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SPACE APPLICATIONS AT THE SERVICE OF FOOD SECURITY: POLICY RECOMMENDATIONS

Abstract

Food Security has become one of the highest political priorities at the national, regional, and international level, notably emphasised in the UN Secretary General's Common Agenda and most recent statements under the G7 umbrella.

Climate change is a key determinant of current and future risks at stake for food security. The alteration of Essential Climate Variables undeniably affects and poses significant threats to natural ecosystems' resilience. In turn, cascading effects are observed in various aspects of our societies as a whole, particularly in the realm of water and food security.

Given the unique climate vulnerability in the Mediterranean region, a prioritized and elevated attention is required, directly undermining the need for intervention to address the humanitarian crisis stemming from food insecurity. The urgency of acting has been understood, along with recognizing that only a coordinated regional approach can be effective in tackling these issues towards a possible solution. Additionally, by leveraging shared expertise and best practices developed in food security-related fields, both Mediterranean countries and stakeholders around the world will have the opportunity to enhance their national response.

The value of space-based solutions in addressing the underlying issues at stake contributing to food insecurity has already been acknowledged. This has been largely evidenced by the emergence of various initiatives, outlined in this paper, directly tackling food security challenges using space data. However, despite these on-going efforts, the full potential of space-based solutions has yet to be fully realized, hence expanding beyond current untapped capabilities and their impact. Thus, several activities could be undertaken to optimize the use of space data and derived information to overcome both current and foreseen food security challenges.

Unleashing this potential requires concrete actions at all levels, and with a multidisciplinary approach. In particular, policy and regulatory measures play a central role in this regard, as demonstrated based on an initial analysis of the status of affairs, complemented by an broad consultation campaign involving both policymakers and decision-makers from Mediterranean countries, as well as relevant international organisations such as FAO, WFP, IFAD.