLANDS & MOUNTAINS

Sarıkeçili Yörüks from the Taurus Mountains of Turkey. Photo: Engin Yılmaz

# 2 Sarıkeçili Yörüks from the Taurus Mountains of Turkey

***Nomadic pastoralism under pressure: institutional and legal barriers undermine traditional ecological knowledge, identity, and livelihoods***

**Source:** Engin Yılmaz, Yolda Initiative

**Location:** Mediterranean shores & Taurus Mountains & Steppes of Central Anatolia

**Community:** Sarıkeçili Yörüks

**Practice(s):** Nomadic pastoralism

In Turkey mobile pastoralism (nomadic pastoralism and transhumance) is a major traditional practice that has been shaping the country's landscapes for thousands of years. Despite the fact that mobile pastoralism in Turkey has suffered, there are still thousands of nomadic pastoralist families, particularly among the Yörük and Koçer communities, who still maintain wisdom, a keen knowledge of the landscapes in which they move, emerging from thousands of years of accumulated experiences. The practice exists in many different forms in Turkey. It has much to offer not only for conserving nature but also for the cultural diversity and heritage of the country.

Sarıkeçili Yörüks, a nomadic pastoralist community, currently with more than 150 families who have been maintaining this livelihood for centuries in Turkey, is a significant case. Migrating hundreds of kilometres on foot with their goats between their wintering site at the shores of the Mediterranean and their summering sites in Central Anatolia beyond the Taurus Mountains, they conserve and enrich nature, contribute to local economies, produce high quality and healthy food, and contribute to the fight against climate change. The area they cover includes very diverse ecosystems such as rangelands, maquis, and shrublands, Mediterranean forests, alpine ecosystems, riverine systems, coastal and inner wetlands, steppe ecosystems, etc.

Sarıkeçili Yörüks have played a critical role as a major agent in the evolution and maintenance of these varied ecosystems, including with their migration routes functioning as ecological corridors ensuring connectivity between them and thus avoiding fragmentation. They play an indispensable role for nature also as they generate spatial heterogeneity, increase plant species diversity, promote diversity of species of different taxonomic groups, disperse plant seeds, contribute to soil nutrient cycling, prevent water pollution, prevent wildfires, and increase overall ecosystem resilience.

Like other nomadic pastoralist communities in Turkey, their culture and practices are based on the understanding that their survival and that of future generations depends on nature. Thus, they have a deep sense of responsibility and connectedness to the landscapes they manage. Their practices, strategies, social institutions, and evolving knowledge, are all based on constant interaction with the environment and ecological processes.

Yet since the end of the 17th century, but particularly in the last two centuries, nomadic pastoralist communities have suffered from historic injustices in Turkey. These include dispossession (either by expropriation or privatisation) of the rangelands and migration routes they use, thus denial of their rights (including usufruct rights) to their traditional lands and resources, and prevention from using them. Additionally, due to the conversion of rangelands to other land use types, particularly agriculture, the total area of rangelands reduced by over 70% from 44.2 million hectares in 1940 to 12.4 million hectares in 2000.

Sarıkeçili Yörüks from Taurus Mountains of Turkey.
Photo: Engin Yılmaz

Sarıkeçili Yörüks from Taurus Mountains of Turkey.
Photo: Engin Yılmaz

Lacking access to institutionalised power they became politically and economically marginalised, and even found themselves criminalised for maintaining their will to move. Similar injustices to these communities have been and continue to be caused also in the name of nature conservation. Without the recourse to maintain the state of their traditional livelihoods, most of the mobile pastoralist communities have abandoned the practice completely, and the majority of those remaining have experienced loss of their traditional systems as integrated and distinct communities.

Sarıkeçili Yörüks are among those very few communities which still conserve their identity as a community despite all these hardships. Thus, in addition to their rich traditional ecological knowledge, like all mobile pastoralists, they also still hold many traditional institutions as a community. This is also reflected in their will and capability to advocate and fight for their own rights. Sarıkeçili Yörüks Association which is led by Ms. Pervin Çoban Savran is performing this role for the rights of Sarıkeçili Yörüks in Turkey.

Regarding land tenure, Sarıkeçili Yörüks, in general, utilise public lands (rangelands and forests) in Turkey. While certain internal governance mechanisms exist amongst these communities in terms of respecting each other's traditional rights to access and use these lands and resources and in terms of managing these commons, none of these are recognized or secured by the state. Thus, to this day they still do not have recognized and secured rights in terms of governance of these lands.

GRASSLANDS & MOUNTAINS

Pastoralism in Tianshan Mountains of Kyrgyzstan.
Photo: Institute for Sustainable Development Strategy

# 3 Pastoralism in the Tianshan Mountains of Kyrgyzstan

***Halting pasture degradation: reviving TEK for sustainable pasture management***

**Source:** Aibek Samakov, ICCA Honorary Member

**Location:** Naryn province, Kyrgyzstan

**Community:** Cholpon village

**Practice(s):** Pastoralism

Historically, the Kyrgyz tribes migrated seasonally between different valleys and mountainous areas (Undeland 2005). During the Soviet era, the management of pastures was centralised and carried out by state-owned farms (Shigaeva et al. 2016). After the collapse of the Soviet Union in 1991, the approaches to pasture management diverged in the Central Asian countries, which had a different effect on herd mobility and pasture access rights (Robinson et al. 2012). Due to costs associated with moving the herds, the remote pastures are often under grazed, whereas overgrazing on pastures near settlements contributes to their degradation. In many Central Asian countries pastures are either private property (Kazakhstan) or state property (Turkmenistan), whereas in Kyrgyzstan an individual pasture leasing system was in place between 2002 and 2009, after which the Pasture Code was adopted in 2009 to designate pastures as common property.

The Pasture Code stipulates the creation of local pasture committees that govern and manage the pastures taking into account both the livelihood interests of local communities and nature conservation needs. Although pasture committees were envisioned to be functioning "bottom-up", i.e. through democratic and decentralised local institutions, some of these pasture committees instead became institutions "that aim primarily to control the use of resources, exclude some people from decision-making, or impose taxation" (Shigaeva et al. 2016).

Although some of the pasture committees have been criticised for focusing solely on fee collection, there are a number of pasture committees that are trying to revive traditional methods of pasture management and integrate innovative approaches. For example, in Cholpon village, where the main livelihood is pastoralism, a pasture committee was established in 2009. Due to increasing anthropogenic pressures on pastures, in part due to the growing livestock numbers, pasture degradation had occurred. However, in the last 5 years the pasture committee has been implementing a participatory process of documenting traditional pasture management strategies and collecting traditional ecological knowledge. One of the aims of the pasture committee is to assist herders to follow traditional seasonal migration patterns and use traditional indicators to identify the biophysical conditions of pastures and their carrying capacity. The pasture committee has been encouraging pasture users to set aside some areas for recovery. While in 2015 only 30 ha were set aside as local informal grassland (forage) reserves, by 2019 the area had increased substantially to 9,000 ha.

Historically, the pastures were managed by local tribes, which followed seasonal migration patterns. The local governance institutions were replaced by the centralised decision-making set-up during the Soviet era and by individual pasture ownership in the 1990s and early 2000s. Since the adoption of the Pasture Code in 2009, local communities have regained their right to govern their pastures. However, the current pasture management institutions do not always demonstrate all of the characteristics of well defined, fully functioning ICCAs.

Pastoralism in Tianshan Mountains of Kyrgyzstan.
Photos: Institute for Sustainable Development Strategy

Yagnob, river and mountains. Photo: Marc Foggin

GRASSLANDS & MOUNTAINS

# 4 Mountain farming in Yagnob Valley of Tajikistan

***New national park on ICCA: Yagnobi people and farming on steep mountain slopes***

**Source:** Adapted from *Journey to Sodiana's heirs* and other notes by Anvar J. Buzurukov, with additional inputs by Marc Foggin (Plateau Perspectives) and Abduvohid Safarov (Anahita Organisation)

**Location:** Yagnob valley in Sugd province, Tajikistan

**Community:** Yagnobi people

**Practice(s):** Mountain farming and agropastoralism

In northern Tajikistan, the Yagnobi people are little known, yet they hold great international historic interest, e.g. as sole descendants of the Sogdian Empire, renowned from long ago alongside the Scythian Empire. In recent times, however, Yagnobi people have suffered terribly and now fewer than 650 people remain in their homeland, the Yagnob Valley. Much needs to be done in order to preserve their unique language and culture (this being one of their foremost concerns, repeatedly expressed). In May 2019, the whole valley was announced as Tajikistan's newest National Park – which brings with it potential pitfalls but also could be leveraged as a tool or mechanism with legal strength working in favour of the local communities through co-management approaches to conservation.[14]

The creation of the Yagnob National Park, Tajikistan in May 2019 should go a long way in helping to relieve the pressures of poverty and natural degradation in this fascinating land of ancient traditions and high mountains. Yagnob is a 60 km long-isolated narrow river valley, separating the Zeravshan and Hissar Ranges. It is occupied by the indigenous Yagnobi people who live primarily in Tajikistan and speak an ancient East Iranian language related to Sogdian. About 50% of the current population of Yagnob people are Yagnobi-speakers, whereas the other half communicate either primarily or exclusively in the Tajik language.

In 1969-70, around 4,000 Yagnobians were forcibly moved to cotton-growing areas in the lowlands, where many died due to the hot weather and hard labour. Now, around 18,000 Yagnobis live in different parts of Tajikistan. In more recent years, some families have returned to the valley and now 638 Yagnobi people in the valley live in extremely challenging economic and environmental conditions. Yagnobi community lifestyles and land-use patterns still generally follow the older traditions.

Primarily based on affinities with ancient Sogdian and Yagnobi languages, valley residents identify with Sogdiana, for which earliest references date back to late VI - early V century BC. Alongside Bactria and Khoresm, Sogdiana was the most ancient state formation (a society represented by the castes of priests, warriors, farmers, and slaves) in Central Asia. Today, the people of Yagnob Valley still face many social and environmental challenges: earthquakes, avalanches, landslides, land degradation, long winters, isolation, poverty, as well as competition with external resource users who move seasonally into the (relatively depopulated) remote valley. For many centuries before the construction of the road, the Yagnobi people have lived and still live in isolation for 8 months each year, with snow and avalanche hazards preventing contact with the outside world. In cases of emergency in winter, people would use the frozen riverbed as an access route, even though this is fraught with many risks.

Yagnob valley. Photo: Abduvohid Safarov

Yagnob Valley of Tajikistan, moving livestock. Photo: Abduvohid Safarov

The Yagnobi people also have many special skills, such as construction of complex irrigation systems and techniques for terracing the very steep mountain slopes. The highlanders grow wheat, barley and potatoes that can potentially produce high yields in this area. Livestock are also raised in the valley, with animal husbandry contributing to local household economies, though in some areas also causing severe erosion, impoverishing the fragile mountain soils.

Traditions that support unique mountain agrobiodiversity are being studied with an aim to support and revive sustainable and enriching socioeconomic practices. New community-friendly enterprises consistent with the conservation goals of the new national park also are being introduced and adapted with ongoing participatory dialogues, such as community ecotourism. Building on community pride – in Yagnobi culture and especially the unique Yagnob language, still spoken widely in the middle and upper reaches of the valley as mother tongue – the national park has been founded with the aim to protect not only the rich mountain biodiversity but also to protect and strengthen local culture with meaningful engagement through approaches such as community co-management of the protected area.

[14] To learn more about Yagnob Valley and its inhabitants and their culture, please visit **http://yagnob.org/** (Russian) and **https://sacredland.org/yaghnob/** (English).

Yagnob National Park was established by the Government of the Republic of Tajikistan in May 2019 with the following aims: (i) to protect nature, (ii) to conduct scientific research, and (iii) to promote tourism and other forms of sustainable use of natural resources.

Territories of life of the Yagnobi people were under pressure especially due to intrusions by herders from other regions. These intrusions happened without any consultations or permission from the local residents. The establishment of the national park plans, as one of its primary intents, to re-invest at least some level of local decision-making authority (and other forms of involvement) to local communities; it was set up to serve as a protective mechanism for them against intrusions by outsiders. Thus, this is one instance when a formal protected area status has the potential to help defend local ICCAs - territories of life.

Traditional Yagnobi agricultural tool. Photo: Marc Foggin

Agricultural fields and local villages in Yagnob Valley. Photos: Marc Foggin



Ecovillages in Armenia. Photos: Ruben Khachatryan

GRASSLANDS & MOUNTAINS

# 5 Ecovillages in Armenia

***United by the common cause: Partnership between CSO and local communities for conservation***

**Source:** Ruben Khachatryan (FPWC)

**Location:** Armenia

**Community:** Vardahovit, Goghtanik, Gnishik.

**Practice(s):** Community-based conservation

The Foundation for the Preservation of Wildlife and Cultural Assets (FPWC) and its daughter organisation, SunChild, have been working with local communities and the local governments to transform traditional villages into regenerative resilient communities. The process guides communities to identify opportunities for positive change in their social, cultural, ecological and economic practices, and to develop a custom palette of solutions for:

- Catalyzing community-led change
- Eradicating poverty
- Restoring natural environments
- Achieving climate resilience

FPWC has been working closely with several communities such as Vardahovit (population of 265 people), Goghtanik (population of 200), Gnishik (population of 199). Several years ago, it was planned by government that the communal lands of Vardahovit community were to be given over for gold mining. As a result of the community's collaboration with FPWC, the community rejected the mining proposal and decided instead to dedicate 1,000 ha of land for wildlife conservation purposes. Later the FPWC rented about 4,000 ha of adjacent land to render the community conserved area even more viable. There is also an educational community created near Vardahovit, situated in the grounds of the 7th-century Arates Monastery.

Gnishik community (including Mozrov and Gnishik villages) is also striving to become an ecovillage with a strong conservation component. The village has a unique history: the population has been displaced several times,

but they have preserved their links to their lands. Gnishik has an amazingly high biodiversity with a great potential for community-based research on local flora and fauna. In order to change the status of land ownership of the targeted communities from community-owned land to the status of 'Specially protected areas' - or territories of life - FPWC is working closely with the Armenian government and local administrative bodies to prepare the prerequisites for the desired change. In this regard, Gnishik is observed to be the first community to undergo such land status change.

According to the legislation of land ownership in Armenia, the lands in the community belong to the communities directly and are managed and administered by the community head and council according to national laws and regulations. The partner communities, in cooperation with FPWC, are promoting the changes in land legislation that will allow formal recognition of ICCAs to protect their land from further exploitation as well as to positively benefit members of the local communities, including their relationships with the land and wildlife.

Ecovillages in Armenia. Photos: Ruben Khachatryan



GRASSLANDS & MOUNTAINS

Baiboosun, on horseback. Photo: Marc Foggin

# 6 Baiboosun community reserve in Kyrgyzstan

***When local communities take conservation into their own hands: Community reserves in Kyrgyzstan***

**Source:** Aibek Samakov, ICCA Honorary Member

**Location:** Ysyk-Köl (Issyk-kul) Province, Kyrgyzstan

**Community:** Various local mountain herding communities

**Practice(s):** Locally-driven nature conservation measures

Baiboosun is a gorge in the Tong district of Ysyk-Köl Province, Kyrgyzstan. In 2019, the local community formally established a community-conserved area in the vicinity of their village to protect wildlife from illegal trophy hunting from outside the community. The main incentive for the communities to take up nature conservation was the observed significant loss of local biodiversity. The elders and middle-aged members of the community note that the species of mammals, amphibians and birds that they used to see while growing up are no longer there. They are reminiscent of the positive emotions that seeing frogs, hedgehogs, porcupines, foxes, ibex and argali or hearing birds and frogs gave them. Many community members identify such encounters with wildlife as being a highlight of their childhood and youth, and they want to ensure that their own children and grandchildren may also be able to experience the same thing.[15]

However, due to uncontrolled hunting, often carried out by those from outside the community, the number of wild species has drastically declined in recent decades. Local people noted that their lands started to appear 'empty' and 'devoid of any life' - this is why the community decided to take action to protect their lands. The community members who spearheaded the establishment of the community conservancy came from different backgrounds: some were herders, some were teachers, while others used to be poachers but had

[15] Local community members share some of these feelings and their hopes and aspirations in the 20-minute documentary film "The Future We Want" (available at **youtu.be/fuDZa3Qd5hY**). Also read more in the related photo essay "Choosing Ecotourism in Kyrgyzstan" (Foggin 2020).

come to realize that this was 'their' nature and 'their' territory and now recognized the need to protect and conserve it.

The community needed legal recognition to be able to protect their lands without breaking any laws. They therefore applied to the State Agency for Environmental Protection to create their community conservancy. However, despite national legislation allowing for such community- conserved areas, the mechanism for actually creating one was not yet in place. The community therefore cooperated with national NGOs to support the state agency in developing necessary by-laws to enable the formal creation and recognition of their local community conservancy.

To protect their conserved area, the community has formed patrol and monitoring groups and, in cooperation with CAMP Alatoo Public Foundation and Ilbirs Foundation, has been setting up camera traps to monitor wildlife. They also have been using the monitoring data (photographs) for educational purposes.

Baiboosun is an excellent example of how a local community can take conservation into its own hands and lobby for changes in legislation to promote community-based conservancies. Inspired by the Baiboosun experience, several other communities in the district also have now started to establish their own conserved areas, e.g. around Aidyn Köl Lake and on Ak Bulung peninsula in Ysyk-Köl Lake, which is an important bird nesting area. Jargylchak is the latest community conservancy to be created based on the success of the Baiboosun experience.

Baiboosun area, eagle and hunter. Photo: Marc Foggin

Snow leopards in Baiboosun community reserve.
Photo: Baoboosun community

Baiboosun community members.
Photo: Baoboosun community

Wildlife monitoring outing.
Photo: Baoboosun community



Kariz in Shafiabad, Iran. Photo: Ninara/Flickr

DESERTS &
OTHER ARID LANDS

# 7 Kariz irrigation systems, ranging from Iran to Xinjiang

***Kariz underground water channels: Ensuring access to water in drylands through traditional irrigation system***

**Source:** Nejat Malikyar, GREDO, and Nina Aminzadeh, CENESTA

**Location:** Badakhshan, Afghanistan, and Takab, Iran

**Community:** Wakhi and other indigenous communities in the Hindukush Mountains, and beyond

**Practice(s):** Indigenous knowledge, integrated irrigation, and agriculture in arid/semi-arid environments

*Kariz* is a network of underground canals for bringing water from highlands to hot arid and semi-arid zones, for drinking and irrigation. Kariz systems exist in many regions of West and Central Asia and are known as *falaj* in Oman, *khettara* (or *foggara*) in North Africa, *Kariz* in Afghanistan and Pakistan, and *qanat* in Central Asia. It is estimated that there are about 33,000 kariz/qanats in Iran and about 3,000 in Oman alone (Mei 2014).

The kariz system has traditionally been a very effective means for ensuring a source of water for people in the Wakhan area and other indigenous and remote territories in the Hindukush mountain range of Afghanistan. It serves as a major source of irrigation and drinking water in arid and semi-arid areas. These are usually constructed on a communal basis, yielding a water flow up to 200 litres/second and thus serving up to 200 shareholding families. Each 'share' in a Kariz system represents the amount of time that water is available for irrigation purposes. These shares may, in turn, be rented out and are often fragmented into even smaller units. The particular nature of the kariz system has also helped to create unique societal relationships and socio-economic conditions in the villages they serve. Unfortunately, traditional systems have in many instances been replaced by modern but often less sustainable hydraulic infrastructure (Mei 2014).

Drying up of Kariz due to installation of newer tube wells and dug wells, lack of maintenance, and droughts across the country – all these are putting the local users under critical pressure. Overconsumption

of underground water using deep wells and lack of coordination in water management in Afghanistan, Iran and elsewhere is also an emerging problem.

The Kariz /qanat system is a traditional water irrigation method that has been used by many local communities in West and Central Asia for many generations. This traditional system uses only the overflow of the underground water tables, and because of this it does not cause any substantial disorder in the region's water cycle. Furthermore, in these irrigation systems the area under cultivation is adjusted to the amount of water available, with cultivation patterns being adjusted also in regard to the use of more drought-resistant crops in order to minimize dependence on water. This system thus represents a sustainable water supply mechanism and it has played an integral part in the building and strengthening of local communities' basic livelihoods based on a balance between the kariz/qanats, the community and the ecosystem. However, Kariz systems across the region need better documentation and dedicated research (Mei 2014) as this would offer more insights for sustainability in the world's mountains and desert regions (cf. Sharma and Kanwar 2009).

Qanat in Iran. Photo: Nina Aminzadeh

Qanat in Iran. Photo: Nina Aminzadeh

Qanat in Iran. Photo: Nina Aminzadeh

Qanats in Shafiabad, Iran. Photo: Ninara/ Flickr



Qanats/Kariz. Photos: International Center on Qanats and Historic Hydraulic Structures (UNESCO-ICQHS), photo archive.

In one area in southern Iran, the women in one community with challenging economic and social conditions have mobilised in recent years, creating the Takab women CBO, Gojino, in which their main activities include handicrafts and, most significantly, the use of participatory film making as a tool for self-empowerment in order to solve their own problems. As their group developed, the women decided to then take yet another step for their common benefit, dedicating fifteen per cent of their income to dredging and reviving the Qanats (or kariz) of the area on which the life of their villages was highly dependent. The customary management system of Qanat in Iran has always had a patriarchal identity, with the women playing no role in the process of decision making around this vital system. However, after more than two years, finally most of the male shareholders came to agree to let women engage in their meetings and, in due course, "the recognition of women's role in the customary Qanat management system and their active participation in the water shareholder's meeting not only brought diversity and creativity of the ideas on how to restore and dredge the Qanats, but also raised the motivation and attachment of the community to the subject" (Aminzadeh 2021).

**Documentary film** about the Takab women's CBO, Gojino: "Women of the Sun, A Chronology of Seeing"

**garlandmag.com/article/make-the-qanats-flow-women-revive-a-patriarchal-tradition**

Wakhi, Shimshal village. Photo: Marc Foggin

DESERTS &
OTHER ARID LANDS

# 8 Territories of life in the Wakhi region of the Pamir Mountains

***Transboundary territory of life and Protected Areas on the Roof of the World (Bam-e-Dunya)***

**Source:** Marc Foggin, Plateau Perspectives, and Nejat Malikyar, GREDO

**Location:** Wakhi region, Pamir Mountains (in several countries)

**Community:** Wakhi and Kyrgyz communities

**Practice(s):** Agro-pastoralism (Wakhi) and semi-nomadic pastoralism (Kyrgyz)

The Wakhi people are distributed across four countries such as Afghanistan, China, Pakistan and Tajikistan. Predominantly Ismaili (in the Shia branch of Islam), Wakhi people sometimes also refer to themselves as Pamiri (Reeves 2017). In this case study, though, the term Pamiri will be used mainly to refer to indigenous or local people of the Tajik Pamirs, including inter alia people from Shugnan, Rushan, and other valleys in the eastern part of Gorno Badakhshan Autonomous Oblast (GBAO). In contrast, mainly Kyrgyz pastoralists live in western GBAO, with relatively little interaction taking place between these two regions and groups. For their part, the Wakhi are, in effect, a subset of the Pamiri people; however, because of their wide distribution and regional level of self-organisation, they are here considered independently.

From around the 2nd century BCE to the 14th century CE, the Wakhan corridor in Afghanistan comprised one of the many Silk Road trade and cultural exchange routes from the Taklamakan Desert in present-day Xinjiang Uygur Autonomous Region, through the Wakhan corridor to regions further afield in West Asia and, ultimately, even Europe. Currently, the Wakhan Valley is inhabited by about 15,000 Wakhi people and the Big Pamir and Little Pamir mountains situated further up-valley are home to 1,250 Kyrgyz people. The Wakhi are agro-pastoralists whereas the Kyrgyz are semi-nomadic pastoralists relying mainly on yak for their livelihoods.

Nomads and semi-pastoralists contribute to regional biocultural diversity. Nomads inhabiting the Hindukush Range of Afghanistan are deeply knowledgeable about the rangelands and the layout of the country. They move long distances to exploit spring and summer grazing lands in the Hindukush's sub-ranges and return each winter to the eastern and southeastern lowlands of Afghanistan and the border region with Pakistan. Their traditional rotational grazing system has ensured the sustainable use of rangelands over many generations, however it has recently been increasingly abandoned due to the trend amongst transhumant populations to settle - leading to a consequent re-distribution of communal lands to individual families for their own use. There is therefore a need to revive the effective indigenous grazing system in concert with modern range management approaches. Appropriate development and marketing of livestock products is another very important issue, as skins and wool from small ruminants could provide raw material for the leather and wool garment industry. Traditional woollen blankets and rugs can also be major sources of income for families dependent on livestock.

In Gilgit-Baltistan, many Wakhi communities are self-organised, exhibiting varying levels of mobilisation and efficiency, often centred around community-level management of natural resources such as through hunting tourism. Community-based financing of local development in tandem with conservation endeavours have been facilitated, for example, by community mobilisation and capacity development efforts over the past several decades, as well as increased access to credit and basic education for both women and men. Community initiatives are now also specifically supported and enabled by organisations such as Khunjerab Village Organization (KVO), with further coordination and support coming from Hunza-wide (district-wide) associations of community organisations.

Another notable example of a territory of life in Gilgit-Baltistan is highlighted through the community-level work of Shimshal Nature Trust (SNT). Shimshal is a farming and herding community with around 250 households (approx. 2,000 people) located in the upper part of Shimshal valley in northern Pakistan. Local Shimshali communities cultivate wheat, barley, potatoes, peas, beans, apricots, and apples on a series of terraced glacial and alluvial deposits forming a broad strip between the river's floodplain and steep mountain slopes between 3,000 and 3,300 metres above sea level. Shimshal's irrigated agriculture is complemented by the extensive herding of sheep, goats, cattle and yak on community governed and managed high-altitude pastures covering about 2,700 square kilometres of the Central Karakoram.

Centuries-old traditional ecological knowledge, local beliefs and worldviews form a foundation for local nature stewardship practices, which are strengthened by a more general Islamic religious ethic of environmental stewardship and respect for nature as God's creation (Ali and Butz 2003). The Shimshal Nature Trust (SNT) was established in 1997 to improve local communities' quality of life in a culturally and environmentally sensitive way while retaining indigenous control of the local environment. Creating the SNT was the community's response to government initiatives to take the community's land for the establishment of two formal protected areas, Khunjerab National Park (est. 1975) and Central Karakoram National Park (est. 1994).

Wakhi, Shimshal women and goats. Photo: Marc Foggin

In Chitral, there are several communities such as local communities in Broghil valley that are facing similar challenges, due to the recent creation of Broghil Valley National Park. There are also civil society organisations and community organisations in Chitral that focus on social welfare as well as environmental and wildlife conservation. In addition, several community groups focus on raising financial resources through community-based hunting, subsequently coordinating and applying funds to communally agreed projects; as also in Gilgit-Baltistan.

Additionally, across both Chitral and Gilgit-Baltistan districts in Pakistan, there are many national parks and nature reserves, often with zoning systems (including core zones and buffer zones) and various levels of public engagement, partnership, and mutual strengthening with communities. Some levels of conflict and/or diverging priorities persist, but partnerships are advancing as well. Local partners for communities and protected areas include researchers at Karakoram International University as well as district forestry officials who are entirely supportive of co-management approaches in/near protected areas as well as supportive of ICCAs, though more capacity building and resources are still needed. Further reflections on **the future of conservation** and the key roles played by local and indigenous communities is offered by Foggin (2022) and also in the GlacierHub blog **"Reflections on Visits to Pakistan"** published under the Columbia Climate School's webpage, State of the Planet.

For their part, the Pamiri people in Tajikistan - including local communities from the Rushan and Shugnan valleys, also from the small Ishkashimi community whose language is now highly endangered - live in both Gorno-Badakhshan Autonomous Province (GBAO), Tajikistan, and over the border in Afghanistan's Badakhshan province. In addition to receiving support from different agencies in the Aga Khan Development Network, which works extensively in the region, communities partner with non-profit organisations such as Green Environment and Development Organization (GREDO). Several community-level associations have recently been established in the Wakhan district of Afghanistan as well.

Notably, the entire Wakhan valley in Afghanistan was brought into the Wakhan National Park, established in 2014, managed as an IUCN Category VI protected area. The ecology of Wakhan National Park is governed principally by its very high elevation, with 59% of the park area being comprised of barren ground and a further 14% covered entirely by glaciers. This region comprises the source, or headwaters, of most of the Pamiri rivers flowing into the globally renowned Amu Darya River, the largest river in Central Asia by volume. The Wakhan region also is an important habitat for 25 species of mammals and 250 species of birds; including the Marco Polo sheep, snow leopard, Ladakh urial, large-billed reed warbler, and others. The Wakhan National Park is recognized as a Protected Area with Sustainable Use of Natural Resources, thus intended to protect natural places together with associated cultural values and traditional natural resource management systems. The recently established Wakhan National Park subsumes within it the previously proposed Big Pamir and Teggermansu Wildlife Reserves, with its unified management plan now replacing the plans for these two smaller reserves.

Various agropastoralist and semi-nomadic pastoralist communities in the Wakhan Valley and across the larger Pamir high mountain region have developed their territories of life over the course of many centuries. The communities have been cooperating with international organisations such as Aga Khan Foundation (AKF) to promote more sustainable livelihoods. The creation of the Wakhan National Park brings with it new potential opportunities for improving biodiversity conservation simultaneously with the meaningful recognition of ICCAs, or territories of life, and the rights of the indigenous communities as well as their genuine involvement in co-management and shared governance of the national park. Parallel experiences in the development of community conserved areas (often with hunting-based tourism) and partnerships between local communities and protected areas in northern Pakistan can equally serve as models and be further extended in the region.

Passu summer pastures. Photo: Marc Foggin

Shimshal Lupghar corral. Photo: Marc Foggin

Broghil council meeting.
Photo: Marc Foggin

Broghil meeting.
Photo: Marc Foggin

Shimshal Lupghar livestock. Photos: Marc Foggin

Hima system in Lebanon. Photo: Bassima Khatib

DESERTS &
OTHER ARID LANDS

# 9 Al-Hima system in Lebanon

***Reviving centuries-old stewardship traditions in the Middle East***

**Source:** Bassima Khatib, SPNL, Lebanon

**Location:** The Middle East and Levant

**Community:** Various local communities

**Practice(s):** Traditional pastoralism

*Al-hima* (meaning "a protected place" or "protected area" in Arabic) is a traditional indigenous model in the Middle East that evolved as an adaptation to the harsh environment (Kilani et al. 2007). Originally, it was an area to which its owner imposed access restrictions but it evolved to signify a rangeland reserve, a piece of land set aside seasonally to allow regeneration. It evolved over the years with different cultures, where Islam has added to its social values, such as equality, common benefit, benefit for the poor, etc. Nowadays, *hima* is an area that is set aside permanently or seasonally for the public good and meets the following four criteria:

1. It should be constituted by the 'imam' – deemed as the legitimate governing authority
2. It should be established in 'the Way of God' – for purposes for the public's welfare
3. It should not cause undue hardship to local people, i.e. not deprive them of any resources that are indispensable to their subsistence and their well-being
4. It should realise a net benefit for society (more benefit than harm)

Since 2004, the Society for Protection of Nature in Lebanon (SPNL) has been supporting local communities in their efforts to revive the *Hima*, a long-standing traditional community-based approach for the conservation of key biodiversity sites in collaboration with municipalities and other local authorities. Through establishing *himas*, local communities participate in decision making, promote the sustainable use of natural resources, and alleviate poverty through creating alternative forms of income generation. Since 2004, SPNL has supported the re-establishment of 25 *himas* in key biodiversity areas; namely Ebeles-Saqi in South Lebanon, Anjar and KfarZabad wetland in Central Bekaa Valley, West Baalback, Qoleileh, and Mansouri on the southern coast, Maabour Alabiad in Upper Akkar, Andket in Akkar, Menjez and Charbein in Upper Hermel, Jdeidet El-Fakiha in North Bekaa, Roum and Qaytouli in Jezzine, AinZebdeh and Kherebet Anafar, Qaroun and Aitanit in West Bekaa, Jbeil, Tarshish, Aakoura, Kayfoun, Kfar Matta, Ras Al Maten and Hammana in Mount Lebanon, and Anfeh in Keserwan. *Himas* focus on empowering local communities, improving their quality of life, and enhancing livelihoods as well as promoting the sustainable use (and through this, conservation) of natural resources in collaboration with the municipalities and local communities.

SPNL is merging the traditions and values of the Hima approach with modern scientific techniques, such as identification of ecological sites, stakeholder analysis, and using participatory approaches for involving the local communities in the visioning, planning, and implementation of the Hima projects.

Hima projects concentrate on scientific research (social and ecological), situation analysis, and the development of a management plan for the Hima sites that take into consideration poverty alleviation and providing alternative, ecologically friendly work opportunities for local people that support their livelihood and quality of life (for example, through ecotourism, homestay facilities, visitor centres, serving as nature guides, and cultural artisanal products and food).

The Hima approach concentrates on the involvement of the local community through its participatory framework. It makes sure to involve underprivileged groups, such as women and youth, empowering them to become more active members of society. SPNL applies gender-sensitive planning and targeting to make sure women are well served in development programs. Women committees and cooperatives are an example of social assets promoted by SPNL. Five programs have been developed by SPNL under its Hima framework, namely Hima Schools, Homat Hima, Souk Hima, Hima to Hima, and Hima Farms.

Hima system in Lebanon. Photos: Bassima Khatib

Tahtacı Türkmens in the Kaz Mountains of Turkey. Photo: Engin Yılmaz

FORESTS & SHRUBLANDS

# 10 Tahtacı Türkmens in the Kaz Mountains of Turkey

***Forest nomads: traditional ecological knowledge, rites, and sacred sites***

**Source:** Engin Yılmaz, Yolda Initiative

**Location:** Kaz Mountains (Mount Ida)

**Community:** Tahtacı Türkmens (Forest Nomads until 19th Century)

**Practice(s):** Traditional Forestry, agriculture, and pastoralism

The territory of Kaz Mountains is an area of high biodiversity in the Anatolian shores of the Mediterranean that provide habitats for unique plant taxa, a diversity of freshwater fish, many reptile and animal species and rare birds, such as the Krüper's nuthatch (*Sitta krueperi*), Golden Eagle (*Aquila chrysaetos*) and Peregrine falcon (*Falco peregrinus*). Having a major role in the evolution and maintenance of the area, the Tahtacı (wood-cutters) Turkmens are a nomadic forest community known to have inhabited the area for at least six centuries (Selçuk 2004). They are considered descendants of the 13th-century Ağaçeri (tree-men). They are a subgroup of the Alevis, practicing a heterodox belief system within Islam, with vivid connections with paganism and interpreting nature as sacred. Forest, trees and the land are at the heart of the sense of the sacredness of the Tahtacı Türkmens, and their social and cultural identity is closely embedded in the Kaz Mountains area. Their rituals are mainly around the forest and the trees, for instance, the old trees in the forest are called 'ulu ağaç' (mighty trees) and it is forbidden to cut them as they are all sacred. Prickly juniper (*Juniperus oxycedrus*) and myrtle (*Myrtus communis*) are also considered sacred and it is forbidden to cut them. The significant traditional ecological knowledge of the Tahtacı Türkmens encompasses the forest ecosystems and their governance and management, but also traditional agriculture and small-scale pastoralism, all developed through centuries of nomadic lifestyles.

In the 19th Century, the Ottoman Empire forced the Tahtacı Türkmens to settle and its Forestry Directive of 1870 disregarded the Tahtacı Türkmens' traditional governance rights. For livelihoods, they were forced to become forest workers, employed by the state, and controlled by forest officers on their own land. This even worsened after the 1980s, when forest management started being passed on to private entrepreneurs. Finally, in 1993, part of their land was designated as a National Park.

Tahtacı Türkmens are recognized as 'forest villagers' and their rights to forest resources are limited to harvesting residues such as bark, deadwood and branches for household consumption. They also have the 'right' to be employed in the harvesting, thinning, afforestation, and forest product transportation activities. The designation of the National Park has even restricted access to the land for sacred rituals. The Tahtacı still maintain their traditional beliefs and some of the traditional institutions, but their functioning is much weakened. The authorities allow the Tahtacı Türkmens to enter the National Park as a community only during the time of their traditional pilgrimage, from 15th to 25th August each year.

Today, the area is facing multiple threats from 'development' projects, including mines, thermal power plants, dams, and intensive recreational investments. In recent years, there has been one rare and significant large-scale protest against the installation of a gold mine owned by a Canadian company. One could imagine that the traditional forestry, agriculture and pastoralism of the Tahtaci Türkmens could be 'rediscovered' and ensure the sustainable use of the Kaz Mountains for centuries to come. However, the chances of this being welcome and supported seems meagre in the current context.

Despite the deep connection with the land held by the Tahtaci Türkmens and the fact that the rich traditional ecological knowledge they hold and apply is fundamental to maintaining and conserving the high biodiversity in the area, their rights and ability to govern and manage the land are not recognized.

They still have traditional institutions regarding decision-making within the community, based on their belief system. Yet, in many aspects, these traditional institutions no longer function as an integrated body. Additionally, they have faced oppression and injustices, particularly for the last two centuries. They have also been oppressed for centuries for being Alevis. Currently, the majority of the community is reluctant to openly oppose policies that harm their lives.

Tahtacı Türkmens in the Kaz Mountains of Turkey. Photo: Engin Yılmaz

Panorama in Arslanbob. Photo: Wikicommons

FORESTS & SHRUBLANDS

# 11 Walnut forests in the Tianshan Mountains of Kyrgyzstan

## *Arslanbob: living in the largest walnut grove in the world*

**Source:** Aibek Samakov, ICCA Honorary Member, and Azamat Azarov, University of Central Asia

**Location:** Arslanbob village, Bazar-Korgon, Jalal-Abad province of Kyrgyzstan

**Community:** Kyrgyz and Uzbek communities

**Practice(s):** Herding, collection of Non-timber forest products, tourism

Arslanbob forest is the largest natural walnut grove in the world, spreading over 11,000 ha in the Fergana and Chatkal mountain ranges. These walnut forests have remarkable biodiversity. However, the area covered by walnut forests has been substantially reduced and ongoing anthropogenic pressures on existing walnut groves thwart their successful regeneration. All forests are now under the exclusive ownership of the state. To prevent unsustainable use of the forests the government has declared some forests as protected areas but this action does not take into account that the local people depend on the forests and the resources they need for their livelihood.

The walnut forests are managed through governmental forest administrations. These government agencies rent out plots to local people for the collection of walnuts and livestock grazing. Grazing, felling of trees for fuel, and overharvesting of nuts and other non-timber forest products (NTFPs) such as morels, hawthorn and wild apples are often cited as threats to the walnut forest. NTFPs processing is not well developed and as a result, the local communities do not produce value-added products from their NTFPs. Both community-led and external assessments highlight that there is a great potential for developing value-added NTFPs.

At the same time, local people point out that the illegal cutting of burls by outsiders (sometimes by forestry officials themselves) constitutes a much greater threat. Burls are smooth, knotty growths on tree trunks, often used for making high-end furniture and decorations.

In recent years, the local communities have been developing community-based tourism with support from international donors and projects. A growing number of households are offering various services for tourists such as lodging in guest houses and yurts, cafes, taxi services, horseback riding, etc. Such projects aim to reduce the pressure on walnut forests by generating alternate sources of income for local households. The Arslanbob forest also has a spiritual significance for local people, including several pilgrimage sites.

State ownership of the forests and short-term leasing schemes prevent local communities from regaining the sense of ownership of the walnut forests they once had. There have been several attempts to revive and promote community forestry and co-management, however to date such initiatives have not been effective.

Tianshan Mountains. Photo: Jerry界/Pixabay

Arslanbob. Photo: Azamat Azarov

Vil. Chikuneti. Photo: Irakli Goradze

FORESTS & SHRUBLANDS

# 12 Saphari forests in Machakheli valley of the Western Lesser Caucasus Mountains, Georgia

***Saphari forests: community-managed and governed areas of the globally unique Colchic forests***

**Source:** Irakli Goradze, UNDP Georgia

**Location:** River Machakheli valley, Khelvachauri Municipality, Ajara Autonomous Republic, Georgia

**Community:** Machakheli valley community, Georgian

**Practice(s):** Beekeeping, subsistence agriculture, hazelnut growing, viticulture, tourism

The Machakheli River valley is part of the Colchic biogeographic region in the western Lesser Caucasus Mountains (South-West Georgia), belonging to the Caucasus Ecoregion - one of the WWF's Global 200 Ecoregions, also a globally recognized biodiversity hotspots i.e. one of the world's 34 biologically richest and most endangered terrestrial ecosystems. A key component of the ecoregion is the Colchic forests ecosystem, amongst the oldest and best-preserved examples of temperate broadleaf rainforests worldwide. In 2021, Colchic forests and wetlands were inscribed on the UNESCO World Heritage list.

In 2012, the Machakhela National Park was established in the Machakheli valley, governed by the National Agency of Protected Areas. It is bordered by nine villages with a total population of about 3,000 people. The local community initially opposed the establishment of the protected area, partly because it also included their community-protected forests (*saphari*, 'protective'). These forests contain sites of springs and chestnut trees, which are important for honey production and provide protection against landslides and avalanches. Officially, the *saphari* forests are governed by the forestry agency. However, the communities continue to govern and manage these forests informally. Previously, realising the importance of the *saphari* forests to local communities, the Forestry agency officials supported their protection by not authorising logging operations. However, with the inclusion of the *saphari* forests in the newly established National Park, local communities were concerned that the protected area administration might change established governance arrangements and management practices.

In response to the villagers' claims, a boundary delimitation study was initiated in 2015, involving representatives from the communities themselves, local government authorities and the national park administration. The delimitation committee recommended that the protected area boundary be revised to exclude *saphari* forests. The national protected area authority accepted all these recommendations, and the protected area boundary was changed to exclude 1,400 ha - about 20% of the original territory. As a result, the community governance and management of the *saphari* forests continue as before. In return, locals agreed to include in the National Park some forested areas which were not considered as *saphari* forests.

The successful collaboration on the boundary change has improved the relationship between community members and protected area governance authorities. The communities have subsequently been interested in declaring the *saphari* forests as part of the restricted use 'core' zone of a proposed Protected Landscape. Following discussions with the communities and the municipality, a study implemented by UNDP in 2018-2019 developed a draft zonation plan for the proposed Protected Landscape that mainly situates the core zone on the *saphari* forests. The draft outline of the management plan for the landscape also includes these forests. The Protected Landscape would be governed by the local municipality through a management committee consisting of a combination of local members and others approved by the Mayor of Khelvachauri Municipality. A draft national law on the establishment of Machakheli Protected Landscape was initiated in 2022 and it is now being considered by the parliament of Georgia.

Vil. Lower Chkutuneti. Photo: Irakli Goradze

WETLANDS & RIVERS

Riparian communities along the Syr Darya in Kazakhstan.
Photo: Aibek Samakov

# 13 Riparian communities along the Syr Darya in Kazakhstan

***The Syr Darya River Delta commons: territories of life of local Kazakh tribes***

**Source:** Aibek Samakov, ICCA Honorary Member

**Location:** Qazaly district, Qyzylorda province, Kazakhstan

**Community:** Kazakh tribes of the Junior Juz

**Practice(s):** Herding, reed mowing, shifting agriculture

The Syr Darya Delta has been an area of rapid social-ecological change. Environmental degradation caused by the desiccation of the Aral Sea coupled with the collapse of the Soviet Union and the transition to a market economy have been the main drivers of change. Historically, the Kazakh tribes in the Syr Darya delta migrated with their herds between two areas, known as *syr* (meaning the riparian zone of the Syr Darya River) and *qyr* (meaning the Qaraqum semi-desert north of Syr Darya). The semi-desert south of the river, known as Qyzylqum (lit. Red sands), was occupied by Turkmen nomadic tribes. The Kazakh tribes spend winters in the riparian pastures and summers in the cooler Qaraqums. Similar to other areas of the USSR, after the establishment of Soviet authority, herding was managed by collective farms known as *kolkhozes* and *sovkhozes*. The Syr Darya Delta region was assigned to grow rice, although the naturally low soil fertility and the area's proneness to soil salinization were not favourable conditions for large-scale irrigated agriculture.

After the collapse of the Soviet Union, the state farms dissolved and market-oriented policies promoted the privatisation of lands. However, the local communities in the Syr Darya Delta *de facto* revived their traditional common pool resource management system. Thus, the land which belonged to the state farm started again to be used by local people as common property. The strong community ties within the communities and informal rules allow the successful functioning of the commons. The common pool resources in the delta region include pastures, reed beds where locals harvest reed as animal feed and construction material, and land for shifting agriculture (mostly for growing melons, watermelons, and other fruits and vegetables).

The local communities have strong social ties as well as strong historical connections to their territories of life. These areas are very close to being Defined ICCAs, however the lack of formal recognition of communities' rights to their commons leads to our classifying them as disrupted.

Riparian communities along the Syr Darya in Kazakhstan. Photo: Aibek Samakov

WETLANDS & RIVERS

Marsh Arabs poling a traditional mashoof in the marshes of southern Iraq.
Photo: Hassan Janali /Wikipedia

## 14 Marsh Arabs on the Tigris-Euphrates in Iraq and Iran

*Desiccation of Marshes leads to loss of livelihoods, traditional knowledge, and values*

**Source:** Aibek Samakov, ICCA Honorary Member

**Location:** Southern Iraq

**Community:** Marsh Arabs

**Practice(s):** Fishing, reed mowing, handicrafts

The annual flood pulses of the Tigris and Euphrates, two mighty rivers of West Asia, created the famous Mesopotamian Marshes, which used to be one of the largest wetlands in the region. These marshes covered 15,000-20,000 square kilometres in the 1970s and were home to about half a million people (UNEP 2001). The marsh-dependent livelihoods of Marsh Arabs included herding water buffalo, small-scale fishing, reed mowing, handicrafts, and trade (Young 2009, Ochsenschlager 2004, Thesiger 2007). Both the Iran-Iraq war and government policies directed against the local communities devastated the Marsh ecosystems, with up to 90% of them being drained and local communities displaced (UNEP 2001). The restoration efforts in the 2000s managed to rehydrate about 58% of marshes in Iraq (Al-Handel and Hu 2015), but droughts, desertification, soil and water salinization, water diversions projects, dam construction upstream and climate change all are posing great threats to local ecosystems and livelihoods (Fawzi et al. 2016). Desiccation of the marshes is resulting in a loss of traditional marsh-related knowledge and skills, especially among women, as local communities have fewer opportunities to engage in their traditional livelihoods. Those communities that have access to sufficiently hydrated marshes, such as in the Chibayish district and the Iraq Marshlands National Park, are observed to be able to retain and successfully pass on their traditional knowledge to the younger generations (Fawzi et al. 2016).

The Marshlands of southern Iraq and Iran are areas where traces of some of the earliest human civilizations are found. Local communities have accumulated a body of traditional ecological knowledge that has allowed them to thrive in this environment for centuries. However, armed conflicts coupled with policies detrimental to the local ecosystem have disrupted the strong ties that once existed between the local communities and their territories of life and have severed their governance institutions and practices.



COASTAL AREAS

Traditional fishermen of the coastal lagoons in Turkey.
Photos: Engin Yılmaz

## 15 Traditional fishermen of the coastal lagoons in Turkey

*Preserving biodiversity through traditional fishing practices*

**Source:** Engin Yılmaz, Yolda Initiative

**Location:** Coastal lagoons on the Mediterranean Shore in Turkey

**Community:** Traditional fishermen

**Practice(s):** Traditional trap fishing and artisanal fisheries

Traditional trap fishing (*dalyancılık*) in the coastal lagoons along the Mediterranean shores in Turkey is one of the most ancient fish trapping techniques in the world, practised for centuries. Before World War I, the practice was mostly conducted by the Greek population in the Aegean region, as still acknowledged by fishermen today. Wetlands are among the most threatened ecosystems globally. Turkey is likely to be one of the countries which has lost the most wetlands in the 20th century, largely due to water abstraction upstream for creating agricultural lands and energy production.

Coastal lagoons are among the priority wetlands in Turkey, with threats including:

- Decreasing or full stop of freshwater input due to water abstraction
- Abandonment of traditional practices and lands
- Land loss/fragmentation/degradation
- Shallowing
- Pollution
- Illegal fishing and overfishing
- Climate change

Lagoons are modified natural ecosystems which over hundreds of years of trap fishing became a unique example of coexistence between humans and natural processes. Thus, human activities do not only threaten the lagoons (as outlined above) but they also may be beneficial and result in the conservation of these wetlands and also the marine biodiversity including high trophic level fish species - such as through traditional cultural practices of local communities.

As these local lagoons are critical ecosystems for fish populations as nursery areas and feeding grounds, their richness made traditional trap fishing one of the main

income-generating activities for local communities for thousands of years. This practice consists mainly of setting up traps made of sticks and nets by the coastlines of the lagoons. The objective is to trap fish of a certain size so the young fish and fish eggs are not destroyed. The method also allows a certain amount of fish to escape the nets, thus preventing overharvesting of fish populations. Although there are minor changes regarding the opening and closing season for each lagoon, this method is in harmony with the natural cycle as the traps are set up at the same time every year, coinciding with the times when fish migrate from lagoons to the sea, catching only a sustainable amount. This practice has important positive impacts on the lagoon ecosystems by maintaining high levels of both marine and terrestrial biodiversity.

Considering the diverse flora and fauna they host, all the lagoons where these practices take place are under protection by national legislation, and some also by international conventions.

The fishermen communities at the lagoons are organised in cooperatives in which the number of members varies depending mostly on the production levels. These cooperatives manage the lagoons based on contracts signed with the Ministry of Agriculture and Forestry. Thus they are not a part of the governance mechanism per se but can only hold the limited responsibility of managing the lagoons for a certain time as stated in contracts. Additionally, their rich traditional ecological knowledge which is crucial for the sustainability of these ecosystems is not recognised and respected by the decision-making authorities and also in most cases by the academics who are closely involved with these authorities.

In sum, the fishermen in these lagoons represent a wealth of traditional ecological knowledge in terms of natural resource management, which to date has remained largely unrecognised within the conservation community even though it holds a key for a more sustainable future. We can greatly benefit from such tried and tested community perspectives and practices, which have stood the test of time and could be extremely beneficial on a broader scale in the future.

Traditional fishermen of the coastal lagoons in Turkey.
Photos: Engin Yılmaz



Herders in the Ysyk-Kol region. Photo: Aibek Samakov

COASTAL AREAS

# 16 Sacred sites in the Ysyk-Köl Biosphere Reserve in Kyrgyzstan

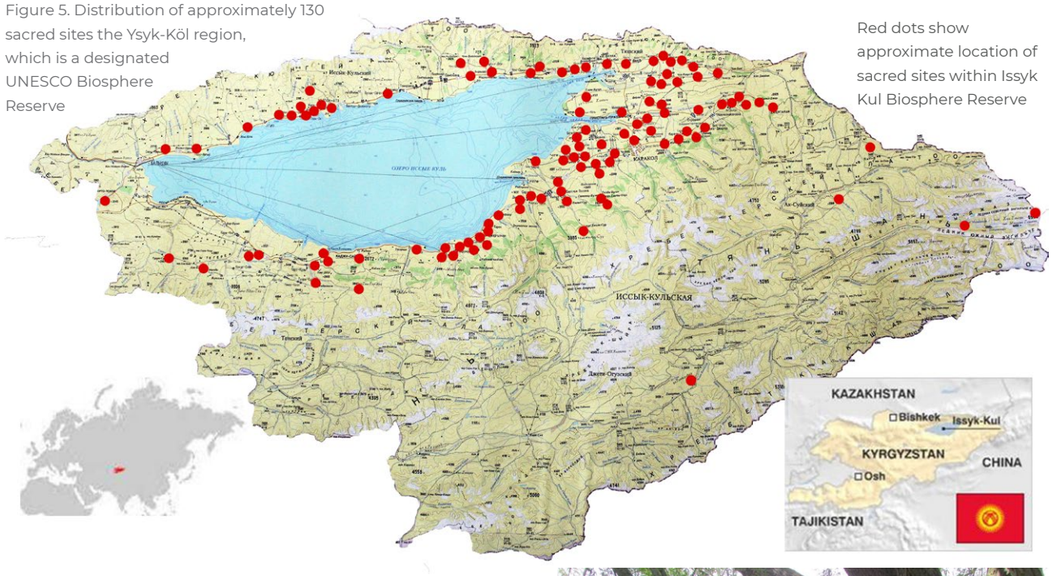
***Sacred sites in the Ysyk-Köl Biosphere Reserve: promoting biocultural approach to conservation***

**Source:** Aibek Samakov, ICCA Honorary Member
**Location:** Ysyk-Köl (Issyk-kul) Province, Kyrgyzstan
**Community:** Various local communities
**Practice(s):** Traditional spiritual/religious practices

There are more than 1,000 sacred sites across Kyrgyzstan. Sacred sites have been a part of many Indigenous cultures around the world (Verschuuren et al. 2010). Although the 'sacredness' of a place may stem from cultural, religious, and spiritual domains (Aitpaeva 2009) and may not explicitly refer to conservation, oftentimes sacred sites have a positive effect on biodiversity conservation. Sacred natural sites are usually defined as "areas of land or water having special spiritual significance to peoples and communities" (Verschuuren et al. 2010, p.1) and have been protected by local communities around the world for centuries. In some communities (for instance, across Asia and Africa) sacred sites have been better protected than most officially protected areas (Dudley et al. 2005). Moreover, some formally protected areas were established around existing areas that had been already protected by local communities through traditional "conservation practices, including some elaborate and effective systems" (Borrini et al. 2004, p. 20). Sacred sites are present in all countries of the West and Central Asian region. In most countries, sacred sites are not officially recognized and function as informal institutions, whereas some countries have started to take steps toward recognising them. For example, Kazakhstan launched a state-backed program called Sacred Geography of Kazakhstan, which aims to document and conserve sacred sites in the country.

Some of the sacred sites are located within formally protected areas. Sacred sites are revered by local communities as places of purity, divine energy, and force. People visit sacred sites individually or in groups and conduct various rituals such as healing rituals, rights of passage, etc. The reasons for visiting sacred sites are very diverse and vary from specific reasons such as asking for good health, progeny, wealth, luck, etc. to more generic spiritual reasons such as self-improvement and purification.

Figure 5. Distribution of approximately 130 sacred sites the Ysyk-Köl region, which is a designated UNESCO Biosphere Reserve




Red dots show approximate location of sacred sites within Issyk Kul Biosphere Reserve

There are more than 130 documented sacred sites in Ysyk-Köl Province of Kyrgyzstan (Figure 5). They are very diverse in terms of size and biophysical elements encompassed by a particular sacred site. It is believed that sacred sites are the 'umbilical cord' that connects communities to their territories of life. For example, a sacred site can consist of several springs and trees or entire ecosystems such as Lake Ysyk-Köl or Khan-Tengiri Mountain.

The unique feature of sacred sites in the Ysyk-Köl region is that they are located within formally protected areas. Up until recently, the Directorate of the Biosphere Reserve did not take into account sacred sites in its conservation strategy. Nowadays, the Biosphere Reserve recognises the positive role of sacred sites in biodiversity conservation and believes that the incorporation of sacred sites can improve biocultural conservation in Ysyk-Köl Biosphere Reserve (YKBR) in the following nine ways: 1) making the concept of Biosphere Reserves more understandable for local communities, 2) improving ecological monitoring, 3) indirectly conserving species and areas, 4) improving biosphere reserve zoning, 5) providing a complementary culture-rooted set of incentives for conservation (in addition to external incentives), 6) fostering a biocultural approach to conservation, 7) collecting and using traditional ecological knowledge (TEK) in conservation, 8) serving as a communication hub for YKBR managers and local communities, and 9) serving as a platform for local communities' capacity building.

Sacred sites in Ysyk-Köl province as well as throughout Kyrgyzstan are conserved and protected by local communities for spiritual and religious reasons. Due to the rules and taboos related to the sacred sites, they have become local biodiversity hotspots. However, the anti-religious policies during the Soviet times disrupted the connections between many local communities and their sacred sites. The visits to sacred sites were prohibited and the sacred sites practitioners were prosecuted by the authorities. Since regaining independence, many communities have reestablished the tradition of visiting and protecting sacred sites. However, there are still challenges preventing the sacred sites in the Ysyk-Köl province from becoming defined ICCAs. First of all, there is no recognition of sacred sites in the national legislation. Secondly, some new movements within Islam condemn as idolatry the tradition of visiting sacred sites, which is at odds with the traditional perceptions of sacred sites.

Mazar-Bulak, a sacred site in the Ysyk-Kol region.
Photo: Aibek Samakov



# Challenges and opportunities for the ICCAs - Territories of life in West and Central Asia and the Caucasus

This overview of ICCAs in West and Central Asia and the Caucasus demonstrates their incredible diversity. Their diversity directly results from the social-ecological diversity of the region, including overlapping biophysical, climatic, linguistic, cultural, historical and institutional realities. The diversity of ICCAs in the region therefore can only be safeguarded when the full breadth of unique local languages, values, worldviews, livelihoods and ways of life - all that promote life and relationships - are protected.

The diversity of the social-economic and political contexts within which ICCAs exist creates different challenges and threats to various ICCAs across the region. For example, armed conflicts in the Caucasus and the Middle East pose an immense threat to ICCAs and the local communities. Large-scale infrastructural projects may also adversely affect the local communities and their territories of life (Hughes et al. 2020, Foggin et al. 2021b). At the same time, global challenges such as climate change are likely to accelerate biodiversity loss and land degradation (Samakov 2019) in the region. Furthermore, the COVID-19 pandemic has revealed vulnerabilities of indigenous peoples and local communities, for example with restrictions stipulated by the government (in context of the struggle against the pandemic since 2020), disrupting access of local communities to their territories of life and traditional livelihoods in many parts of the region.

One of the features of ICCAs in the region is their **transboundary nature**. Since some of the borders in the region are quite new (especially in the areas that previously were in the USSR), many transboundary ICCAs have become disrupted. For example, the migratory or nomadic nature of livestock herding in Central Asia meant that territories of life of local communities encompassed a number of seasonal pastures, yet following the collapse of the Soviet Union new inter-state borders emerged that precluded such seasonal migrations, thus disrupting the access of herders to their comprehensive territories. National state borders also have disrupted the migration routes of nomadic tribes in Iran and across the Middle East.

Another widespread feature of the ICCAs in the region is their **overlap with Protected Areas,** e.g. Yagnob National Park, Khan Tengiri National Park, the Iraq Marshlands National Park, etc. The overlap of ICCAs and protected areas raises issues of 'management' and 'governance' -- what to do, and who decides what to do in such protected areas (see Box 2). Such overlap with formally protected areas creates both opportunities and threats to the territories of life. For example, the status of a protected area may be leveraged to help local communities to protect their territories of life from destructive industries such as mining or other intrusions. On the other hand, rules of formal protected areas can also sometimes significantly limit the local communities' access to and traditional use of their territories of life. The involvement of local communities in the co-management of protected areas has been shown to improve overall conservation effectiveness by ensuring respect for the rights of local communities, securing public support for conservation activities, and valuing TEK and other ways of knowing.

Many different ICCAs in the region may have similarities, or common characteristics, such as the presence of Al-Hima institutions. Yet in other ways, conditions of otherwise similar ICCAs in the region may differ, e.g. the quality of pastures and rangelands in Central Asia. There are also differences in ICCAs' status. For example, while some ICCAs such as pasturelands are officially recognised in Iran, some other forms of ICCAs such as sacred sites are not formally recognised in Kyrgyzstan, nor are the rights of 'forest nomads' sufficiently recognised in Turkey.

There is no single one-size-fits-all solution for promoting recognition of ICCAs across the region, as these institutions are extremely diverse across institutional, historical, political and cultural perspectives. Nonetheless, several important recommendations are now emerging and these may be broadly grouped according to the following three high-level themes: a) documenting ICCAs, b) self-strengthening processes, and c) international level opportunities as well as threats.

# A Recommendations for the documentation of ICCAs

1. Launch or continue the documentation process of ICCAs and of local and/or traditional management practices present across the region, as the state of knowledge of ICCAs in the region is extremely uneven. Although in some areas (e.g. Iran) local communities have been documenting and mapping their own ICCAs for some time, in other areas (e.g. Kyrgyzstan, Lebanon, Armenia, Turkey, etc.) the documentation process has been driven more by local scholars and NGOs. Overall, the diversity and current status of ICCAs across the region remain relatively understudied.
2. Conduct a legal review at country-level in regard to regulations and policies pertaining to ICCAs, with the overarching goal to identify legal gaps, barriers and opportunities for promotion of meaningful recognition and protection of ICCAs - territories of life.
3. Encourage the involvement of indigenous people and local communities themselves in knowledge (co-)production and purpose-driven research.

# B Recommendations about self-strengthening processes

4. Increase/enhance local and international efforts in all countries to promote meaningful recognition of ICCAs and to strengthen IPLCs' rights. Local and indigenous groups should seek support from civil society (NGOs), from local and national governments, as well as from inter-governmental institutions to advocate for meaningful recognition of ICCAs. Formal recognition of the human right to a healthy environment is now supported internationally through United Nations structures (Knox and Boyd 2018, UN Resolution A/76/L.75, 2022).
5. Position ICCAs in the centre of global and national dialogues on biodiversity and sustainability (i.e. the SDG agenda), including current post-2020 Global Biodiversity Framework negotiations. For example, IPLCs can advocate strongly to include ICCAs in strategies and programmes for SDGs 14 and 15 (Life Below Water and Life on Land), National Biodiversity Strategies and Action Plans for 2015-2025 (NBSAP-II), as well as post-2020 Biodiversity Targets.
6. Promote official recognition and implementation of the IUCN Matrix, which includes ICCAs as a type of governance. For example, tribal confederacies and NGOs in Iran have been trying to promote this recognition at both national and provincial levels.
7. Promote ICCAs in the region through other complementary concepts, tools and/or approaches such as the category of Other Effective Area-Based Conservation Measures (OECMs) and UNESCO's Intangible Cultural Heritage List.
8. Promote programmes and actions in all countries of the region that aim to support ICCAs, including UNDP's Global Support Initiative (GSI), the Small Grant Program (SGP) and international organisations such as UNEP and UNESCO, and advocate for all donors to support ICCA activities in the region at both the policy and practical levels.



# C Recommendations pertaining to international action

9. Raise the visibility of ICCAs in the region by contributing to international science-policy platforms such as the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Intergovernmental Panel on Climate Change (IPCC), Coalition for Nature, etc. Local scholars and Indigenous Peoples and Local Communities (IPLCs) can participate in the development and review of assessments, including e.g. IPBES assessments, IPCC reports, GEO reports, Global Land Outlook reports, etc.
10. All international and regional dialogues and negotiations pertaining to climate change and biodiversity - these being deeply interlinked - should henceforth be required to explicitly consider both their challenges and impacts on, and opportunities for, ICCAs and IPLCs.
11. Some large-scale infrastructural projects are envisioned to be carried out in the region and these are likely to have, directly and indirectly, major implications for territories of life (Hughes et al., 2020, Foggin et al. 2021). IPLCs should therefore be enabled to participate in all stages of assessing, planning, implementing and reviewing such development projects at early planning stages.
12. Free, Prior and Informed Consent (FPIC) must be obtained from all relevant parties, including local communities and indigenous peoples, at early stages of assessment and planning for all infrastructural projects and any other forms of development projects that have potential to negatively impact social and/or ecological conditions in ICCAs - territories of life.

Sign post, Baiboosun, Kyrgyzstan. Photo: Baoboosun community

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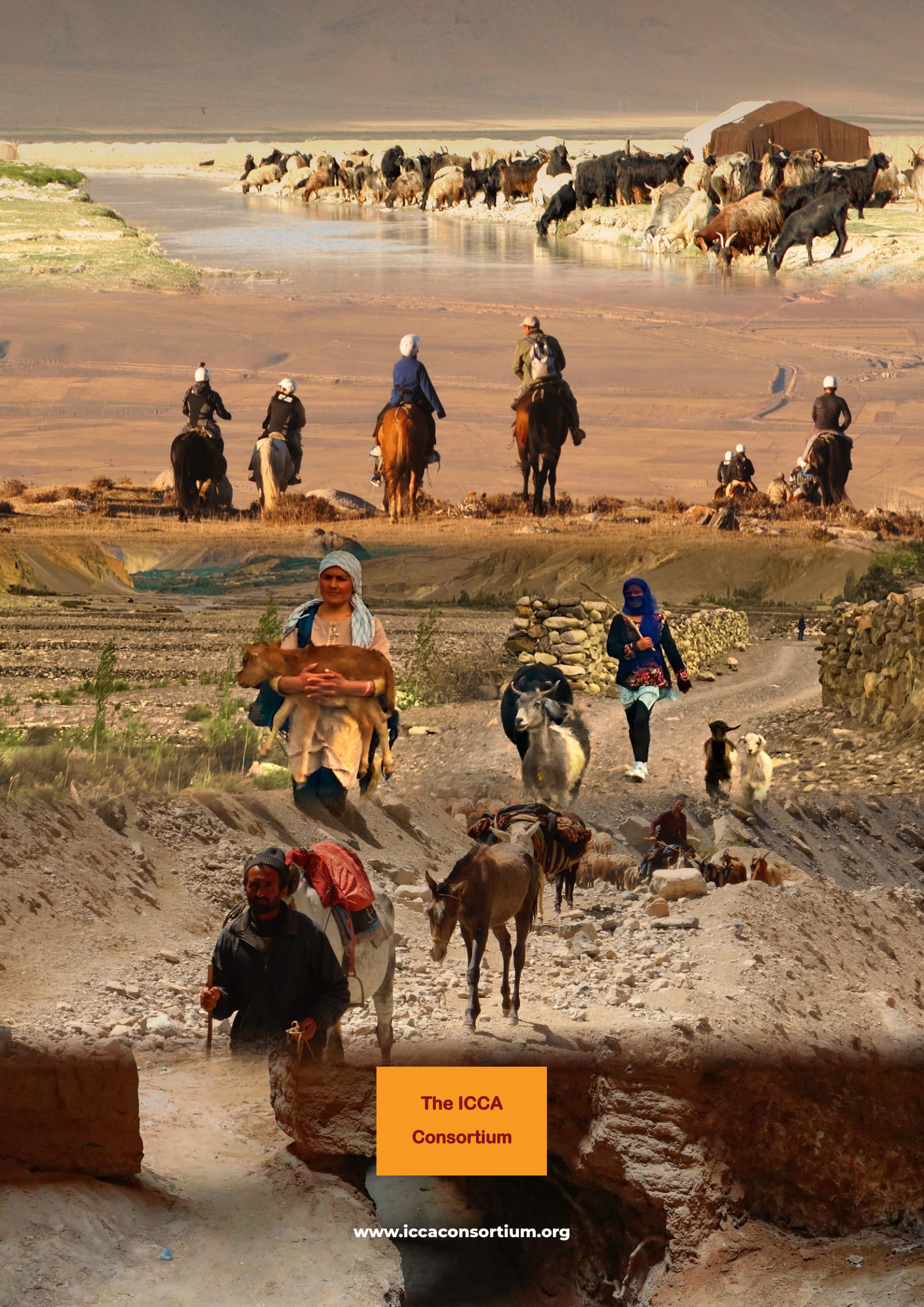
Mountain farming in Yagnob Valley of Tajikistan, trail and mountain. Photo: Marc Foggin



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