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Earth Observation Societal and Economic Applications, Challenges and Benefits (5)

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TITLE: HARNESSING EARTH OBSERVATION FOR SOCIETAL AND ECONOMIC BENEFITS IN ERITREA: CHALLENGES AND OPPORTUNITIES

Abstract

Eritrea is a coastal nation located by the Red Sea in the Horn of Africa. Eritrea's climate is mostly desert, with some hot semi-arid regions in the south. Despite contributing less than 0.01This paper aims to:

1. Explore EO technology's societal and economic applications in addressing key challenges such as food security and water resource management. 2. Identify the challenges hindering the widespread adoption of EO solutions in Eritrea. 3. Propose strategies for overcoming obstacles and maximising EO applications' societal and economic benefits in Eritrea.

The research methodology involves a comprehensive review of existing journals and reports from different government ministries collected via a practical observation of the field and responses by the farmers and labourers based on questionnaires. A comprehensive review of existing literature on EO applications in developing countries was utilised to gather insights into the challenges and opportunities associated with EO technology. The study's findings reveal that EO technology offers an opportunity for addressing societal and economic challenges in Eritrea. By providing valuable data on land use, crop health, and water resources, EO applications can help with decision-making processes and enhance resource management practices. Key challenges hindering the effective utilisation of EO technology include infrastructure, limited technical expertise, and financial constraints that pose significant obstacles to integrating EO solutions into sustainable development initiatives. In conclusion, EO technology provides an opportunity for addressing societal and economic challenges, and overcoming the associated barriers is essential to realising its full potential.