## Afghanistan's Lithium Belt: A Critical Mineral for the Global Green Transition Based on a 2025 study by Arian, Alaminia, et al.

Beneath Afghanistan's rugged terrain lies a mineral belt of global significance. The Afghanistan Pegmatite Belt (APB) spanning over 900 km and holding some of the world's richest untapped reserves of lithium, tantalum, niobium, and rare gemstones. Which includes over 1.8 million tons of lithium oxide (Li

O) estimated from just 12 of 76 known deposits. Regions like Nuristan, Badakhshan, Kunar, and Daikundi contain hundreds of pegmatite dikes rich in spodumene, lepidolite, and columbite. All of these minerals are vital for electric vehicle batteries, high-tech electronics, and green energy systems. However, despite exploration beginning in the 1960s, most of the APB remains unmapped and politically contested. Discussion Questions: • Can Afghanistan avoid the "resource curse" and harness its lithium for sustainable development? • What frameworks are needed to ensure scientific oversight and environmental protection? • How can Afghan scholars and geologists shape a national mining policy rooted in evidence and justice?

## **Comments**