

## **(ECOSF) Why Science Matters in the ECO Region – Regional impact of STEM.**

Science is a strategic driver of sustainable development across the ECO region, a geographically and culturally diverse area connecting Central Asia, South Asia, the Middle East, and beyond. In this region, science, technology, engineering, and mathematics (STEM) are not only tools for innovation but essential foundations for economic resilience, environmental stewardship, and social progress.

STEM empowers ECO member states to address shared regional challenges—such as climate change, water scarcity, food security, energy transition, public health, and disaster resilience—through evidence-based solutions and cross-border collaboration. Scientific research enables the region to transform natural resources into knowledge-based economies, reduce technological dependence, and strengthen regional self-reliance.

Investment in science education and research nurtures a new generation of scientists, engineers, and innovators who can drive industrial modernization, digital transformation, and sustainable infrastructure development. By strengthening STEM ecosystems, the ECO region can bridge development gaps, enhance competitiveness in global markets, and foster inclusive growth that benefits both urban and rural communities.

Science also serves as a unifying language across borders. Regional scientific cooperation encourages knowledge exchange, builds trust, and creates platforms for collective innovation among ECO member states. Through shared research initiatives and capacity-building programs, STEM strengthens regional integration and supports long-term peace and prosperity.

For the ECO Science Foundation (ECOSF), science is not only about discovery—it is about impact. By promoting STEM excellence and collaboration, ECOSF helps unlock the region's human capital, turning scientific knowledge into solutions that advance economic development, social well-being, and a sustainable future for the ECO region.