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Session 1A Equitable and Sustainable Development in Tajikistan: Poverty, Biodiversity, Economic Growth, and the Markhor Goat

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Equitable and Sustainable Development in Tajikistan:

Poverty, Economic Growth, and the Markhor Goat

Marisa Granados, Morgan Hertel, Seth Kimball, Emma Von Sprecken



Country Profile

- Small, developing, agricultural-dependent country located in Central Asia.
- 9.5 million people call Tajikistan home although it has faced an emigration crisis after the fall of the Soviet Union.
- 93%, is classified as "mountainous" and is intertwined with diverse grasslands, deserts, glaciers and, forests.
- Tajikistan is the most climate change vulnerable country in central Asia due to the socio-economic structure of the country, proximity to glaciers, and mountainous landscape

The INDCs of the Republic of Tajikistan

- Tajikistan is participating in the International Pilot Program for Climate Resilience
- Focused on achieving climate resilience through hydro-power, renewable energy development, agriculture, risk reduction, and education
- Achieve a target of 65- 75% of the 1990 CO2 levels by 2030

Ecological Indicator

- The markhor is a carpa species native to central Asia.
- While Tajikistan does not have an official national animal, many Tajiks consider the markhor their national animal.
- The markhor was placed on the IUCN Red List in 2015. As of now, the population is generally increasing, but it is still on the Red List.
- Conservation became a greater concern to the Tajik people after signing the Paris Climate agreement when it became apparent that climate change would greatly impact Tajikistan as well as their ecological indicator, the Markhor.



- Reduced the poverty rate from 81% in 1999 to 31% in 2016 with guidance from UN Millennium Development Goals
- In the top 10 states for reducing poverty efficiently and quickly between 2000 and 2015.



- Accelerated housing and agricultural development to stimulate economy
- 98% of their energy grid is fueled by hydropower
- UN sanctioned hydropower and land management projects



- Recognize the value in biodiverse ecosystems
- Many of their unique species are on the International Union for Conservation of Nature Red List.
- "Specially Protected Natural Territories" program protects more than 25% of land from development

Drivers

- Poverty
- Tourism
- Growing infrastructure and agricultural land use

Pressures

- Poverty increases poaching
- Tourism increases human-wildlife interactions
- Land use change decreases habitat

Response

- Tajiki government allows 7 hunting permits per year
- Increased conservation concern
- Rangers hired to patrol to reduce illegal poaching

Impacts

- Illegal poaching led to near extinction of Tajiki Markhor populations
- Decreased food source for Snow Leopards

State

- Markhor population declined to 350 in the 90's
- IUCN red-listed as near-threatened
- Population started to increase in 2012



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