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Irrigating the Desert Water Management, Agricultural Practices, and Social Complexity in Southern Turkmenistan during the Bronze Age

by Roberto Arciero

1. The Murghab alluvial plain experienced aridification from the end of the third millennium BCE and into the second millennium, and this had considerable effects on the distribution and nature of settlements in the region..
2. The under-researched hydrological system of the Murghab river is crucial for better understanding settlement patterns, subsistence economies, and the social dynamics of the Bronze Age.
3. Communities in the Murghab region adopted a variety of resilience strategies to cope with climate change during the second millennium BCE.
4. Applying a single model of agricultural practices and water management to the Murghab fan during the Bronze Age is problematic. Instead, local-scale areas need to be investigated to boost our understanding of variabilities of agricultural and social strategies in these landscapes.
5. Investigations of local-scale landscape dynamics, using remote sensing and geoarchaeological analysis, should always be included in archaeological proposals for desert environments like Central Asia.
6. Only through a holistic methodological approach, combining isotope, archaeobotanical, archaeological, remote sensing, geoarchaeological and pollen data, can we effectively reconstruct the economic and social realities of Bronze Age communities in Central Asia.
7. Although landscape analysis in the archaeology of Central Asia has yielded excellent results in recent decades, data are still lacking that would allow us to understand the rise of the historical Silk Road.
8. Archaeologists in Central Asia should exercise caution when applying models of landscape dynamics from other arid environments, such as West Asia.
9. Archaeological communities must seriously consider how to preserve the sites after excavations. This crucial aspect of conservation is often overlooked in archaeological proposals, especially in economically disadvantaged countries such as West and Central Asia.
10. A “*decolonial approach to archaeology*” should be a mandatory course in all archaeological curricula.
11. The archaeological community working in West and Central Asia should put all their efforts (and supporting funding) into hosting the next ICAANE in West or Central Asia.
12. During the Mongol Rally, an intercontinental, non-competitive event for vehicles with engines under 1200cc that starts in Europe and ends in Mongolia, participants should always consider transiting through Turkmenistan to enjoy the beautiful archaeological sites of the country.