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## LEVERAGING SPACE TECHNOLOGY FOR SUSTAINABLE DEVELOPMENT: THE ROLE OF THE MIDDLE EAST'S SPACE SECTOR

## Abstract

The Middle East's growing space sector is playing a vital role in meeting the 2030 Agenda on Sustainable Development. With the region's commitment to sustainable development, space technology is being used to address critical issues such as food security, water scarcity, and environmental protection.

Satellite-based remote sensing technology is being used to monitor crop growth, soil moisture, and vegetation health, providing farmers with real-time data to improve crop yields and water management, which directly contributes to achieving the Zero Hunger goal. Additionally, space technology is being used to monitor water resources, predicting water availability and demand, optimizing water use and managing water resources effectively, which directly contributes to achieving the Clean Water and Sanitation goal.

The region's space sector is also working towards achieving the Sustainable Cities and Communities goal by monitoring and managing the environment in the region. Satellite-based remote sensing technology is being used to monitor air and water quality, detect oil spills, and track changes in land use and land cover. This data is being used to inform policy decisions and to develop strategies for environmental protection and conservation.

Overall, the Middle East's space sector is becoming an essential driving tool in meeting the 2030 Agenda on Sustainable Development. As the region continues to invest in its space sector, there is tremendous potential for further advancements and collaborations with other space-faring nations. By leveraging space technology to address some of the region's most pressing challenges, the Middle East is demonstrating its commitment to sustainable development and becoming a leader in the global space community.