

# **Not only cultural interaction. Agricultural exploitation and water management in the Murghab (southern Turkmenistan) during the Late Bronze Age.**

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## **Abstract**

The Murghab region in Turkmenistan is regarded as the main area of the Bactria Margiana Archaeological Complex (BMAC) or Oxus Civilization during the Bronze Age. During this period, the region is characterized by citadels with outstanding architectures, such as Gonur Depe, and contact with neighboring regions, such as Iran, Indus Valley, and Mesopotamia. These contacts, and the presence of diversity in the population within the BMAC, seem to be also confirmed by recent aDNA analysis (Narasimhan et al. 2019). Notably, from the Late Bronze Age, the Murghab region started to be characterized also by the presence of groups with different pottery assemblage, linked to the Andronovo sphere. The survey over the last decades revealed the presence of numerous sites with a massive presence of this different Incised Coarse Ware (ICW) pottery (also known as “Andronovo” or “Steppe” pottery). Although the investigation suggests a peaceful cultural interconnection between these groups, little research focused on the agricultural and water management interaction during this period. In an arid region such as the Murghab, the agricultural and water resources were crucial aspects of land management. As such, my paper aims to present the result of my PhD research conducted over two different areas characterized by the presence of these two groups. With a multidisciplinary approach, including remote sensing and geoarchaeological analysis, I investigated the agricultural and water management of these small-scale areas and to what extent the interaction of these groups led to different land exploitation during the 2nd millennium BCE in the region.