

MOUNTAINS OF CENTRAL ASIA

Supporting biodiversity safeguards
in the era of an infrastructure boom
in Kyrgyzstan, Kazakhstan, and Uzbekistan



IMPACT Report

CEPF-Zoï project, 2021-2022

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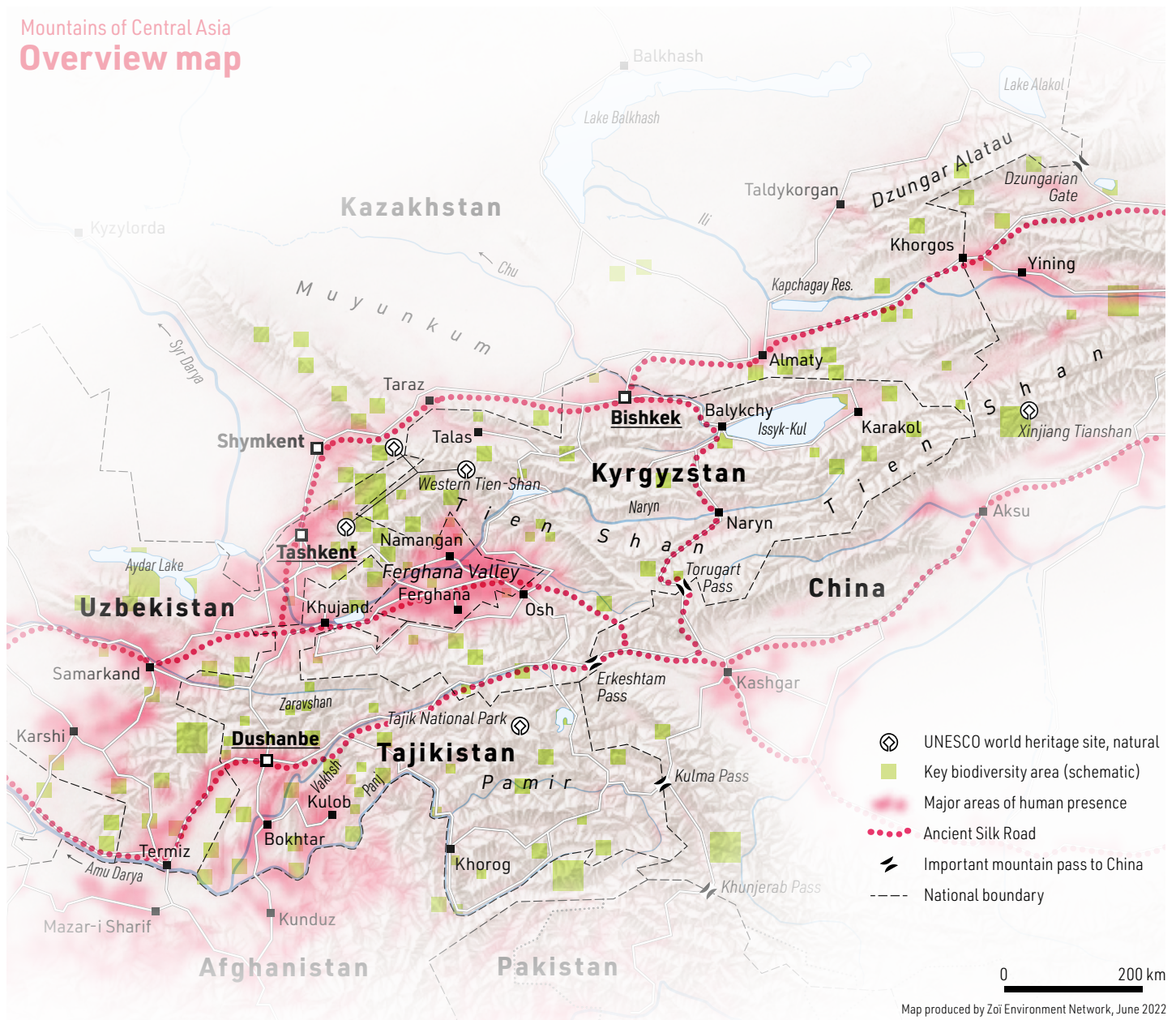
Chatkal, Kyrgyzstan

About the project

New roads, logistical hubs, power lines, and oil and gas pipelines are emerging to connect the once remote Central Asia region with markets in China, Russia, Asia and Europe. New roads create better access to tourist destinations and mining sites. These developments create economic prospects, but some of the infrastructure projects are in close proximity to Key Biodiversity Areas (KBAs), posing ecological risks to breeding grounds, migratory species and the preservation of unique forests, animals and plants.

Under a project financed by the Critical Ecosystems Partnership Fund, Zoï Environment Network supported civil society organizations' efforts to explore and address potential risks to key biodiversity areas and ecological corridors. This work entailed the development of maps, a toolkit, rapid assessments, and the dissemination and application of these products through field work and public events. Zoï consulted mining, road and tourism operators and forest and land users. The work entailed discussions of a network of local and international partners and the strengthening of partnerships.

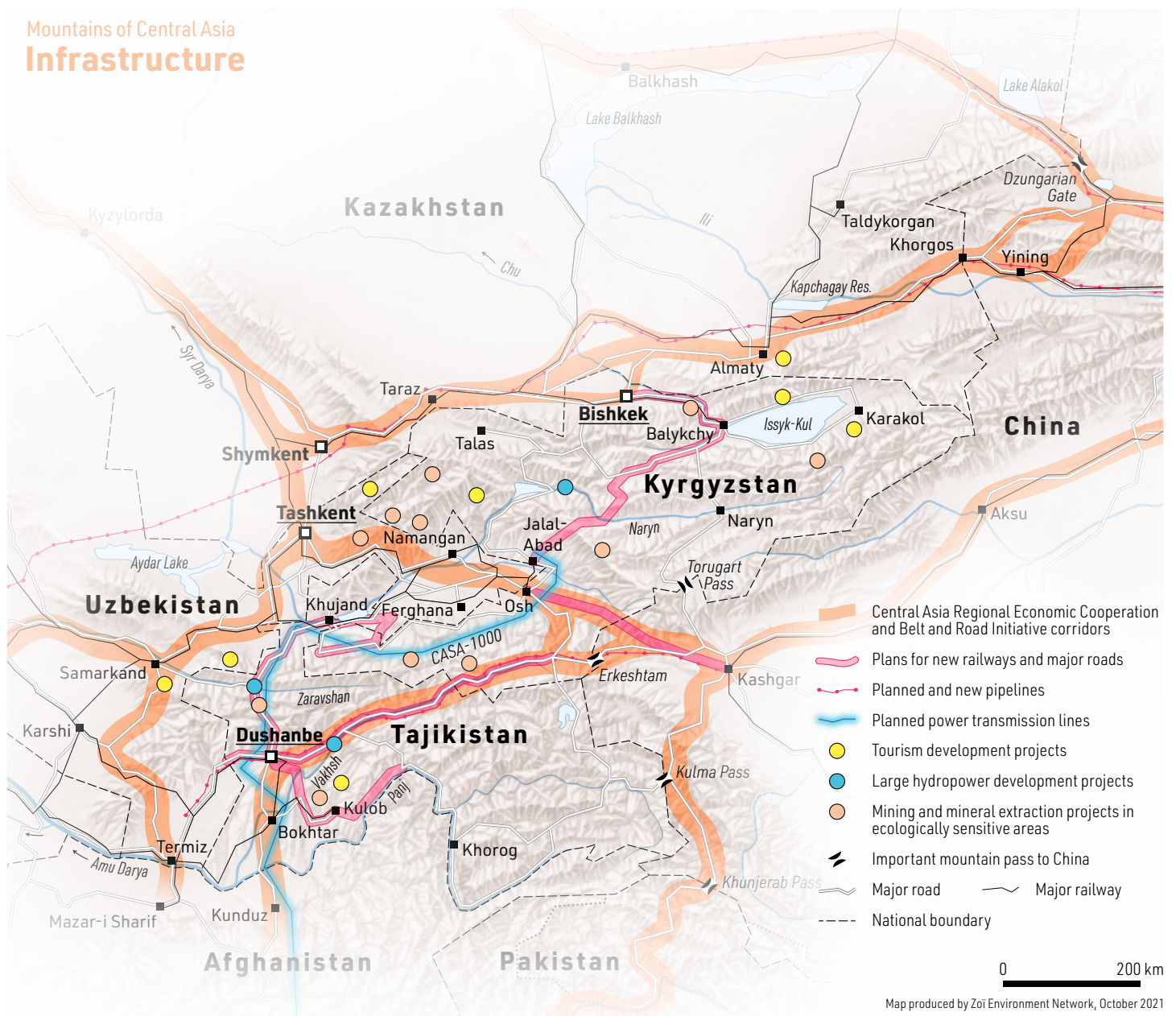
Mountains of Central Asia Overview map



Many modern roads in the region follow the ancient Silk Roads and much of the region's wilderness lies in the remote mountains where the ridges themselves form many of the national borders. The hotspot includes cultural and natural world heritage sites, national and local protected areas and Key Biodiversity Areas, many of which face one another across political boundaries, raising both the opportunities and challenges for regional cooperation.

Of the 65 million people living within the biodiversity hotspot, most reside in the valleys and cities. Agriculture provides livelihoods for many in the rural areas, but the excessive water withdrawals and inefficiency in this sector created a major socio-ecological problem – the disappearance of the Aral Sea. Agricultural runoff affects water quality. Mining, road expansion and tourism projects pose risks to the spectacular nature and unique biodiversity.

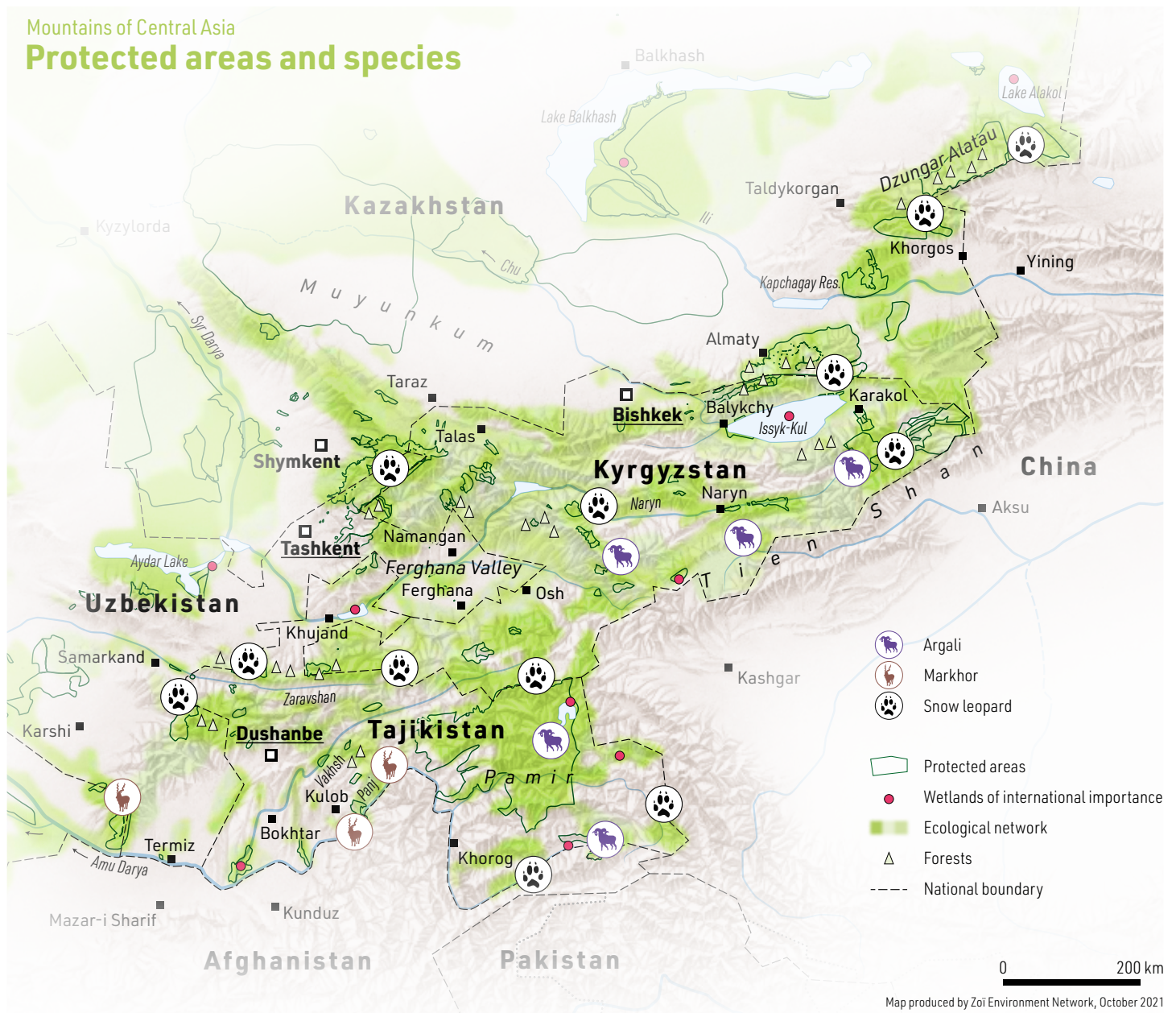
Mountains of Central Asia Infrastructure



China's Belt and Road Initiative, the Central Asia Regional Economic Cooperation (CAREC) programme, international development banks and others have established new roads and mountain passages, and developed major trade and transit links over the past decade with more roads, tunnels, railways, power lines and other infrastructure planned or underway. In addition, tourism infrastructure and the associated impacts on mountain areas are growing

as this sector is recovering from COVID-19 travel restrictions, and visits by local and overseas tourists massively increase. Accommodation facilities, access roads and infrastructure further encroach on habitats. The pandemic halted or slowed some developments, but tourism, mining and energy projects are quickly rebounding. Unfortunately, many fast-paced and high-level projects limit the involvement of NGOs and the general public.

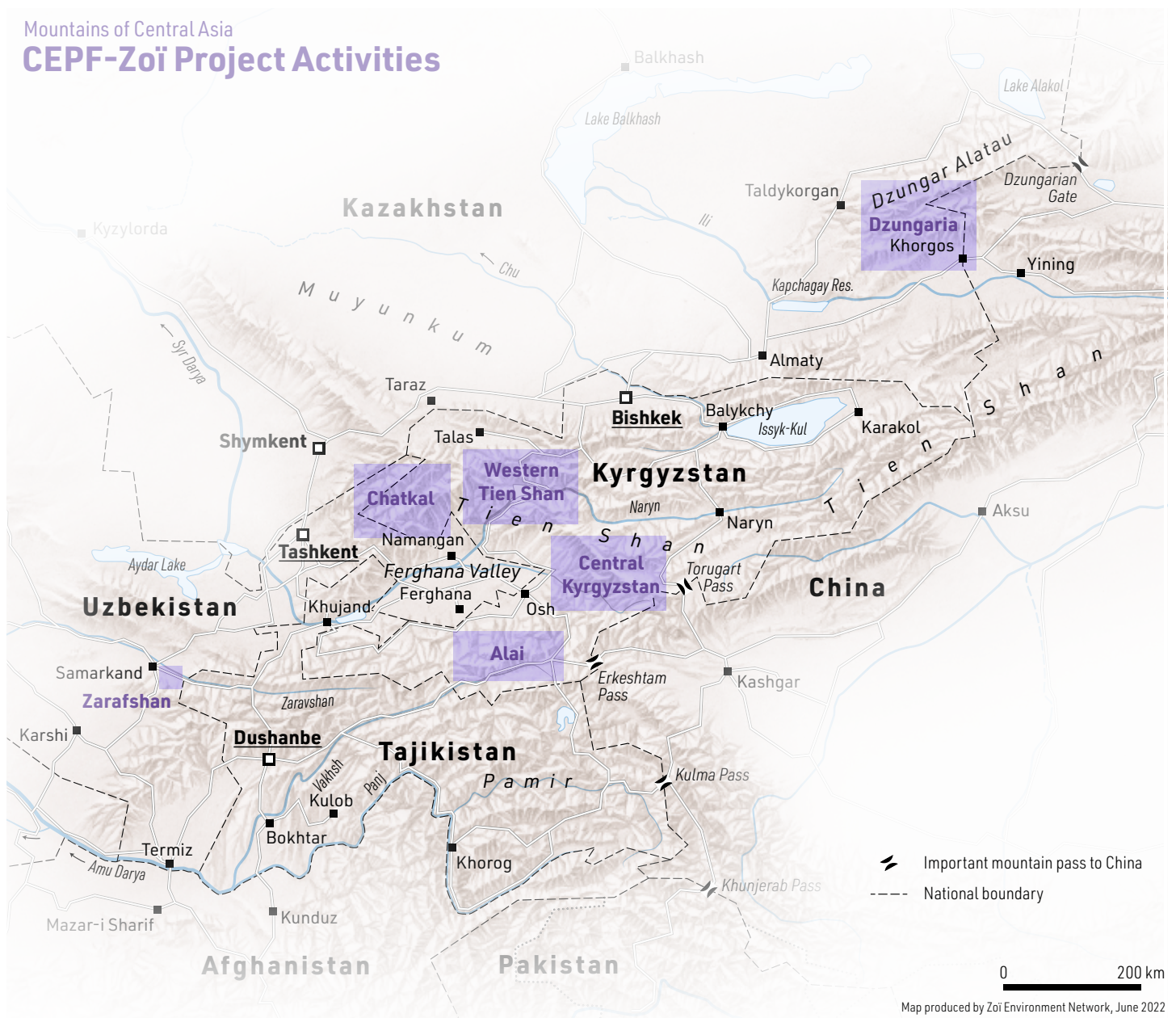
Protected areas and species



A limited understanding of Key Biodiversity Areas and ecological networks, along with unclear boundaries and changing regulations and ownership of protected areas, are slowing or halting conservation efforts. Nevertheless, the network of protected areas continues to grow. Conservation projects by local, international and governmental actors have

helped several endangered species – snow leopards, markhor goats and argali sheep – recover, and have reduced human-wildlife conflict and increased benefits for local communities. But many lesser-known species still face risks of extinction, habitat destruction and fragmentation

Mountains of Central Asia
CEPF-Zoï Project Activities



Working in cooperation with local civil society organizations and activists, Zoï targeted its activities under the CEPF project on several ecological corridors and KBAs where the existing or planned infrastructure projects pose real and potential risks. In central Kyrgyzstan, the Western Tien-Shan, and the Chatkal and Alai Valleys, Zoï concentrated on areas where mining and road construction disturb endemic species, KBAs and sensitive ecosystems. In Uzbekistan tourism in and nearby mountains is booming, so Zoï focused efforts in the Samarqand and Tashkent tourism destinations.

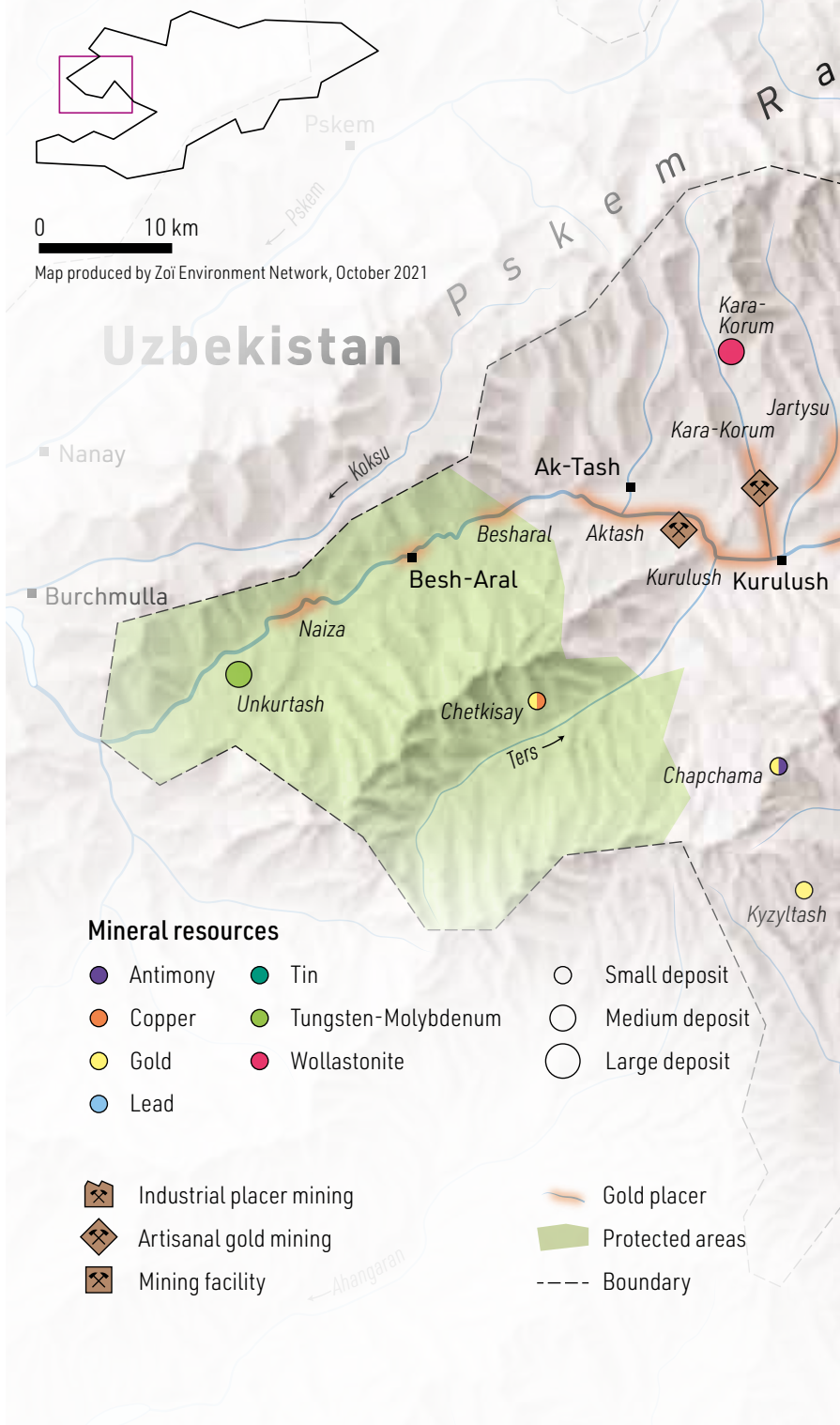
In Kazakhstan, the Dzhungarian section of the biodiversity hotspot extends to the border with China with few people, high security, and intact ecosystems with wild apple forests. The nearby Khorgos dry port, a major BRI project, connects Kazakhstan and Eurasia with China via railroad, a free economic zone and trade pavilions. Due to restrictions related to the COVID-19 pandemic and border regime, Zoï action in this area was limited to desk research and engagement of Kazakhstan partners in a regional project meeting in Almaty in December 2021 and in regional networks.

Mining developments in Kyrgyzstan have been sources of local tensions over environmental and social impacts for many years, and Zoï and Kyrgyz partners have been monitoring the situation in the Chatkal Valley since 2011. An increase in mining activities with little regard for environmental protections and remediation in nearby protected areas and water ecosystems has jeopardized high-value riverine forests and endemic and red-listed species of flowers and trees. Abandoned mines and tailings – legacies of the Soviet era – stand as cautionary tales, warning government and mining companies to follow biodiversity safeguards.

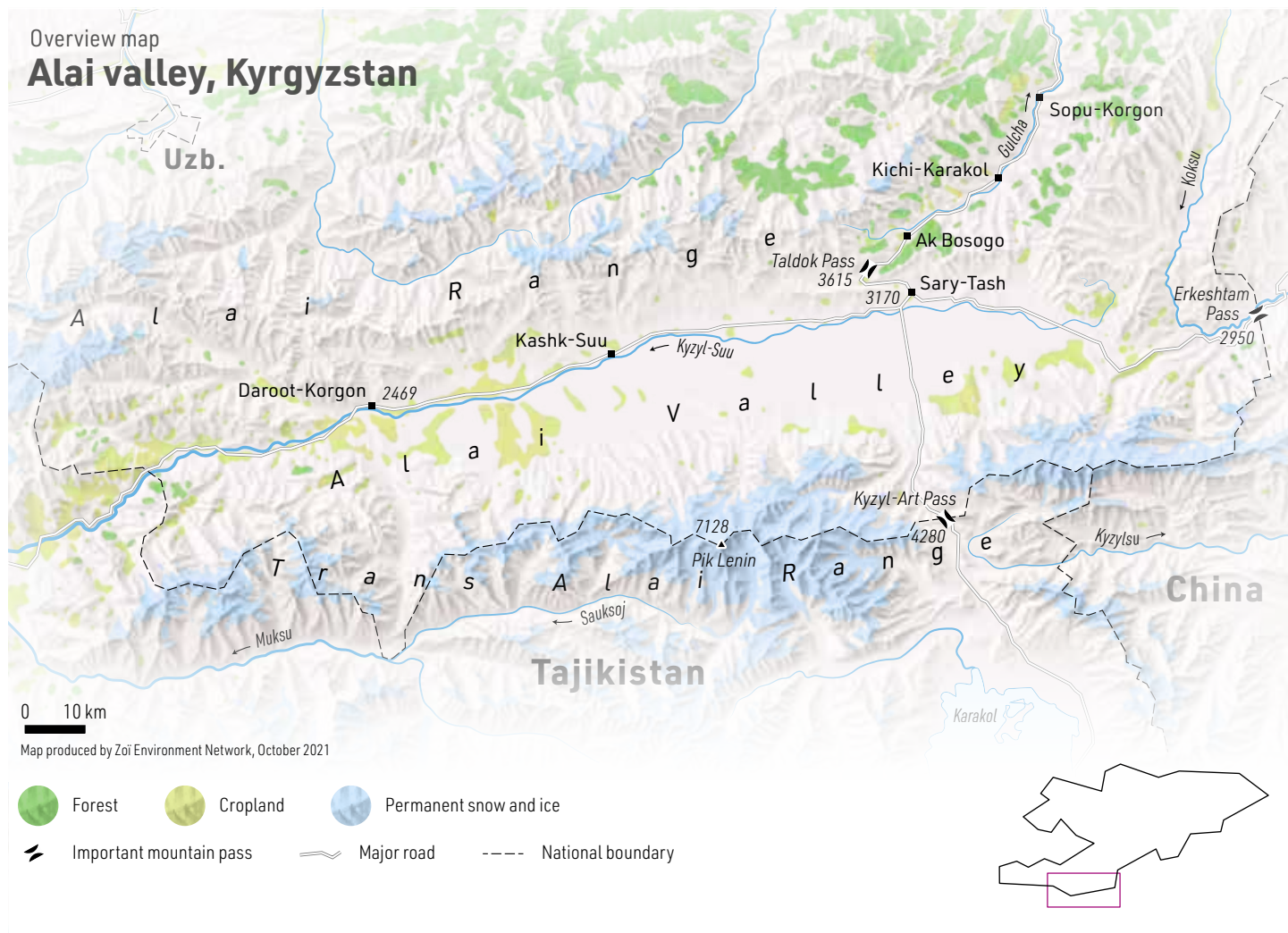
In this area, Zoï and Kyrgyz partners have held meetings with the local population, protected areas staff and mining companies and have conducted investigations on biodiversity safeguards and risk reduction measures, including the establishment of micro-reserves. In addition to irresponsible mining, irresponsible remediation is becoming an issue in the Chatkal Valley.

Overview map

Mining developments in the Chatkal Valley, Kyrgyzstan

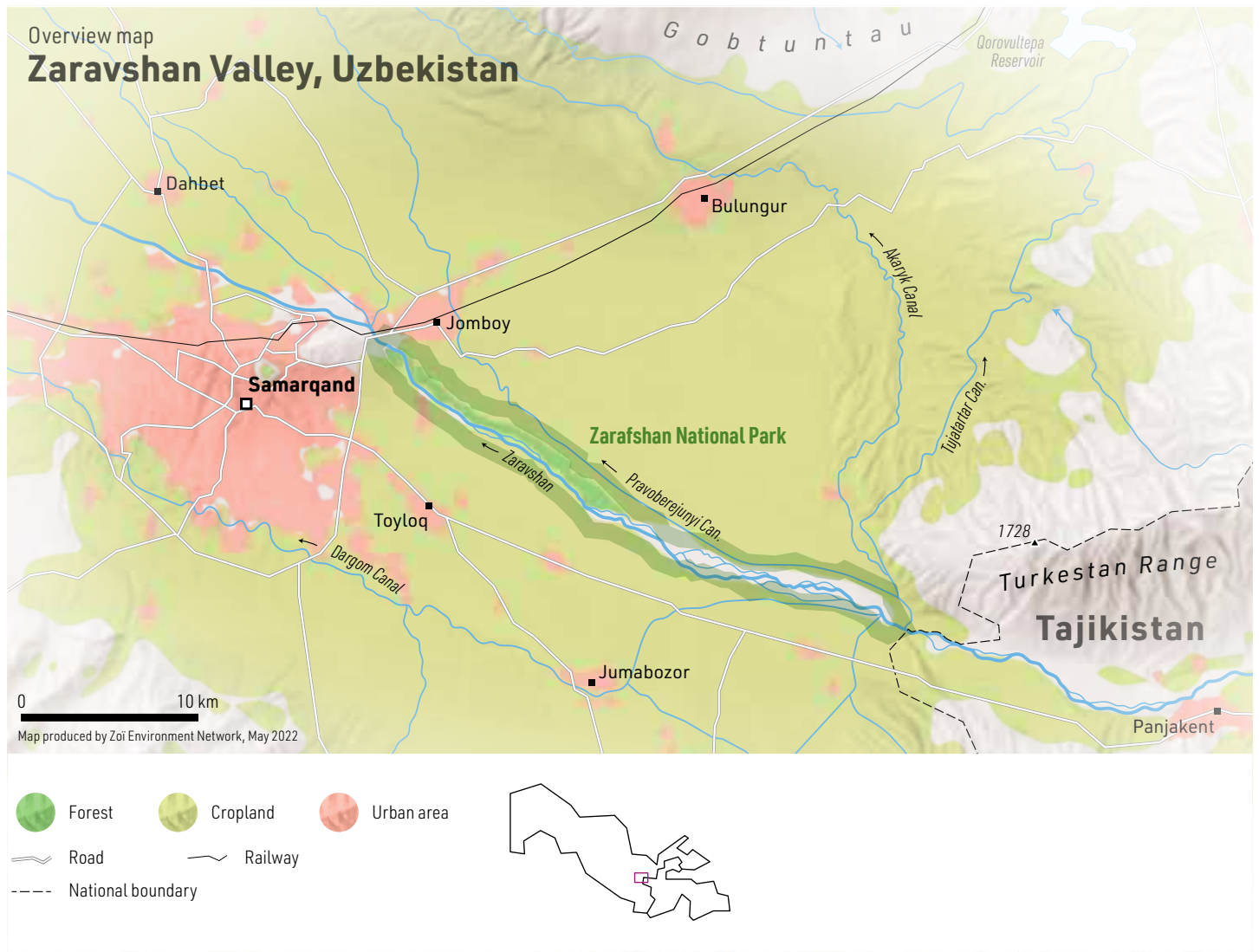






The isolated high-mountain Alai Valley in southern Kyrgyzstan hosts important habitats for endemic plants and for the snow leopard, but has no protected areas. As the area faces growing pressures from transit, and potentially from the development of new mining, roads and gas pipeline to China, volunteers among the local population are organizing efforts

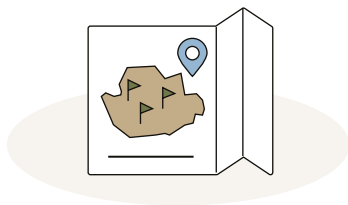
to protect these habitats. In addition, a GEF project to establish new protected areas with recognition of KBA sites is under preparation. Zoï and Kyrgyz partners have conducted local awareness-raising events and situation update visits, and have contributed to the initial planning of protected areas and other forms of conservation for local KBAs.



The ancient city of Samarqand – a prime tourism destination in Uzbekistan – is located next to a well-established protected area along the Zaravshan (also called Zarafshan) River. Once a strict nature reserve – with a high protection status – this area was recently designated a national park. The relaxed protection status means that the area is now open to more tourism pressures and to some economic development. With more frequent access and fewer protections, the park is vulnerable to illegal activities – grazing, tree cutting, hunting, and the removal of gravel – and NGOs, local activists and environmental authorities are trying to maintain the necessary level of conservation under the new designation.

The newly created Amankutan national park in the Zaravshan mountains near Samarqand also needs careful planning for tourism and conservation. The Chatkal biosphere nature reserve near Tashkent, part of the Western Tien Shan world heritage designation under UNESCO, for now is successful in balancing the growing demand from tourism against conservation. Zoï and Uzbek partners have conducted awareness events for local authorities and protected areas staff and a youth campaign with tree planting, and have engaged tourism and education actors.

Project activities and results in a nutshell



Mapping the links and challenges between biodiversity, KBAs and infrastructure development



Designing and disseminating information in local languages



Field visits, public awareness, mass media campaigns and investigations



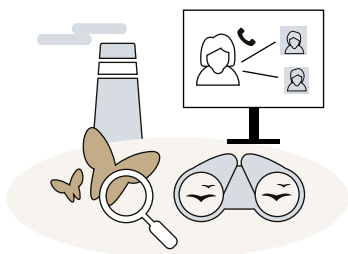
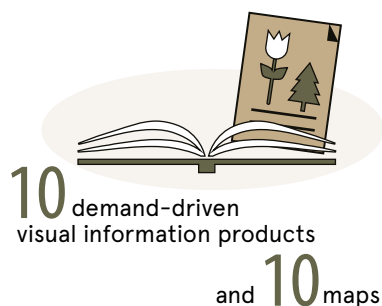
Local community engagement, lectures and meetings



Biodiversity safeguards toolkit and micro website



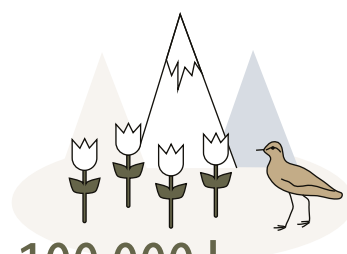
Youth and women engagement in conservation activities



Networking and information exchange between civil society organizations strengthened, new CSOs established

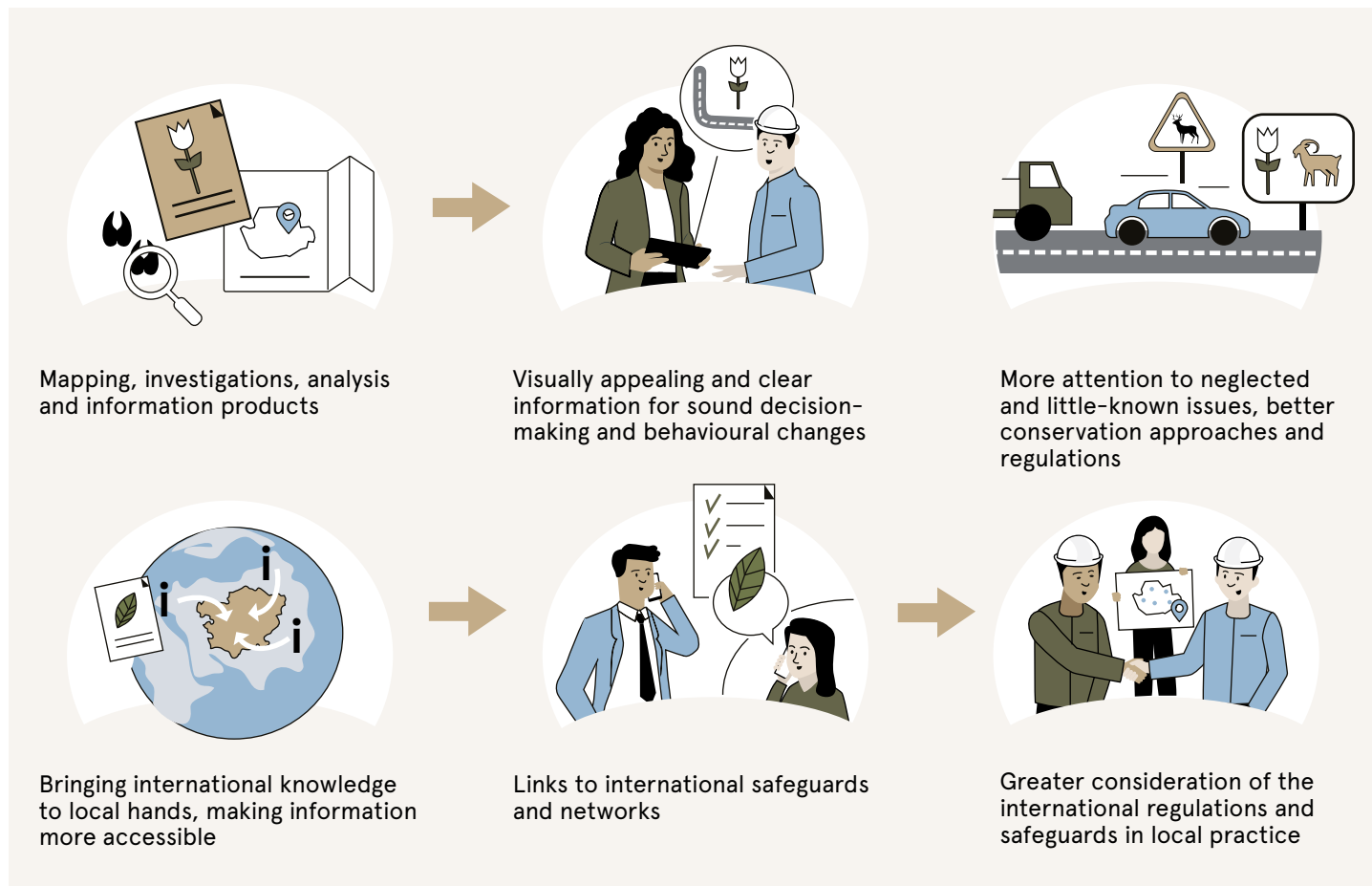


Activities covered infrastructure development projects with investment volume totalling USD 200+ million



100 000 ha of the KBAs and ecological corridors covered and better conservation promoted

Project impacts and prospects

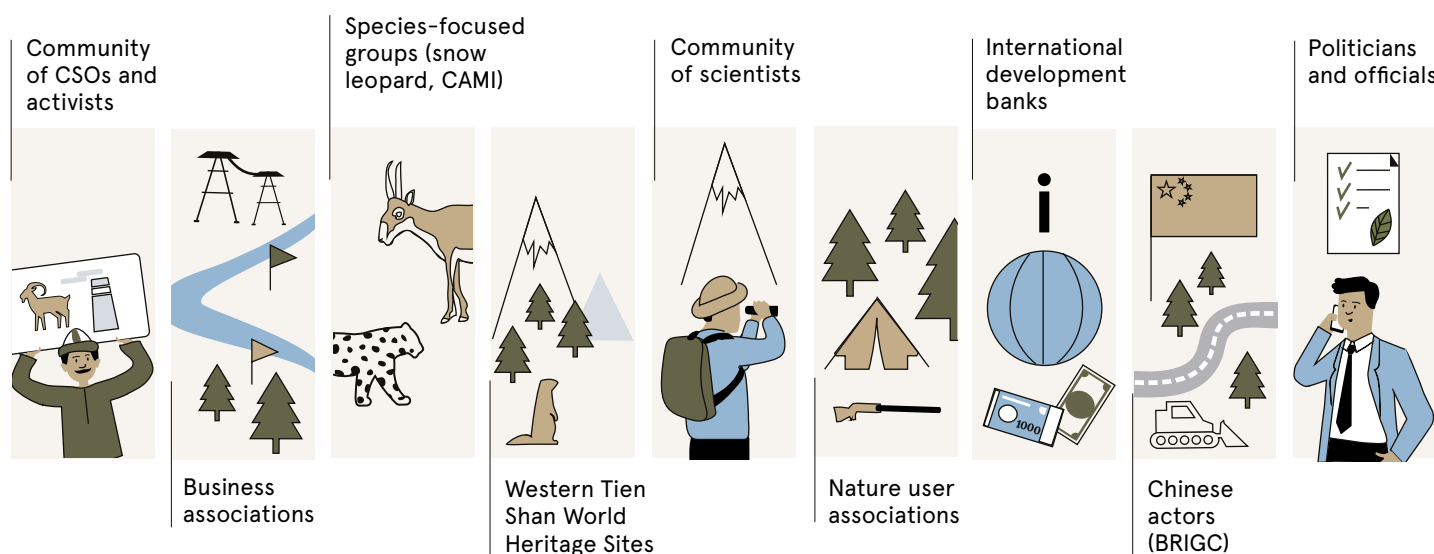


CEPF-Zoï project implementation engaged civil society organizations and civil activists and equipped them with new knowledge and information on biodiversity safeguards and conservation approaches in infrastructure projects, including roads, pipelines, tourism development and mining in Kyrgyzstan and Uzbekistan. In Kazakhstan, the project team conducted desk work and maintained links with local partners and mass media. Project activities covered large, medium and smaller infrastructure projects at the planning, construction or implementation stages. The total volume of investments of these projects exceeds USD 200 million and affects 100 000 ha of KBAs and eco-corridors. Engagement

of local mass media helped in knowledge dissemination and in linking project activities to the International Year of Sustainable Mountain Development 2022, and attracted interest from decision makers, journalists and the public.

As result of the project, at least 20 civil society organizations and community groups were trained in using safeguard tools and better prepared for environmental impact assessments and investigations. Networks and partnerships for promoting safeguards were strengthened in the course of project implementation through interactions and experience exchange.

Partnerships and networks

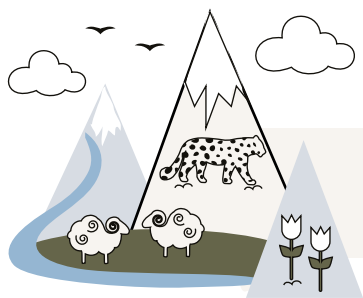


In the course of project implementation the Zoï team cooperated with, consulted and involved the following organizations and networks: Osh Aarhus Centre; Eco-MiR; Eco Tartyp; BIOM; Archa; CAMP Alato; MoveGreen; CAMI; CAREC; Living Asia; Internews, Kogart.kg; Jalalabad medic-centre; jamoats of south-central Kyrgyzstan and mahallas of western Uzbekistan; Kyrgyzstan’s road, tourism and mining, forest and land user associations; Uzbekistan’s tourism association and academy; national academies of sciences; Belt and Road Initiative International Green Development Coalition (BRIGC); environmental safeguard teams of the international development banks, nature reserves and national parks – Chatkal, Zarafshan, Zaamin, Hissor, Amankutan, Padysh Ata, Saymaluu Tash, Kan Achuu, Besh Aral, Sary Chalek, Alatay, Dashman; and national and local environmental authorities.

In addition to the project meetings and events, the Zoï team contributed to the following conferences and processes to share project experience and results: Western Tien Shan world heritage site network and meetings; the International Year of Mountain Sustainable Development 2022; CBD and Espoo Convention sessions; the Economic and Environmental Forum sessions of the OSCE.

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Biodiversity areas and concerns to address



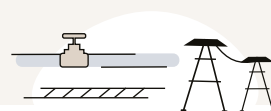
Chatkal and Alai Valleys,
Naryn River, central Kyrgyzstan



Transport, roads



Mining projects



Energy projects



Zaravshan River and mountains
nearby Samarqand



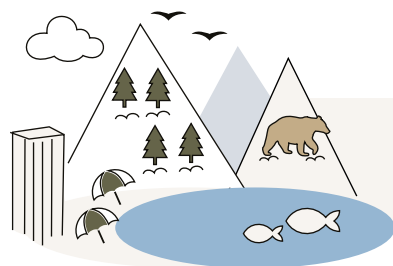
Gravel extraction



Deforestation



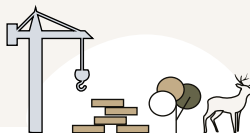
Construction nearby
protected area and KBAs



Western Tien-Shan, Dzhungaria,
Ile Alatau, Issyk Kul Lake region,
Charvak, Tashkent region



Roads expansion, regional
economic corridors



Construction nearby
protected area and KBAs



Tourism projects

The Mountains of Central Asia biodiversity hotspot includes a mosaic of diverse environments: fruit and nut forests, juniper woodlands and alpine meadows, turquoise lakes, white-water rivers and high- and low altitude deserts. These environments, which serve as pastures, sources of minerals and tourist attractions, face the range of pressures shown in the infographic. Zoï jointly with local partners identified risks and suggested solutions, the success

of which depends on political will, responsible behaviour and adherence to the required and recommended safeguards by business actors. Civil society organizations, activists, local communities and mass media also have a role to play in observing, communicating, informing and influencing the infrastructure projects. Zoï will continue field and awareness activities, mapping and networking to support successful implementation.

Mountains of Central Asia biodiversity hotspot



The Mountains of Central Asia biodiversity hotspot harbors around 5 000 species of plants, including 1 500 endemics. This is an ancestral home to apricots, plums, cherries, apples, pears, almonds, and tulips. In addition to the high variety of plants, there are 500 species of birds, 140 species of mammals, and 60 species of reptiles. This region lies along the ancient Silk Roads and has been home to the great commercial and cultural centers associated with that fabled route. It covers parts of 7 countries, including almost all of Kyrgyzstan and Tajikistan. Today, the Mountains of Central Asia are experiencing a boom in infrastructure, a growth in connectivity and an increase in accessibility to wild nature. Additional pressures on mountain biodiversity come from climate change, pollution and habitat fragmentation.

CEPF

The Critical Ecosystem Partnership Fund (CEPF) created in 2000 empowers people in developing and transitional countries to protect the world's biodiversity hotspots – some of the most biologically rich yet threatened ecosystems – that are vital to humanity. The fund is a joint program of l'Agence Française de Développement (AFD), Conservation International (CI), the European Union (EU), the Global Environment Facility (GEF), the Government of Japan and the World Bank (WB). CEPF provides grants to civil society organizations – nongovernmental, private sector and academic institutions around the globe to deliver innovative solutions on biodiversity conservation. CEPF started its grant program for Central Asia in 2019–2020, jointly with [WWF Russia](#) acting as [RIT](#) – Regional Implementation Team, and by summer 2022 distributed 60 small and large grants.

Zoï Environment Network

Zoï Environment Network is a Swiss non-profit organization established in 2009, based in Geneva, and provides environmental information services for governments, international organizations and civil society organizations. In 2016–2017 under guidance from CEPF, Zoï conducted situation mapping and stakeholder consultations, and prepared an Ecosystem Profile for the Mountains of Central Asia. Zoï communication products and analyses are widely known and disseminated, and are used by policymakers, development organizations and the general public.