



SoGE | School of Geography
and the Environment



6TH INTERDISCIPLINARY
OXFORD DESERT
● **CONFERENCE**

MARCH 2023



Economic
and Social
Research Council



WELCOME



Dear Desert Researchers,

Welcome to the 6th Oxford Desert Conference!

Now in its thirteenth year, we feel exceptionally fortunate to host the sixth Desert Conference in the School of Geography and the Environment. The Conference continues to bring together scholars from across the world to discuss and debate dryland themes, to build new connections and to showcase the significance of cross-disciplinary and interdisciplinary engagement. For the 2023 conference, the range and depth of research featured in the talks and roundtables reflects the vibrancy and growing community of this field of scholarship. We are grateful for the active participation of scholars and practitioners from across the globe, who make this event one of the most exciting in Oxford.

We wish you a most wonderful conference. May the shared admiration for deserts renew your love for these extraordinary places!

Yours Truly,
The Conference Organising Team

*"The desert is no longer a landscape, it is a pure form produced by the abstraction of all others."
-Jean Baudrillard*

VENUE INFORMATION



- **16th & 17th March**
6th Oxford Desert Conference
School of Geography and the Environment
South Parks Road, Oxford OX1 3QY

- **16th March Evening**
Desert Conference Dinner
St Cross College
61 St Giles, Oxford OX1 3LZ

- **17th March Afternoon and Evening**
Drinks Reception
Merton College
Merton Street, Oxford OX1 4JD

DAY 1 SCHEDULE



- **Diversity Room**
08:00 - 09:30: Registration
Tea and Coffee will be available

- **Main Lecture Theatre**
09:30 Welcome from Head of School, Professor Giles Wiggs
10:00 Keynote speech by Saverio Kratli with Dawn Chatty as Discussant
'Pastoralism in Development: An overview on Navigating a Treacherous Landscape'

- **Diversity Room and Desert Room**
11:00 Tea Break(s)

- **11:15** Panels 1a and 1b

Atmosphere Room

Panel 1a - Identity and Culture Across the Eurasian Steppe

Chair and Discussant: Peter Finke

Baigal Khuasai

- The role of epos in the construction of Buryat identity in post-Soviet Inner Asia

Matyzhanov Kenzhehan

- Melodies of the Great Steppe and the Desert Region

Akira Kimamura

- Hybridity and Vitality of Culture: Mongolian Traditional Performing Arts during the Covid-19 pandemic

Svetlana Anyeyeva and Almira Kalieva

- Dialogue of desert cultures on the Great Silk Road

Exhibition by Chieko Hirota

- Handicraft techniques inherited by the Kazakh people and their characteristics - a case study of Bayan-Ulgii Province, Mongolia

- **Diversity Room, Place Suite and Desert Room**
12:30 Lunch Break

- **13:30** Panels 2a and 2b

Atmosphere Room

Panel 2a - Milk and Meat in Pastoralist Societies

Chair and Discussant: Eric Thrift

Thomas White

- TBC

Yuki Morinaga

- Changes in the traditional nomadic drink "airag (fermented horse milk) in Mongolia

Joanna Roque de Pinho

- Olpul leCorona: Maasai meat camps at the intersection of a pandemic and Evangelical Christianity

Takahiro Tomita

- Reconstruction of pastoral management and local milk supply in suburban areas

Moe Terao

- Beliefs in Meat and Milk: A Study on the Relationship between the Wellness Philosophy and Traditional Foods in Mongolia during the Pandemic

Lecture Theatre

Panel 1b - Water in Global Deserts: Historical and Current Perspectives

Chair and Discussant: Joseph Bull

Bolormaa Purevjav

- Stakeholders' views on Integrated water management in the Gobi mining region

Iroda Amirova

- Water Management and Governance in Central Asia

Mohammed Masroor

- Monitoring of spatio-temporal pattern of drought conditions in semi-arid region of Deccan plateau in India

Phillipe Paillou

- The Ephemeral Kuiseb River (Namibia) Seen From Space: Past and Present History

Place Suite

Panel 2b - Desert Lifecycles

Chair and Discussant: Nurit Hashimshony-Yaffe

Limame Barbouchi

- The Desert: the forgotten ecological system that matters for human survival

Aimeerim Tursalieva

- The life of trash in Kyrgyzstan

Vanessa Lehmann

- Planting an Orange Orchard in the Desert

Jamie Hinch

- Smoke and Mirrors: Spectacular Afforestation and the Misappearance of Bakarwals in Pakistan

Wassef Al Sekhaneh

- Core Concepts of Criminal Responsibility in Bedouin Society

DAY 1 SCHEDULE



Diversity Room and Desert Rooms
14:45 Tea Break

15:00 Lecture Theatre

Troy Sternberg's Desert Quiz Games - with prizes!

Gordon Clarke

- How the Desert Made the Tent: An exploration of nomadic architecture and why it matters

Roundtable on Security, States and Conflict

Chair and Discussant: Chris Gerry

Kemel Toktomushev

- China, Central Asia, and Conspiracy Theories

Matthew Porges

- Trouble Underfoot: Navigating the Aftermath of War in Western Sahara's Pasturelands

Elena Korosteleva

- Nurturing societal resilience in Central Eurasia

Desert Room and Diversity Room
16:00 Tea Break

16:15 Panel 3a and 3

Atmosphere Room

Panel 3a - Mobile Pastoralism: Land and Livestock

Chair and Discussant: Saverio Krätli

Greg Akall

- The Politics of Community Land in Kenya: A case of Turkana and Isiolo Counties

Zsolt Molnar

- Global principles of traditional ecological knowledge: how herders see their pastures and livestock?

Peter Finke

- Patterns of land usage and distribution in Western Mongolia

Ilse Kahler-Rollefson

- The International Year of Camelids 2024: Opportunities and Challenges

Mogamat Igshaan Samuels

- Multi-dimensionality of herd mobility in the context of drought in the drylands of South Africa

Lecture Theatre

Panel 3b - Environmental Change and Governance in Global Drylands

Chair and Discussant: Troy Sternberg

Nicola Favretto

- Assessing opportunities for climate resilient development across drylands, small islands and mountain regions

Nausheen Mazhar

- Desertification Risk Assessment and Management Planning, based on Multi criteria evaluation-DPSIR approach for the Drylands of South Punjab, Pakistan

Amir Lewin

- Current and future land-uses, conservation status, and overlap of global arid landscapes

Jagbir Singh

- Geo-Environmental Threats to the Thar Desert

Zheng-Hong Kong

- Beyond the National Environmental Programmes: future environmental management in drylands, China

Poster by Vanessa Winchester

- Forest Restoration at Berenty Reserve, Southern Madagascar: A Pilot Study of Tree Growth Following the Framework Species Method

17:45 End of Day 1

19:00 Drinks and Formal Dinner at St. Cross College



Be Sure to Check Out the **White Horse Press** Table in the Desert Room!

DAY 2 SCHEDULE



● **Desert Room and Diversity Room**
Tea and Coffee
08:30 to 09:30

● **Lecture Theatre**
09:30 Keynote speech from Dawn Chatty
'The Camel: Beast of Burden or Cultural Icon'

● **Desert Room and Diversity Room**
10:30 Tea Break

● **10:45** Panel 4a and 4b

Atmosphere Room

Panel 4a - Mongolia: During and Post-Pandemic
Chair and Discussant: Allison Hahn

Batbuyan Batjav and Akira Kamimura

- Impact of the Covid-19 Pandemic on Mobile Pastoralism in Mongolia

Munkh-Erdene Gantulga

- On The Coal Truck: Long-Distance Movement of Mongolian Pastoralists in the Pandemic

Takahiro Ozaki

- Post COVID-19 pastoral society as a resilience from social disaster

Eric Thrift

- Patron-client relationships and market-based governance in the Mongolian Gobi

Yuko Matsumiya

- Exodus from overcrowded cities: Creating dual habitation in Ulaanbaatar during Covid

● **East Lab**
12:00 Lunch

● **13:00** Panel 5a and 5b

Atmosphere Room

Panel 5a - Mining and Energy Extraction
Chair and Discussant: Jill Shankleman

Nurit Hashimshony-Yaffe and Hilah Segal Klein

- Desert meeting point- renewable energy production and local populations in Lake Turkana, Kenya

Bayar Dashpurev

- Fragmented, Desolate, Frontier: How Perceptions of South Gobi Undermine Environmental Claim-Making

Sarah Lunaček

- Lack of information, false promises and cooptation: how to say no to uranium mines?

Iris Pakulla

- Degrees of ownership: the illusion of the stable job in post-pandemic Mongolia

Place Suite

Panel 4b - Water and Society: Institutions and Relations
Chair and Discussant: Joseph Bull

Frishta Qaderi

- Governing Fluid Spaces: Human-Fish Relations in Uzbekistan's Zarafshan River

Madina Gazieva

- Researching access to water in Uzbekistan: reflections on positionality and variegated reactions during fieldwork

Juan Antonio Hernández-Agüero

- S-Oases database: Identifying the global distribution of oases

Sayana Namsaraeva and Dobdon Maksarov

- When 'masters of water' leave the spot: Inner Asian cosmology of water and desertification from the Buddhist perspective

Place Suite

Panel 5b - Desert Biologies and Food
Chair and Discussant: Olwen Grace

Stella Nwawulu Chiemela et al

- Analysis of linkages between environmental change, conflict and food insecurity in dryland Nigeria

Abba Ngurno

- Examining the role of climate smart agriculture (CSA) interventions in enabling climate resilience development (CRD) for smallholder farmers in dryland Nigeria

Ursela Windberger

- Specific features of dromedary camel blood fluidity

Aref Abu Rabia

- Camel Pasture and Milk Medicinal Properties

Muhammad Farooq Hussain Munis

- Execution of native Cholistan desert flora to control rot of stone fruits

DAY 2 SCHEDULE



● 14:15: Tea and Coffee Break

● **14:30 Lecture Theatre**

Panel 6a - Knowledge and Institutions Across Desert Societies

Chair and Discussant: Sarah Lunaček

Alison Hahn

- Zooming in from the Desert

Sina Maghami Nick

- Changes in cycles of life for Bakhtiaris in the Zagros Mountains of Iran

Cory Rodgers

- Mobile Peoples' Rights within the Indigenous Peoples' Movement: an uneasy alliance

14:30 Atmosphere Room

Panel 6b - Education and Social Change

Chair and Discussant: Matthew Porges

Zalina Enikeeva

- The role of women during COVID-19 in three regions of Kyrgyzstan

Ulrike Schultz

- Enduring schools and becoming an educated person: Educational trajectories of young Turkana

Olga Mun

- Learning from the Tulips of the Steppe: Towards a Central Asian Sustainability Education Framework

● **15:15: Closing at School of Geography and the Environment**

15:30: Walk to Merton College

● 15:45 Final Panels at **Merton College: Conserving Wildlife in the Central Asian Steppes**

The final two panels will showcase wildlife conservation in Central Asia, co-hosted by Oxford University's Central Asian Network and the Saiga Conservation Alliance, the US Fish and Wildlife Service, and the Convention on Migratory Species' Central Asian Mammals Initiative.

Panel: Central Asian Mammals Initiative

This Panel session will be chaired by Polina Orlinsky of the Convention on Migratory Species. The session will introduce attendees to the work of Central Asia Mammals Initiative in coordinating actions to conserve the ecosystems of Central Asia and the migratory species which they contain, working with local pastoralists, governments and other stakeholders.

Also featuring:

- Elena Bykova (Uzbek Institute of Zoology)
- Buuveibaatar Bayarbaatar (Wildlife Conservation Society, Mongolia)
- Stephanie Ward (Frankfurt Zoological Society/Altyn Dala Project)
- Dr. Mohammad Faradinia (Research Fellow, Oxford Martin School)

Discussion: Wildlife trade supply chains in Central Asia

An interactive discussion on wildlife trade supply chains in Central Asia, and how researchers, conservationists, local and national governments, international organisations, businesses and local communities can collaborate to address the illegal and unsustainable trade in wildlife. This will be chaired by Dr Tatiana Hendrix, saiga programme lead at the USFWS, and will launch the saiga programme of the USFWS's new "Conservation Catalysis Fund".

Featuring:

- David Gill (Flora and Fauna International)
- Buuveibaatar Bayarbaatar (Wildlife Conservation Society, Mongolia)
- Dr. Amy Hinsley (Oxford Martin Programme on the Illegal Wildlife Trade)
- Peter Damerell (Saiga Conservation Alliance)
- Wildlife Conservation Society (China) and TRAFFIC (Malaysia) will also be represented

● 17:30 Closing Reception at Merton College

ABSTRACTS

KEYNOTE SPEECHES - DAY 1 AND DAY 2



16 March 2023

Dr **Saverio Krätli** specializes in the interface between science and development with a focus on pastoral systems. Saverio's current research interests include the relationship between resilience and dry land people's adaptive strategies to take advantage of environmental variability, and the gap between dry lands/pastoral development theory and its methodological legacy. Saverio has been an honorary editor of *Nomadic Peoples*, the journal of the Commission on Nomadic Peoples, International Union of Anthropological and Ethnological Sciences (IUAES) since 2009. He has recently launched a MOOC on Pastoralism and Development.

Pastoralism in Development: An Overview on Navigating A Treacherous Landscape

If a global perspective on pastoralism was possible, what would it look like? Thirty years after the theoretical framework for the understanding of pastoralism and the rangelands was challenged at its core, the old conceptual horizon is still alive. In fact, its key goals of sedentarisation and commercialisation are being revived. All this while climate change is deeply transforming the very horizon of development. This presentation provides a bird-view of the transformation in the theory of pastoralism, from the new understanding of variability in ecology, and its economic implications, all the way to the ongoing efforts to show the connection with the roots of agroecology and the fundamental issue (eminently political!) of the relationship with the natural environment. This theoretical landscape, still very much in the making, will be linked with the general trajectory of pastoral development policies and practices in the last decade.



17 March 2023

Professor **Dawn Chatty** is a social anthropologist whose ethnographic interests lie in the Middle East, particularly with nomadic pastoral tribes and refugee young people. Her research interests include a number of forced migration and development issues such as conservation-induced displacement, tribal resettlement, modern technology and social change, gender and development and the impact of prolonged conflict on refugee young people. She is both an academic anthropologist and a practitioner, having worked in universities in the USA, Lebanon, Syria and Oman, as well as with a number of development agencies such as the UNDP, UNICEF, FAO and IFAD. She was Director of the Refugee Studies Centre at the University of Oxford from 2011 to 2014. Dawn has written numerous books, including *Displacement and dispossession in the modern Middle East* (2010), and *Syria: The making and unmaking of a refuge state* (2018), *From Camel to Truck: The Bedouin in the Modern World* (2nd edition, 2013).

The Camel: Beast of Burden or Cultural Icon

This paper will explore the transformations in the use of camels in the Middle East from beasts of burden - often interbred with Bactrian camels in Anatolia to strengthen their endurance and load bearing - to icons of cultural heritage and sport - as exemplified in the UNESCO recognition of the Jordanian intangible camel culture heritage, and the Gulf states government sponsored camel races and beauty contests.

ABSTRACTS



PANEL 1A - IDENTITY AND CULTURE ACROSS THE EURASIAN STEPPE

Baigal Khuasai

National University of Mongolia and the International Institute for the Study of Nomadic Civilisations

The role of epos in the construction of Buryat identity in the post-Soviet Inner Asia

This paper explores how Buryat identity is reconstructed through the use of heroic epos. Since 1990s, epos appeared as an indispensable element of the Buryat national culture and identity. I find that *üliger* plays the prominent role as the significant factor in the process of self-presentation and became a practical social tool to strengthen the ethnic identity. Also, ethnography in this chapter shows how different national celebrations and events always endorse *üliger*s. The socio-political role of *üliger* grows significantly in this period together with the different ethno-festivals.

Kenzhehan Matyzhanov

Auezov Institute of Literature and Art, Kazakh Academy of Sciences

Melodies of the Great Steppe and the Desert Region

Words of wisdom took on eagle wings and began to fly across the Great Steppe, the deserts of Central Asia, lingering in hearts for generations. Epic stories conveyed the historical memory of the people. Thanks to its spiritual origins, original culture and purity of the poetic language have remained with us. The origins of Kazakh philosophical thought is centuries old, influenced by its spiritual heritage. It is significant that proverbs are actively used in the modern Kazakh language, words, apt comparisons and artistic images contained in inscriptions in honor of Kul-Tegin, Tonyukuk, Bilge-Kagan and many Turkic leaders, preserved in the endless steppe and deserts. An outstanding written monument in the 9th century was left by the famous singer and musician, performer of ancient folk wisdom Korkyt-ata. His musical heritage united the Central Asian region. 'Anthology of steppe folklore', published by the Auezov Institute of Literature and Art, contains the best examples of oral folk creativity of the heirs of the Great Steppe - kui, musical works, legends. Folklore and melodies of the Great Steppe acquired a "new breath" in a modern digital format.

Akira Kimamura

Tokyo University of Foreign Studies

Hybridity and Vitality of Culture: Mongolian Traditional Performing Arts during the Covid-19 pandemic

This paper aims to clarify how the hybridity of culture relates to cultural vitality, using as an example the "Dance Chance" movements and events carried out on Facebook and YouTube by Mongolian people around the world during the COVID-19 pandemic. In 2020, the Mongolian Government decided to broadcast a pre-recorded video clip on television instead of a live performance of the opening ceremony of Naadam due to the pandemic. On July 16, Erdene-Ochir, the founder of the "Dance Chance" movement, posted their dance performance on Facebook from the countryside. He patched into the performance a Kalmyk folk song from the clip's contents, the domestic tourism boom following the extended severe quarantine, and the "Kiki Dance Challenge" originating from the song by the famous rapper Drake. The post made many Mongolian followers spread their performances in various versions worldwide through social media. Mongolian traditional or national performing arts were invented as a new socialist national culture or a hybrid of European and Mongolian traditions. The description of the development of the "Dance Chance Challenge" movement during the COVID-19 pandemic shows the link between the hybridity rooted in the Soviet-era cultural policies and the vitality of the current culture.

ABSTRACTS

PANEL 1A - IDENTITY AND CULTURE ACROSS THE EURASIAN STEPPE



Svetlana Ananyeva, Auezov Institute of Literature and Arts, Kazakh Academy of Sciences
Almira Kalieva, Auezov Institute of Literature and Arts, Kazakh Academy of Sciences

Dialogue of desert cultures on the Great Silk Road

The transcultural picture of the modern world would not be complete without Kazakh culture and literature; without living interconnections of the literary text and cultural models of our time; without promoting the model of domestic cultural development, the national cultural code and Kazakh literature in foreign countries. Modern cultural and civilizational processes actualize in the humanitarian sphere the concept of "border", which does not divide but acts as a meeting place for "us" and "them". In this context, the Great Silk Road, connecting countries, peoples, civilizations, and culture, contributed to the development of "foreign", the synthesis of different cultural traditions and art systems, incorporating the achievements of national cultures in the world. The Central Asian region has served as a cultural source of the renaissance. Freedom of thought prevailed in the teachings and the work of Khayyam, Al-Farabi, Balasaguni and many prominent figures of science and culture. Concept of the Great Silk Road and its reconstruction in literary text allows modern Kazakh prose writers to connect the present with the past and make it an integral part of our spiritual world. Themes that remain relevant in the 21st century are: spiritual and moral values, world ethics, dialogue and cooperation, ethno-cultural identity, solidarity, and are embodied in literary texts by Anuar Alimzhanov, Maurice Simashko, Dukenbay Doszhan, Chingiz Aitmatov. This will be the focus of the presentation 'Dialogues of desert cultures on the Great Silk Road.'

Chieko Hirota, Chiba University

Exhibition: Handicraft techniques inherited by the Kazakh people and their characteristics - a case study of Bayan-Ulgii Province, Mongolia

This exhibition introduces the handicraft techniques and characteristics inherited by the Kazakhs living in Mongolia in the 20th and 21st centuries. Today, Kazakhs account for approximately 4% of the population of Mongolia. They are the descendants of Kazakhs who migrated from the southern foothills of the Altai Mountains at the end of the 19th century. They pride themselves on maintaining traditional Kazakh cultural practices. This exhibition focuses on the handicrafts of women among the Kazakh cultural practices that have been handed down in Mongolia. Specifically, the exhibition focuses on photographs and videos recorded during research conducted in Bayan-Ulgii Province, Mongolia between 2011 and 2019, as well as actual objects collected, to show what, how and for what purposes Kazakh people in Mongolia have made crafts on a daily basis. The exhibition shows the characteristics of the handicraft techniques inherited by the Kazakhs in Mongolia and how the natural and social environment in the western region of Mongolia has supported the inheritance of these techniques.

"When you're in the desert, you look into infinity...."

-David Lean

ABSTRACTS



PANEL 1B - WATER IN GLOBAL DESERTS: HISTORICAL AND CURRENT PERSPECTIVES

Bolormaa Purevjav
University of British Columbia

Stakeholders' views on Integrated water management in the Gobi mining region.

Water resources management in the dry desert region represents a huge challenge to regulators, mining companies and host communities. The southern part of Mongolia, the Gobi, is also called a mining region due to the significant mining activities in the region. There are several giant mines, such as Oyu Tolgoi copper-gold mine, Tavan Tolgoi coal mines, Mongolian Alt Corporation coal and copper mines, and Erdene Resources gold mine and more. Although the mining industry in Mongolia makes a significant economic contribution, it uses a significant amount of water in mineral processing and impacts the lives of people living in the Gobi region, in particular herding communities. Livestock is an important economic sector in Mongolia, and also an important part of cultural identity, and national security. The current research explores stakeholders' views and perspectives on integrated water management to understand water management practices and experiences. The research findings provide insights on how to disentangle the complexity around water access and inform what water governance issues should be addressed first to achieve sustainable water management in the region. The current research applies core elements of the Integrated Water Resources Management approach for research analysis. These core elements are the stakeholder's engagement process, relevant government institutions, and information for decision-making.

Iroda Amirova
Center for Policy Research at Westminster International University in Tashkent

Water Management and Governance in Central Asia

In Central Asia, community water governance institutions emerged and prevailed for a long time. By employing an analytical modelling approach using variants of the evolutionary Hawk-Dove game, we scrutinize three epochs' (pre-Tsarist, Tsarist and Soviet) coordination mechanisms and qualitatively compare them in the efficiency spectrum. We find that the pre-Tsarist community water governance setting, due to its synergetic and pluralistic aspects, was associated with higher efficiency than the Tsarist and Soviet periods' settings. The pre-Tsarist community arrangement linked irrigation duties with benefits. Our analytical model reveals how the Tsarist Russian regulation that replaced the election-sanctioning element with a de-facto system appointing the irrigation staff and paying them fixed wages corrupted the well-established pre-Tsarist decentralized water governance. We term this move the "Kaufman drift". Resulting inadequacies in the water governance could have been averted either by restoring the community mechanism's election-sanctioning attribute or else with an alternative approach such as privatizing water resources. With the use of the "Krivoshin game," we produce an alternative scenario for the region where we envisage the potential consequences of the water privatization. Modelling history might not disentangle the complex nature of water governance evolution fully, however, the heuristics we use in the analysis assist in guiding the diagnosis of the matter and its solution. This makes our study well-timed for contemporary Central Asia. The analyses assess current water management's chances to return to ancient principles of election-sanctioning and perspectives of private irrigation water rights.

Mohammed Masroor
Jamia Millia Islamia University

Monitoring of spatio-temporal pattern of drought conditions in semi-arid region of Deccan plateau in India

The semi-arid region of the Deccan plateau in India has been experiencing significant trends rainfall, maximum & minimum temperatures, relative humidity, rainy days, mean wind speed, mean evaporation at monthly, seasonal and annual scales. Forecast of these climate variables followed the trend of historical data and predicated decrease in rainfall and increase in maximum and minimum temperature leading to desert or arid climate in the study area. Therefore, monitoring and assessment of drought conditions is necessary. This paper makes an embryonic attempt to assessed drought conditions using remote sensing data in semi-arid region of Deccan Plateau in India. MODIS monthly time series remote sensing data during 2000-2021 was utilized for the assessment of drought conditions in the study area. Land surface temperature (LST) and enhanced vegetation index (EVI) data were used to construct the drought indices, namely vegetation condition index (VCI), temperature condition index (TCI) and vegetation health index (VHI). The findings revealed that nearly 15 watersheds out of 56 watersheds were severely drought affected in the study area. The mean frequency of the drought occurrence was 7.95 months during the study period.

ABSTRACTS



PANEL 1B - WATER IN GLOBAL DESERTS: HISTORICAL AND CURRENT PERSPECTIVES



Phillipe Paillou
University of Bordeaux

The Ephemeral Kuiseb River (Namibia) Seen From Space: Past and Present History

The Kuiseb River is one of the major ephemeral rivers of western Namibia, setting the northern limit of the Namib Sand Sea and outflowing in the Atlantic Ocean. Using high resolution radar images from the Japanese ALOS-2 satellite, we mapped for the first time numerous channels hidden under surface aeolian sediments. Radar-detected channels were studied during fieldwork in May 2019, confirming the existence of the Paleo-Kuiseb drainage system, remnant of the Holocene history of the Kuiseb River moving northward under the progression of the Namib Sand Sea. We also investigated potentials of multi-wavelength satellite data to monitor the dynamics of the Kuiseb River. We acquired time series of multi-spectral optical and near infrared imagery together with synthetic aperture radar scenes from the Sentinel 1 and 2 satellites operated by ESA. Strong variations in remote sensing data were observed during March and April 2017 and June and July 2018 in a tributary of the Kuiseb River, rain events causing its reactivation. However, evidences of reactivation were also observed during a major flood in 2021, while no rain occurred on the studied area: this is related to the dynamics of the aquifer of the Kuiseb River.

*“In the empire of desert,
water is the king and shadow is the queen.”
~ Mehmet Murat Ildan*

ABSTRACTS

PANEL 2A - MILK AND MEAT IN PASTORALIST SOCIETIES



Yuki Morinaga
Meiji University

Changes in the traditional nomadic drink "airag (fermented horse milk) in Mongolia

A drink made by fermenting horse milk is called airag (kumis) and has been consumed by the Mongolian people of the Eurasian steppe for centuries. Airag is a fizzy drink that tastes similar to yogurt and contains several percent alcohol. In the steppe areas of Mongolia, many households produce their own airag, and some of it is also transported to cities. It is drunk on a daily basis in the summer and is also an essential part of various events such as festivals and ceremonies. As nomads in Eurasia become more settled, it becomes difficult to keep herds of large livestock such as horses and camels, which makes the production of these dairy products difficult. Because of the known benefits of airag, airag production continues on farms and in factories even in areas that have become more settled. However, there are few areas, except for Mongolia, where airag production continues to be active while people are nomadic. In this sense, home-produced airag are a symbol of nomadism. However, the process is in danger of rapidly dying out, and the traditional method of making airag using cow-skin bags in Mongolia was registered as a UNESCO World Heritage Site in 2019. This talk describes the transition of airag through a national survey in Mongolia in 2012, a survey of 51 households in Mogod County in Bulgan Province in northern Mongolia, a famous production area, in 2018, and one-off interviews through 2023. We will describe who drinks it, how it is produced, and how it is studied. We will also discuss how airag has been affected by COVID-19, starting in 2020, with the custom of drinking indoors from a single bowl with many people passing it around.

Joana Roque de Pinho
Centro de Estudos Internacionais (CEI), ISCTE-IUL

Olpul leCorona: Maasai meat camps at the intersection of a pandemic and Evangelical Christianity

The Maasai 'meat camps' or ilpuli (sing. olupul) have been described as male meat-eating feasts and, more recently, as 'holistic healthcare systems'. In practice, ilpuli are secluded gatherings in bush areas whose participants consume meat and medicinal plants, socialize, and pray. During the Covid-19 pandemic, ilpuli underwent an enthusiastic revival in Maasai communities of southern Kenya. As news of the pandemic and lockdown measures hit Narok county in March of 2020, Maasai men 'ran to the bushes' to join ilpuli. This presentation, based on two years of remote research conducted with pastoralist friends acting as co-researchers, followed by fieldwork, explores the motivations for joining ilpuli, and the perceived benefits thereof. It also examines innovations reflecting the epidemiological context, and the accommodation of Evangelical beliefs and practices. While immunity-strengthening was a prime motivation, intense socializing (while under official social distancing orders), increased solidarity, sharing of medicinal knowledge and training in pastoral practices were unexpected and deeply valued benefits. Thanks to its perceived therapeutic, social, and spiritual benefits, which spill over to other members of Maasai society, the olupul emerged as a pastoral response to the extreme uncertainty brought about by Covid-19 and associated anxieties. Its widespread enjoyment during the pandemic also reveals a broader local appreciation for pastoral strategies as assets under extreme, global crises.

ABSTRACTS

PANEL 2A - MILK AND MEAT IN PASTORALIST SOCIETIES



Takahiro Tomita
Graduate School of Intercultural Studies, Kobe University

Reconstruction of pastoral management and local milk supply in suburban areas

The food hoarding and supply disruptions around the world caused by the Coronavirus disease (COVID-19) revealed the importance of a stable food supply and highlighted the vulnerability of the centralized global supply chain to shocks. This presentation investigates the characteristics of the local food production, distribution, and consumption system and its problems by focusing on the expansion of small-scale dairy production in the suburban areas of Erdenet, Mongolia. Since the 2000s, small-scale dairy production and sales, mainly by individual family businesses, have become widespread near city and rural centers. To increase the number of their livestock, herders have engaged in the sale of cashable products other than livestock (meat). Compared to such products as cashmere, dairy products afford herders more room to ingeniously increase their income and they likely reflect the choices and decisions of the households. There are differences in the types of dairy products sold and the amount and frequency of transactions among Bulgan province's three regions – Orkhon, Selenge, and Teshig. Herders have adapted small-scale and informal dairy production to local environmental, social and economic conditions, considering the size and composition of their herds and the availability of land and manpower, as well as the distance from markets, which impacts the cost of preservation and transportation of dairy products.

Moe Terao
Kagoshima University

Beliefs in Meat and Milk: A Study on the Relationship between the Wellness Philosophy and Traditional Foods in Mongolia during the Pandemic.

This talk examines what kinds of foods Mongolian people in rural area eat or drink to cope with COVID-19 and discusses the cultural linkage between various notions of health or purity.

When I visited Mongolian rural area for the first time in two years, I asked people in my fieldwork place about their experiences with COVID. And they usually explained their attitude toward this infection by saying "Hüchtei hool iddeg baisan ochiraas gaigüi" (they were fine because they eat "hüchitei" meals). "Hüchtei" is a Mongolian word that means some conditions with energy (hüch). In this case, "hüchitei hool" means meals rich in meat and fat. However, the word "hüch" also means fermentation. The sourness of the milk products, which is a proof of sufficient fermentation, is described as "hüchtei". So good fermentation also implies a fullness of energy.

In Japan, there also have been rumors of fermented food's potential for increasing resistance to the new, unknown viruses. There is some strong belief in the positive effects of fermented food on human physical health. However, in Mongolia, the words that I heard may mean more than that. It is because meat and dairy fermented foods are at the core of the Mongolian food culture, which is from pastoralism. These two are symbolic substances or medias that connect herders to supernatural beings through various rituals and are therefore "energetic" foods. In this chapter I identify what foods are associated with ideas of health, energy, fullness, or power, and how these are manifested in actual eating practices in Mongolia.

A Mongolian Triad

*"Three Difficult Things in the World:
To grow vegetables on stones is difficult.*

To light fire on water is difficult.

To keep snow on an ox's horns is difficult."

-In C.R. Bawden's Anthology of Mongolian Traditional Literature

ABSTRACTS

PANEL 2B - DESERT LIFECYCLES



Limame Barbouchi
Ibn Zohr University, Morocco

The Desert: the forgotten ecological system that matters for human survival

The Will to Live, as Arthur Schopenhauer nicely argued, is a conceptual point of departure to understand the irrational, ceaseless whim that drives instinctive behaviours, causing an endless ravenous endeavours in human existence. However, this endless need to survive has been harming the earth in various ways. The populated world has proved itself to be a fundamental source of all environmental crises. To green its energies, in an attempt to save the environment, the populated world has turned their attention to the empty corners of the world, the unpopulated world for renewable energies of wind-power, solar-power, and famine food resources exercises. The desert is a good example of those unpopulated ecologies. To explore its inhabitants' environmental practices, cultural in nature, this presentation will present how the desert survival mode can offer alternative ways of life that both bring back environmental justice to space and guarantee a sexual equality in dealing with space. This paper will particularly focus on the Hassani & Touareg communities in Great Sahara.

Aimeerim Tursalieva
Tazar Kyrgyzstan

The life of trash in Kyrgyzstan

Garbage problems are growing in Kyrgyzstan every year. In Bishkek, each citizen produces more than 500 kg of garbage per year. In Kyrgyzstan, there is not a single well-built landfill, including Bishkek itself. The state waste management system has not been built. However, there are attempts to separate waste collection, which fails due to the lack of a training component among the local population. Although the collection and recycling of waste are in the informal sector of the economy, it is developing and rapidly expanding. It creates new realities and opportunities for the development and improvement of the environmental situation in the country.

Vanessa Lehmann
Goldsmiths, University of London

Planting an Orange Orchard in the Desert

The talk is an extract from my doctoral research on the transformation of Egypt's desert landscapes, particularly since the postcolonial period, as the desert becomes a 'strategic vacuum' (president Anwar Sadat, 1974). In the research, I argue that zones of development have been designed like 'islands in the sea of sand'; as extraterritorial spaces (Easterling 2014) or (spatial) zoning technologies (Ong 2006) of bureaucratic and legal exception. I add to this conception that these 'islands' also follow a specific material and social configuration and the talk will show this taking the example of land reclamation schemes in Egypt. As a territorial practice - based on the human-lead manipulation of water and with the goal to expand agricultural land surface and also seasonal crop windows - land reclamation has been done since Pharaonic times, most notably on the Nile watershed. Today, however, through a dispositive of land allocation, the techno-politics of hydrology, energy infrastructures, public administration and labour relations, dependencies on shared environmental resources are being increasingly circumvented and a more insular, controllable and most importantly predictable environmental setup is being configured. The talk will address what the specificities of this territorial configuration look like on the desert ground in Egypt, its affects and limits.

ABSTRACTS

PANEL 2B - DESERT LIFECYCLES



Jamie Hinch
University of Oxford

Smoke and Mirrors: Spectacular Afforestation and the Misappearance of Bakarwals in Pakistan
TBC

Wassef Al Sekhaneh
Faculty of Archaeology and Anthropology, Yarmouk University

Core Concepts of Criminal Responsibility in Bedouin Society

Collective responsibility is a concept the meaning of which varies according to the culture of a society and to the particular situation in which it is called upon. In the Bedouin social reality, the world of moral persons rests upon an intrinsic solidarity, a moral bond of unity, which persons feel towards one another. It is an attribute of the blood distance between individuals, and of the sharing of honour which generates rights and duties within a group with an external boundary. Collective responsibility is a central dynamic factor of tribal solidarity reinforcing the cohesion within the tribal structure. Bedouins thus share a collective responsibility to ensure the success of the tribe as a whole because this reflects on all of its members. This responsibility concerns above all the protection of every member of the tribe. It is firmly believed that one will never be capable of shouldering this responsibility without closing the ranks, overcoming differences, and confronting those who try to undermine this solidarity and divide the ranks.

*"So it always is:
when you escape to a desert the silence shouts
in your ear."
-Graham Greene*

PRE-ROUNDTABLE TALK

Gordon Clarke
Institute of Nomadic Architecture | University of Exeter

How the Desert Made the Tent: An exploration of nomadic architecture and why it matters

The desert gave birth to the tent. I would like to present some new research that charts the changing architecture from Kenya through Ethiopia to the sahel. I will show how designs morph with the environment, becoming ever lighter and more mobile as the land becomes more arid. I also particularly want to communicate how rapidly these structures are disappearing and with them a heritage of global importance. I have a unique catalogue of photos and video footage that I will use to support the talk. You can see a little of this at www.nomads.org.

ABSTRACTS



ROUNDTABLE - SECURITY AND CONFLICT

Kemel Toktomushev
University of Central Asia

China, Central Asia, and Conspiracy Theories

Chinese initiatives in Central Asia are clouded by rumors, speculative knowledge, and conspiracy theories. Conspiracy theories are the discourses, which explain a significant event as secretly planned and executed by an agent or a group of agents. Moon landings, Illuminati, Bilderberg Group, and the New World Order are a small fraction of conspiracy theories that dominate public discourses around the globe. However, conspiracy theories shall not be regarded purely from an entertainment perspective, as these narratives often embody distorted realities of existing problems. Conspiracy theories are not about truth or falsehood, but about their power to affect both political discourses and political practices. Accordingly, this work will examine the sources of anti-Chinese conspiracy theories in Central Asia and whether they are reproducing elitism, patriarchy, and patronage as modes of governance in the region. The article will also explore whether the outbreak of coronavirus had a toll on Chinese initiatives in Central Asia and the narratives of the Chinese dream of the common and harmonious future.

Matthew Porges
University of Oxford

Trouble Underfoot: Navigating the Aftermath of War in Western Sahara's Pasturelands

Western Sahara, a former Spanish colony now partially occupied by Morocco, is contaminated by several million landmines and other Unexploded Ordnance (UXO). This material was largely deposited by the Moroccan military during the 1975-1991 war for control of the territory between Morocco and the pro-independence Polisario Front. Since the conclusion of war, both Polisario and the UN mission in Western Sahara have engaged in demining and landmine safety training in the context of ongoing pastoralist mobility throughout the Polisario-controlled territory of Western Sahara. Drawing on extensive ethnographic fieldwork in Western Sahara, this presentation will discuss challenges and adaptations to UXO by Western Sahara's pastoralists, with a focus on spatial imaginaries and loci of agency in contexts of regular mobility.

Elena Korosteleva
University of Warwick

Nurturing Societal Resilience in Central Asia

This paper argues for the need to rethink governance through the lens of 'resilience as self-governance'. Building on complexity-thinking, it contends that in the context of change and complex life, challenges are most efficiently dealt with, at the source, 'locally', to make 'the global' more responsive and sustainable.

Resilience as self-governance is advanced as an overriding framework to explore its constitutive elements - identity, 'good life', local coping strategies and support infrastructures - which, when mobilized, can turn communities into 'peoplehood' in the face of adversity. It is argued that these communities of relations, self-organised and self-aware of their worth, is what makes them so resilient to crises, and what helps them to transform with change; and how they should be governed today. Central Eurasia, spanning from Belarus in the west, to Azerbaijan in the south and Kyrgyzstan in the east, provides fertile grounds for exploring how resilience works in practice in times of complex change. By immersing into centuries-long traditions and philosophy, local experiences of survival, and visions for change, this book shows that governability at any level requires a substantive 'local' input to make 'the global' more enduring and resilient in a complex adaptive world.

“Desert is simply that: an ecstatic critique of culture,
an ecstatic form of disappearance.”

~Jean Baudrillard

ABSTRACTS

PANEL 3A - MOBILE PASTORALISM: LAND AND LIVESTOCK



Greg Akall
Drylands Learning and Capacity Building Initiative (DLCI)

The Politics of Community Land in Kenya: A case of Turkana and Isiolo Counties

Sustainable pastoralism in arid and semi-arid lands of northern Kenya inhabited by pastoralist communities is critical for coping with drought risk. These drylands ecosystem inhabited by pastoralist communities like the Turkana are large-scale ranges include both dry and wet season pastures that ensure large herds of livestock can be sustained. The Community Land Act (CLA) of 2016, provides a formal legal mechanism whereby communities may (re) claim territories they held historically (Government of Kenya, 2016). The CLA puts greater decision-making authority over local land use in the hands of those affected. Additionally, the act also prohibits county governments from selling, transferring, or converting for private purpose any unregistered community land, which may provide some protection against encroachment and illegal distribution. However, recent field work in Turkana and Isiolo Counties, for instance, suggests that community land act implementation has been shrouded by controversies of common land and privatisation politics pitting ruling elites/politicians who have worked against CLA 2016 implementation and local communities fighting to protect their common land from dispossession by the State and private investors. In Turkana and Isiolo, local pastoralist communities are facing the problems of common land grabbing, land privatisation, land fragmentation, fencing off of dry season grazing areas and blockage of migratory routes denying livestock access to areas with pasture and water amid the current drought reported as the worst in 40 years in the region's history.

Zsolt Molnar
Centre for Ecological Research, Hungary

Global principles of traditional ecological knowledge: how herders see their pastures and livestock?

An understanding of traditional ecological knowledge systems is increasingly acknowledged as a means of helping to develop global, regional and national, but locally relevant policies. Pastoralists often use lands that are unsuitable for crops due to biophysical and climatic extremities and variabilities. Forage plants of pastures are utilized by herding communities by applying locally relevant multigenerational knowledge. We analyzed the forage-related knowledge of pastoralists and herders by reviewing scientific papers and video documentaries on forage plants and indicators, their use in land management, and plant-livestock interactions. We found 35 indicators used by herders to describe forage species. The indicators described botanical features, livestock behavior during grazing, and the impact of plants on livestock condition and health. The indicators were used in context-specific management decisions, with a variety of objectives to optimize grazing. We identified ten global principles, including, among others, a livestock-centered perspective, close monitoring and targeted pasturing of various forages, and the use of different livestock types and well-planned spatial movements at multiple scales to optimize the utilization of available plant resources. Although pastoralists vary greatly across the globe, the character and use of their traditional forage-related knowledge do seem to follow strikingly similar principles.

Peter Finke
University of Zurich

Patterns of land usage and distribution in Western Mongolia

The western provinces of Mongolia are peculiar for several reasons, including remoteness and a more diverse ethnic composition than other parts of the country. Equally distinctive is its ecology and topography with the highest mountains, the northernmost deserts and one of the harshest climates all over Central Asia. This also influences patterns of land usage. Annual mobility of pastoralists is of far greater extent and governed by a multitude of variables, utilizing a range of vegetation zones between the desert-zone lowlands (mostly in spring and autumn) and alpine meadows (during summer and winter). In combination with the needed flexibility to adapt to ever-changing circumstances, this creates a rather complicated system of allocation rules that are, at times, detrimental to long-term sustainability. This paper describes the challenges pastoralists in Western Mongolia face since the transition to an economy based on private property in livestock and the utilization of the market, which was accompanied by large-scale migratory movements and ecological hazards.

ABSTRACTS



PANEL 3A - MOBILE PASTORALISM: LAND AND LIVESTOCK

Ilse Kahler-Rollefson
League for Pastoral Peoples

The International Year of Camelids 2024: Opportunities and Challenges

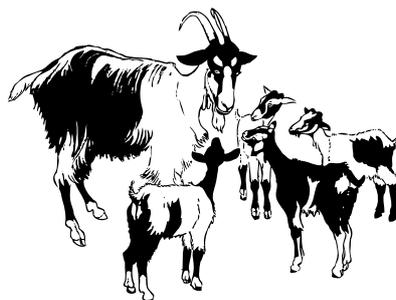
In 2017, the UN General Assembly declared 2024 the International Year of Camelids (IYC), encouraging 'all Member States, the United Nations system and all other actors to take advantage of the International Year to promote awareness among the public of the economic and cultural importance of camelids and to foster the consumption of the goods produced from these mammals, including edible goods, in order to contribute to the eradication of hunger, food insecurity and malnutrition'.

So what does this mean and how can we ensure that benefits of the IYC actually trickle down to the people at the grassroots who breed and manage camelids in both the Old World and the New World? This paper will take a critical look at on-going camel research and analyse whether it is really directed at achieving the goals of the IYC.

Mogamat Igshaan Samuels
Agricultural Research Council, South Africa

Multi-dimensionality of herd mobility in the context of drought in the drylands of South Africa

About 69% of South Africa is rangeland, which are either privately, communal, tribal or state owned. These different rangelands have evolved due to the country's oppressive history but all rangelands in the arid zone have a high degree of variability, unpredictability and are either fragmented or spatially constrained. Herd mobility is viewed as a nature-based management strategy that is adaptable to these harsh environments and can provide ecosystem services and build resilience. This study examined how herd mobility was implemented in different dryland pastoral systems in South Africa during drought periods. Well-established networks facilitated livestock on private ranches to be moved within and across provincial boundaries by trucks up for more than a 1000 kilometers to other private farms. In the communal areas, livestock was moved around on foot within extensive, unfenced rangelands of up to 0.5m ha in size, to farms acquired through land reform or onto adjacent private ranches but with negotiated compensation. Despite differences in land tenure and livestock production systems, mobility remained key to increase herd resilience. Policies are needed in support herd mobility to protect rangelands from climate impacts and conversion and land reform could play an important role in securing pastoral lands.



ABSTRACTS

PANEL 3B - ENVIRONMENTAL CHANGE AND GOVERNANCE IN GLOBAL DRYLANDS



Nicola Favretto
University of York

Assessing opportunities for climate resilient development across drylands, small islands and mountain regions

A number of scientific assessments have been carried out in recent years to try to understand climate resilient development that adopts mitigation and adaptation measures to secure a safe climate, meet human needs and enable sustainable development. However, few analyses look across different vulnerable regions and livelihood systems to understand similarities and differences in the constraints and opportunities presented by adaptation and transitions towards climate resilient development. This paper assesses adaptation across drylands, small islands and mountain systems, identifying similarities and differences, and assessing co-benefits and opportunities for synergy as different systems attempt to transition towards climate resilient development. It asks: (1) are the same climate risks experienced across drylands, small islands and mountain regions?, (2) what types of adaptation are being employed across these geographies and what are their similarities and differences?, and (3) how can governance regimes can be conducive to climate resilient development, supporting not only adaptation but also mitigation and development? The identified measures focus on promoting land and ecosystem-based approaches, livelihood diversification and economic development, mixed knowledges and policy and institutional measures. A range of governance actions are identified with potential to accelerate transitions towards climate resilient development.

Nausheen Mazhar
Lahore College for Women University, Lahore

Desertification Risk Assessment and Management Planning, based on Multi criteria evaluation-DPSIR approach for the Drylands of South Punjab, Pakistan

Desertification causes perilous threat to human existence in Pakistan as 90% of its land is either suffering from or vulnerable to it in near future. This study aims to calculate the desertification risk index (DRI) for the drylands of South Punjab, Pakistan and then to formulate a management plan for different intensities of desertification. Six selective indicators, affecting land degradation were used to calculate DRI. Data of the same was collected through field survey and satellite imagery. A multi-criteria evaluation procedure was devised, based on analytical hierarchical process to identify the variation of desertification intensity in the study area and Pairwise Comparison Matrix was used to assign weights to these indicators. Study proceeded to propose desertification management plan and Driver, Pressure, Status, Impact and Response (DPSIR) framework for the DRI zones highlighted in the mapping analysis. The findings of the desertification management plan, aligned with the DRI analysis, revealed that very low DRI class covered 0.03%, low DRI covered 0.04%, moderate DRI was spread over 57.19% and high DRI covered 38.44% of the study area for which, no planning, maintaining status quo, hazard avoidance and lastly controlling measures were recommended, respectively for areas falling in each class. The study recommends that in order to address SDG 15.3, consistent monitoring is essential and policy makers need to plan desertification control policies region specific, based upon the level of intensity of this hazard.

Amir Lewin
Ben-Gurion University of the Negev

Current and future land-uses, conservation status, and overlap of global arid landscapes

Deserts are biodiverse and vital environments, yet are often overlooked and rarely prioritized. Greater emphasis on the inclusion of deserts into an integrated framework for conservation and the development of new protection priorities has the potential to significantly contribute towards achieving global targets of biodiversity conservation while also preserving desert habitats worldwide. We evaluate the global distribution of deserts to assess their degree of congruency, protected area coverage, biodiversity and future threats, providing a relevant framework for the strategic development of conservation targets. We find over 13 million km² of unique, non-overlapping desert regions based on different desert classifications. Drylands (UNEP-WCMC) are considerably less protected (9%) than non-Drylands (16%), with an effective halving of protected coverage when considering areas set aside strictly for biodiversity conservation. Consequently, the vast majority of Dryland vertebrate species across continents have less than 10% of their Dryland ranges protected. Under future climate and socioeconomic change scenarios by 2100, few natural Drylands remain intact coupled with extreme land-use intensification even under very optimistic scenarios, especially due to the expansion of alternative energy sources, threatening the future integrity and persistence of Drylands and desert species – an alarming and urgent call for expanding desert protected area networks.

ABSTRACTS



PANEL 3B - ENVIRONMENTAL CHANGE AND GOVERNANCE IN GLOBAL DRYLANDS

Jagbir Singh
Swami Shraddhanand College, University of Delhi

Geo-Environmental Threats to the Thar Desert

India is a very large country, covering 3.28 million square kilometers, or 2.4 per cent of the world's land surface area. It has the second largest population in the world and in India, the Thar, the smallest desert in the world, occupies nearly 385,000 km and about 9 per cent of the area of the country. But it is the most populous desert in the world. India, has over 8% of the world's total biodiversity, making it one of the 12 mega-diversity countries in the world. The present landscape aridification due to the precipitation decrease and reinforced windiness generates surface-cover dryness, aeolian erosion with a mass sediment transfer, salinity of excessively irrigated lands and groundwater depletion. Together these pose major geo-environmental threats and settlement risks of the expanding Thar Desert. It is highlighted that sustainable use and management of this biodiversity is necessary to support human and livestock needs besides conservation. The strategy should be such that it is supported by public.

Zheng-Hong Kong et al
University of York

Beyond the National Environmental Programmes: future environmental management in drylands, China

This paper investigates social learning among scientists and policymakers in the development and implementation of National Environmental Programmes (NEPs) in China. We considered NEPs as resulting from previous policy learning, and as part of an on-going, iterative learning-by-doing process that characterises China's policy approach. We aimed to: 1) assess the changes delivered by the NEPs; 2) examine the ways in which social learning occurred and the impacts this had for affected actors; and to 3) identify what can be learnt from stakeholders' experiences with the NEPs to inform the design of social learning processes and to support future environmental management in the Chinese context. While the NEPs achieved their environmental goals, delivering positive environmental changes, they created new socio-economic issues that they were unable to solve due to limited participation of local communities in the learning process. In official reports, information sharing with the public focused on only good news about national progress in restoration and led to missed chances for broader social learning and to inform policymakers and educate civil society at large of emerging challenges. Despite the NEPs having tried to redress undesirable environmental conditions such as land degradation, the learning process it generated was unable to deliver supporting cognitive and relational changes or build wider capacity among local communities. Mechanisms to include communities in social learning are still lacking in China.

Vanessa Winchester
University of Oxford

POSTER: Forest Restoration at Berenty Reserve, Southern Madagascar: A Pilot Study of Tree Growth Following the Framework Species Method

Forest conservation and restoration are urgently needed to preserve key resources for the endemic fauna of dry southern Madagascar. This is a priority in the shrinking, seasonally dry forest of Berenty, a private reserve in Southern Madagascar. However, to provide a basis for forest restoration, a study of tree growth and regeneration in this unique biome is essential. A three-year planting program of native and endemic species was initiated in 2016. Three trial plots were established in forest gaps, with varying microclimates and soil conditions: one on the riverside, one in the mid-forest and the third in a degraded dryland area. We planted 1297 seedlings of 24 native tree species with plantings spaced at 1 m and 1.5 m and measured their height and stem diameters and recorded seedling mortality. We also recorded plant recruitment on the plots from the nearby forest. The main findings were that growth was best on the mid-forest plot planted at 1 m. Seedling mortality was highest on the riverside plot for the 1 m seedlings and least in the mid-forest at both planting distances. Recruitment was highest in the mid-forest at both planting distances and high also at 1.5 m by the river



ABSTRACTS

PANEL 4A - MONGOLIA: DURING AND AFTER THE PANDEMIC



Batbuyan Batjav, Center for Nomadic Pastoralism Studies, Mongolia
Akira Kamimura, Tokyo University of Foreign Studies

Impact of the Covid-19 Pandemic on Mobile Pastoralism in Mongolia.

This paper aims to explore the impact of the Covid-19 pandemic on mobile pastoralism in Mongolia. We conducted field surveys with questionnaires and open-ended interviews in the summer of 2022, which involved around 80 herder households. The questionnaire included questions to ask about how the governmental policies against the pandemic had affected the following three flows: (1) the flow of people, (2) the flow of animals (pastoral or livestock migration), and (3) the flow of goods (purchase of foods and daily commodities, and sale of livestock products). While they evaluated the impact of the pandemic on their livelihoods and lives as low in total, most respondents thought there would still be a significant negative impact on health and the economy on a global basis. The policies cutting the above flows generated detours and new connections on the other hand: domestic tourism boom, distrust and evasion of vaccines, and reconnect to TK as a return to traditional food and herbs enhancing immunity, which the government also encouraged. Moreover, the large gap between the outside-high and the inside-low risk evaluation probably reflects their self-perception that their homeland or pastoral area is healthy, less risky, and pure. The pandemic reinforced the stereotype.

Munkh-Erdene Gantulga
National University of Mongolia

On The Coal Truck: Long-Distance Movement of Mongolian Pastoralists in the Pandemic

The pandemic has restricted mobility around the world since Covid-19 started. However, in Mongolia, a non-traditional and distinctive kind of livestock movement was boomed during that time. Pastoralists hired coal trucks to load the livestock and moved from several hundred to thousand kilometres for good pastureland. Traditionally, scholarships on pastoralism in Inner Asia discuss more the restricted or less mobility of pastoralists due to government policy, environmental conditions, and social transformation. Based on ethnographic materials which were collected in Bayankhongor Province in Mongolia, this paper argues that the movement on the coal truck is not only a new type of mobility but also another form of risk mitigation technique of the dzud in the country.

Takahiro Ozaki
Kagoshima University

Post COVID-19 pastoral society as a resilience from social disaster

COVID-19 pandemic did not bring about massive death of human being in Mongolia. It also did not caused death of livestock which Mongolian pastoralists depended on for survival. However, it can be recognized as a kind of social disaster in that it caused a negative upheaval, even if it is less noticeable than a natural disaster or a change of socio-economic system. For instance, number of livestock in Mongolia was still increasing during COVID-19 pandemic. Although pastoralism with extremely high grazing pressure cannot be sustainable, pastoralists who regard livestock as assets think it non-realistic to just reduce it. It is also difficult for pastoralists to return to the pre-pandemic economic framework relying on favorable market in China. At the same time, it will be also difficult for pastoralists to reduce their reliance on smartphones which are useful not only for communication with friends but also for business remotely even after the pandemic passed.

As cases of past resilience from disasters shows, resilience does not mean just retuning. Pastoral society should and can find a new equilibrium point for the future sustainability of pastoralism which they wish to conduct.

ABSTRACTS

PANEL 4A - MONGOLIA: DURING AND AFTER THE PANDEMIC



Eric Thrift
University of Winnipeg

Patron-client relationships and market-based governance in the Mongolian Gobi

This paper comments on the emergence of market-based governance systems in the Mongolian Gobi, involving patron-client relationships between wealthy local actors and nomadic herders. Over the past decade, international development organizations and the Government of Mongolia have introduced initiatives to encourage the provision of public services, including resource management and livestock commodities trade management, through collective action institutions. Yet the herder groups and cooperatives envisaged by these interventions have often failed to encourage horizontal solidarity and collaboration, instead serving to institutionalize existing patron-client relationships with local elites. In this paper, drawing on recent research on cashmere commodity chains, I explore some of the conditions supporting these political formations. First, I suggest that the dispersed and mobile nature of the desert population in Mongolia's Gobi is conducive to a non-territorial governance regime, creating advantages for delocalized market-based structures. Second, I argue that positive cultural value associations with individual wealth accumulation present an appearance of greater legitimacy in market institutions, in contrast to public or elected bodies in which clientelism can be represented as corrupt. I consider the implications of these forms of patron-client governance as bringing Mongolian desert herders under the power of distant, unknown, and unelected economic actors.

Yuko Matsumiya
Saitama University

Exodus from overcrowded cities: Creating dual habitation in Ulaanbaatar during Covid

Those who have always embodied "dual habitation in the city" are intensifying their emphasis on "suburban life" during the pandemic. Suburban development in Ulaanbaatar occurred during the socialist era. It is the Zusran (Lageri), a villa area that incorporates Russian culture. Zusran provides an opportunity for people to "spend leisure time away from the overcrowded environment" while still in the city. In recent years, development of a new villa district has been progressing in further suburbs apart from the traditional Zusran. This is a detached house for the wealthy class, where water supply and sewerage, electricity and the Internet also pass through. As the COVID pandemic required people to avoid sealing, crowding, and close contact, more people left overcrowded centers to spend time in "comfortable suburbs" at all times. During the lockdown, they spent their lives stocking up on daily necessities and retreating to the suburbs, or working remotely, and some people say that they have been comfortable in the suburbs for a long time. I focus on the dual habitation in the city, and clarify how people spend their leisure time and time in the suburbs during the pandemic through interview surveys.

"The desert wears... a veil of mystery. Motionless and silent it evokes in us an elusive hint of something unknown, unknowable, about to be revealed. Since the desert does not act it seems to be waiting -- but waiting for what?"

-Edward Abbey

ABSTRACTS

PANEL 4B - WATER AND SOCIETY: INSTITUTIONS AND RELATIONS



Frishta Qaderi
University of Oxford

Governing Fluid Spaces: Human-Fish Relations in Uzbekistan's Zarafshan River

My presentation will explore human-fish relations in Uzbekistan's portion of the Zarafshan River Basin. I travelled 350 kilometres along the Zarafshan River from October to December, interviewing recreational and commercial fishers. Drawing from this data, I will contextualise the rise of fish farming, a relatively new and ungoverned phenomenon, within the larger management of the Zarafshan basin. I will argue how these sites where human-fish relations take place are spaces where rural riparian communities subvert the laws and development schemes governing the river and assert agency over their futures amidst projections of resource conflict, water scarcity, and rising social inequity.

Madina Gazieva
Dublin City University

Researching access to water in Uzbekistan: reflections on positionality and variegated reactions during fieldwork

Upon enrolling in a PhD program, I anticipated that the data collection process was to be rugged and non-linear. Less anticipated, however, were the inconsistencies in my ability to gauge my positionality and the fuzziness in my understanding of the extent of the sensitivity of my topic, which led to increasing disorientation with every interview. Knowing that water and cotton are contentious topics in Uzbekistan, I initially approached the field with a sober caution. However, the polarity of reactions paralysed me: while some interviewees shared their views freely, others warned that my research could culminate in my deportation. In this talk I aim to make sense of my own confusion surrounding my research and endeavour to construct a meta-analysis of these varied reactions to identify plausible explanations for my experience. The aim is to additionally open up the floor for sharing experiences navigating politically tricky research topics.

Juan Antonio Hernández-Agüero
Senckenberg Museum

S-Oases database: Identifying the global distribution of oases

Drylands cover 46% of the global land surface, harbor 38% of total human population, and are home to unique species. Drylands contribute to about 40% of global net primary productivity, despite the strong controls by limited water availability. Stable water supply facilitates high productivity even in arid or hyper arid areas, and allows oases ecosystems to form. Oases have been defined typically as highly productive intrazonal areas often densely vegetated and used agriculturally, with a certain level of isolation. Oases are considered inland wetlands, "islands of fertility", with a specific microclimate and vegetation structure. They facilitate high biocultural diversity and allowed to maintain cultural exchange through otherwise impermeable regions. However, no previous research had tried to establish their current global distribution. We have created an open-source database (S-Oases: Senckenberg Oases Database), with extensive bibliographical research. The aim was to delineate oases, to assess their environmental and cultural state, and encourage oasis research and management globally. After reviewing more than 5000 papers, around 1700 research papers of 1300 different oases were included in our database. We present the outcomes of the bibliometric and data analyses and the first global map of oases.

ABSTRACTS

PANEL 4B - WATER AND SOCIETY: INSTITUTIONS AND RELATIONS



Sayana Namsaraeva, University of Cambridge
Dobdon Maksarov

**When 'masters of water' leave the spot:
Inner Asian cosmology of water and desertification from the Buddhist perspective**

In Buddhist worldview, humans and environment are integrated systems and misusing the environment has almost immediate consequences for humans insofar as it amounts to a sort of self-harming. Moreover, Buddhist literature depicts an elaborated system of karmic punishment if the balance is disturbed by human activities (e.g. cutting trees, polluting water sources) with the result that environmental calamities – weather disasters and epidemics – become more frequent and more dreadful. Through the prism of some texts (Chapter 4 of Abhidharmakośa and works by Kunkyen Jamyang Shedpa, 18th century Tibetans scholar), this presentation will consider how the mechanism of karmic retribution employs the vision of desert and desertification and how it is all connected to the role of the 'masters of water' (Tib. and Mong. lu) – praeternatural beings inhabiting water sources, who as it is believed, can inhabit or leave the spot, if the environment is mismanaged. After introducing a 'theory part' by co-presenter ven. Dobdon Maksarov, our presentation then will discuss ethnography collected by S Namsaraeva in the steppe zone of the Transbaikal region and local cases, when 'masters of water' have left the spot or came back.

"What makes the desert beautiful is that somewhere it
hides a well."

-Antoine de Saint-Exupery

ABSTRACTS

PANEL 5A - MINING AND ENERGY EXTRACTION



Nurit Hashimshony-Yaffe, The Academic college of Tel Aviv Yaffo
Hilah Segal Klein, Haifa University

Desert meeting point- renewable energy production and local populations in Lake Turkana, Kenya.

Lake Turkana, Kenya is known for being the world's largest desert permanent and alkaline lake. An arid area with low annual rainfall and intense daytime winds. The lake area is a sparsely populated area that suffers from its remoteness. Local Turkana, Samburu, and Rendille peoples of the region are pastoralists. Historically, this desert area has been imagined as a frontier and an "empty" space since early colonial times. This perception led to the marginalization of local pastoralists and has accompanied international and local views of various political, business, and social actors over the years. Lake Turkana Wind Power (LTWP) began operating in 2019 with 365 wind turbines. LTWP was established as part of Kenya's efforts to stay in line with the SDGs, base its energy sector on renewable resources, and better households' connectivity to the national electric grid. However, the location of LTWP on the shores of Turkana Lake is highly significant and poses substantial socio-political challenges. The research presents the tensions between global goals and local pastoralist perceptions, between the political centre and the desert-like periphery and questions the effects of the remote desert location of LTWP as energy infrastructure.

Bayar Dashpurev
Max Planck Institute for Social Anthropology

Fragmented, Desolate, Frontier: How Perceptions of South Gobi Undermine Environmental Claim-Making

The South Gobi wears many hats in Mongolia. South Gobi is often described as a region of dunes and bare rocks. The South Gobi shares arid and hot weather, a windy and dusty environment, and a dry climate. Additionally, the South Gobi is considered a geopolitical space separating Mongolia from Inner Mongolia and the People's Republic of China. According to neoliberal ideology, the South Gobi represents a new frontier where multinational and national mining companies exploit coal and copper deposits cheaply for export to China. Essentially, the South Gobi appears as a harsh and cruel environment, serving as a complex political space and strategic economic territory in Mongolia. Although, these depictions of the South Gobi are relatively recent and result from dialogue surrounding the terms "Tsol" (Desert), "Omno" (South), and "Govi" (the Gobi). This presentation examines how South Gobi is reflected, argued, and constructed in a variety of fields, including human geography, political economy, political ecology, transnational law, and so forth, as well as how these reflections, arguments, and constructions affect the claim-making of environmental rights among herders and communities near large-scale mining operations.

Sarah Lunaček
University of Ljubljana

Lack of information, false promises and cooptation: how to say no to uranium mines?

In many deserts mines of all kinds are taking pasture lands of mobile pastoralists. In case of uranium the state makes deals with foreign companies. Here I will consider local and regional dynamic of recently opened uranium mine in northern Niger and its relative acceptance despite negative experience with previous mines. Most local (neo)traditional authorities and decentralised elected ones are not able to oppose mines openly, since companies seem to be promising much needed services and jobs to impoverished population and unemployed schooled city youth. Local settled and mobile pastoralists are not informed about the consequences of pollution and water exploitation, nor about their right to protest. Some old and new actors of civil society are strongly against uranium mines; in this case they demand replacement of director skilled in cooptation as well as precision and follow up to ESIA. There is some hope a new Shema of land management will succeed to rescue some pasture lands from further mining plans. Would it be possible alternatively to imagine a 'no more uranium' future, revenue and jobs created rather by sustainable activities like existing gardening and mobile pastoralism?

ABSTRACTS

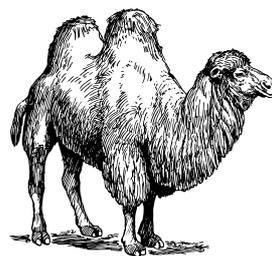
PANEL 5A - MINING AND ENERGY EXTRACTION



Iris Pakulla
University of Cambridge

Degrees of ownership: the illusion of the stable job in post-pandemic Mongolia

The political mobilisation of Mongolian miners during and after the COVID-19 pandemic and the entry into force of a new Labour Law in January 2022 have contributed to the creation of new labour regimes at the Oyu Tolgoi mine. The mine, located in the Gobi Desert, is one of the largest underground mines in the world and a major exporter of copper to China. For the first time in Mongolia, shift work has been legislated in order to allow, in welfare discourses, for a "balanced work and family life". However, this legal change has led to distinctions among workers. Inequalities arise not with respect to land ownership (as a public asset every citizen is entitled to it), but in a complex amalgam of ownership and control, the state and the private sector, in which miners struggle to secure work that provides them with a decent livelihood. As the length of shifts in the mine was limited, some miners saw the opportunity to spend more time in the countryside with their families, while for others, aspirations for the future were diminished, revealing the limitation of legal discourses to encompass the complexity of people's lives. In the post-socialist context of Mongolia, when work ceases to be an obligation and becomes an individual choice, an existential conundrum emerges. With the COVID-19 pandemic this came to the surface, as miners became aware of the importance of health and the imminent possibility of being replaced and began to fantasise about a life as herders, or in a foreign country, away from the endless noise of engines.



ABSTRACTS

PANEL 5B - DESERT BIOLOGIES AND FOOD



Stella Nwawulu Chimela et al
University of York

Analysis of linkages between environmental change, conflict and food insecurity in dryland Nigeria

Farmer-herder conflict in arid, semi-arid and dry-subhumid regions of Nigeria exacerbates national insecurity and food insecurity, with reverberating impacts nationwide, damaging Nigeria's ability to implement the Sustainable Development Goals and advance toward Africa's Agenda 2063. The persistence and escalation of conflict is influenced by environmental security, including changes linked to land degradation and climate change and its impacts (e.g. drought). Institutional inefficiencies, alongside economic and sociocultural issues, also play important roles, affecting livelihood security and food security. Owing to the complex and dynamic nature of the relationships between environmental changes, conflict, and food security, scholars and practitioners are recognising the necessity of employing a transdisciplinary complex systems approach when addressing these challenges. This research aims to analyse the links between environmental change, farmer-herder conflicts, livelihoods and food security in dryland Nigeria. The objectives are to investigate: (i) the connections between environmental insecurity and conflict in the study area; (ii) ascertain the livelihood dynamics and livelihood security and insecurity that has developed due to environmental change and conflicts, and their relationship with and feedbacks to food insecurity; and, (iii) identify the factors that influence farmers and herders' responses to the overall security dynamics. Geocoded data from national and international databases will be used to spatially map the research area, providing data on conflict and environmental insecurity using key indicators. Interviews and participatory research techniques with farmers, herders/cattle owners, extension staff, government officials, and community leaders will be conducted to assess the social, cultural, political, institutional, and economic components, with the resulting data being thematically analysed. A thorough examination of relevant literature and policy documents, together with data from earlier objectives will contribute towards objective iii. This presentation focuses on presenting the overall framing for this research, revealing the different variables to be considered and their interactions, as a first step towards informing the selection of indicators and the collection of empirical data.

Abba Ngurno
University of York

Examining the role of climate smart agriculture (CSA) interventions in enabling climate resilience development (CRD) for smallholder farmers in dryland Nigeria

Climate change impacts exacerbate the issues of poverty, water stress/availability, poor soil fertility, drought, and land degradation faced by smallholder farmers in drylands. These challenges emphasize the need for transformative actions and strategies that will move dryland smallholder farming systems along more Climate Resilient Development pathways. This research aims to investigate the possible role of Climate Smart Agriculture interventions in enabling Climate Resilient Development for smallholder farmers in dryland Nigeria, through: i) identifying opportunities for CRD for different types of smallholder farmers in relation to resource status, agricultural productivity challenges, developmental challenges and livelihood options (these will be analysed in a gender disaggregated manner), ii) identifying CSA interventions that will support CRD for smallholder farmers in the region, by identifying agricultural practices that qualify as CSA and are suitable for farmers to adopt, and iii) examining the role of CRD enablers (governance actors, CSOs, community stakeholders, etc.) in implementation and adoption of CSA interventions by smallholder farmers, by assessing key actor's interventions in capacity building, promotion of agricultural practices and scaling of CSA for farmers, and how they take into account issues of inclusivity, equity and justice, ecosystem stewardship and diversity of knowledge. The proposed research will explore the potentially complementary relationships between CSA and CRD and how they could support smallholder farmers in drylands.

ABSTRACTS



PANEL 5B - DESERT BIOLOGIES AND FOOD

Ursela Windberger
Medical University Vienna

Specific features of dromedary camel blood fluidity

The camelid erythrocyte membrane stability that with still unknown features preserves the elliptic form generates a unique RBC behavior in shear flow. The cells undergo several uncoordinated motions instead of aligning with the streamlines like other mammalian erythrocytes can do. This is why camel blood behaves as a near-Newtonian liquid, expressing almost shear-independent viscosity. This behavior is unique among mammals and implies that flow resistance cannot be lowered when blood flow velocity increases. The significance of this behavior comes into play when the hematocrit rises because any increment increases resistance more profoundly in camels than in other mammals. Generally, hematocrit should not exceed 30%. Blood fluidity also plays a role during heat exposure. During heterothermy periodical changes of blood viscosity force the vascularity to respond to changing shear stresses. But camel blood viscosity shows a low temperature-dependency, which conserves energy and consequently reduces heat production.

Aref Abu Rabia
Ben Gurion University of the Negev

Camel Pasture and Milk Medicinal Properties

Camel milk is a source of food, drink and medicine. The medicinal properties of camel milk are a result of the camel's pasture, grazing on certain plants that have been considered by pastoral nomadic population in Asia and Africa, as a remedy for diseases they encounter. These population obtain their food from wild plants, herd animals, mostly sheep and goats, cows and camels. Some plants on which camel graze tend to scent or flavour their milk. It is a common practice to lead camels to eat certain plants in order to use the milk for specific medicinal purpose in treating a wide range of diseases. The paper argues that most of the medical properties and constituents of the camel milk are a product of the nature of the plants on which camels are pastured.

Muhammad Farooq Hussain Munis
Quaid-i-Azam University, Islamabad

Execution of native Cholistan desert flora to control rot of stone fruits

Deserts have very special environment and the survival of plants under high temperature conditions demands specific physiological and morphological traits. These plants also contain several biochemical compound and secondary metabolites which enable them to thrive and survive. This study has described the use of indigenous flora of Cholistan desert for antimicrobial activity analysis and disease control of stone fruits. For this purpose, five desert plants including Hurhuria (*Gyandropsis gynandra*), Akk (*Calatropis procera*), Ponwar (*Cleome brachycarpa*), Shallaki (*Boswellia serrate*) and Senna-i-mkki (*Cassia senna*) were used. Comprehensive in vitro and in vivo analyses revealed variable mycelial growth inhibition and disease control potential of all plants. Among all tested plants, Akk (*C. procera*) performed best and displayed 92% disease control. Shallaki (*B. serrate*) also displayed significant control (84%) of rot disease. Finding of this study proved great medicinal potential of tested desert plants. These blessed plants must be used at large scale for natural and environment-friendly control of different plant and human diseases. Desert plants have unique composition and there is a need to work more aggressively for exploring hidden benefits of these plants.



ABSTRACTS

PANEL 6A - KNOWLEDGE AND INSTITUTIONS ACROSS DESERT SOCIETIES



Allison Hahn
City University of New York

Zooming in from the Desert

Developments in teleconferencing, necessitated by the COVID pandemic, have changed the ways in which indigenous and nomadic communities participate in development planning regarding climate change. In this paper I examine digital artifacts (Zoom meetings) to uncover the rhetorical strategies of desert-based communities as they engage in data collection, deliberations, and planning. Attention is paid to how community leaders have negotiated the presentation of their identity in these new digital spaces. And, how their identities and communities are at times encouraged and at other times blocked from participating in decision making processes. The results provide insight into how communicative processes and research engagement will continue to evolve in late-COVID and post-COVID forums.

Sina Maghami Nick
University of Oxford

Changes in cycles of life for Bakhtiari in the Zagros Mountains of Iran

Iranians have faced a roller coaster of western modernity from the forced modernization of the Pahlavi dynasty (1925-79), the anti-westernization revolution (1979), and the current Islamic Republic regime (1979-). The lifestyle of Iranians has changed dramatically throughout these governmental upheavals. Before the rise of Pahlavi and their anti-nomadism policies, mobile pastoralism was among the most practised livelihoods in the country, including about a fourth of the population. Although mobile pastoralism in Iran has reduced, it remains adaptive and resilient to significant change, with families maintaining traditional handwoven black tent dwellings and seasonal transhumance with herds over significant distances despite wider social pressures to modernise. In what ways have these adaptations affected mobile pastoral livelihoods in the Zagros mountains? This ongoing research has been looking at the intergenerational perspectives of Bakhtiari mobile pastoralists, on their mobile lifestyle. The research attempts to illustrate the economical, social and environmental scene of the contemporary Bakhtiari people who live a nomadic lifestyle in the Zagros mountains of Iran.

Cory Rodgers
University of Oxford

Mobile Peoples' Rights within the Indigenous Peoples' Movement: an uneasy alliance

In 2022, Indigenous Peoples were front and centre across the three major international environmental conventions addressing Climate Change, Desertification and the Protection of Biological Diversity. As Indigenous Peoples enjoy greater inclusion at international fora and increased recognition of their rights, this paper considers what this trend means for Mobile Peoples, such as pastoralists, nomadic forest peoples and other peripatetic communities. Mobile Peoples have at times been included as a sub-category of Indigenous Peoples, and some communities have thereby managed advances in their pursuit of rights. But not all Mobile Peoples enjoy recognition as Indigenous, and moreover, the Indigenous rights movement has at times conceded to notions of territory and land tenure that are at odds with mobility.

ABSTRACTS



PANEL 6B - EDUCATION AND SOCIAL CHANGE

Zalina Enikeeva
University of Central Asia

The COVID-19 crisis had a negative impact on the population's labor income, especially affecting the most vulnerable categories, women and children, and women of Kyrgyzstan are not the exception. My research work is going to examine how female citizens of different regions adopted to new realities during the COVID-19 pandemic combining job duties (as many firms were transferred to the online mode of work) with household chores and distant education of their children, as well as other crisis outcomes. Our team's previous project on the analysis of the impact of COVID-19 on rural women in Kyrgyzstan, Tajikistan and Uzbekistan identified significant decline in the status of women, especially in rural areas. These findings motivated to learn in details how the pandemic and lockdown impacted rural women in northern, southern areas of Kyrgyzstan and the country's capital, and what women did to overcome their challenges. Starting in spring 2023, field works might help with understanding of how lives of women in three different regions changed economically, psychologically, and physically. The expected outcomes of the research should identify which policy measures might be implemented by government, civil society and other authorities to cope with pandemic consequences in Kyrgyzstan.

Ulrike Schultz
Friedensau Adventist University

Enduring schools and becoming an educated person: Educational trajectories of young Turkana

Discussions on schooling in pastoralist communities mainly circle around two issues. While educational specialists, development organization and national governments focus on the limited access of pastoralists' children to formal education and perceive formal education as the only way to come out of poverty, local NGOs, community leaders and social scientists working on pastoralist communities stress that schooling is not compatible with pastoral livelihoods. The latter focus on the mobility of pastoralist families and their need to have access to the labor of their children. Moreover, it is argued that families use formal education strategically. Families often rely on one or two children and send them to school so that they can support the family in the future while other children remain with their families and are brought up to sustain the pastoral livelihoods. However little is known how children and adolescents experience schooling in pastoralist communities. Taking the life stories of two young Turkana. It becomes clear that their educational trajectories are shaped by the mobility of pastoralist household, the aspirations of (extended) families, and the marginalization of the Turkana within the nation state. The paper is based on long-term encounter with Turkana families (beginning in the late 1980s) and on ongoing study on schooling and educational trajectories.

Olga Mun
University of Oxford

Learning from the Tulips of the Steppe: Towards a Central Asian Sustainability Education Framework

Growing up, I heard many stories about wild tulips in Central Asian steppe. Overtime, except formal biology classes in school, it was rare to be able to learn about nature and environmental issues in Kazakhstan whilst in formal university training. Whilst the voiced observation might represent a personal experience, to a large extent environmental education in Kazakhstan remains an under researched area in the field of comparative and international education and in light of the accelerated impact of climate change in the region, it is becoming increasingly important to reenergize the studies of environmental issues in the region and related education programs. The purpose of this project is an attempt to design an epistemically inclusive, locally grounded framework on steppe flora with a particular emphasis on tulips and the lessons that can be learned from it for sustainability purposes. Kazakhstan alone hosts almost 3000 types of tulips that provide inspiration not only to artists who write poems and stories about nature but also serve as food sources. The uniqueness of this project is the analysis which is primarily based on the books published in Kazakhstan by Anna Ivashenko and colleagues, to amplify the voices of local scholarly community in the context of epistemic imbalance of Global North and South academic communities.



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