IAF EARTH OBSERVATION SYMPOSIUM (B1)

50 years of Earth observation: The contribution to sustainable development goals and plans for the future (6)

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THE CONTRIBUTION OF SPACE APPLICATIONS TO FOOD SECURITY: AN ASSESSMENT OF EARTH OBSERVATION, EARLY WARNING SYSTEMS AND THEIR USE BY DEVELOPING COUNTRIES

Abstract

This paper examines the contribution space-based Earth Observation technology can make to combat hunger in the following ways:

1. How Space technologies can make a contribution to food security. 2. How the use of Earth observation systems can minimize hunger crises.

The goal "Zero Hunger" of the Agenda 2030 of the United Nations appeals to the conscience of the international community. Currently a child is starving to death every five seconds under the age of ten despite the world's capacity to feed the entire population. Climate change poses ever greater challenges in relation to food security, which must be addressed if the 2030 Zero hunger goals are to be achieved. Agenda 2030 places an emphasis on science, technology and innovation to address these issues. Space technologies can make a contribution to food security, especially with regard to monitoring climate change and its consequences. This paper specifically explores issues such as:

(a) Smart-farming (b) Vertical farming (c) Space innovations such as EU:CROPIS, EDEN ISS (d) and the role of EO in Ethiopia as it takes measures to address its greatest national challenge