



A MODEL FOR FOOD SECURITY ASSESSMENT IN DISADVANTAGE AREAS. THE ERITREA CASE STUDY.

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The Horn of Africa is an arid semi-arid region characterised by environmental degradation and precarious rainfall conditions, which strongly affect agricultural productivity and availability of water. As most of the countries belonging to this region, during the last 30 years, Eritrea was affected by recurrent and severe droughts. Besides the frequent famines, protracted insecurity conditions made food subsistence extremely unstable, and dramatically increased the number of vulnerable people.

The Eritrean Government gives highest priority to national food security strategies. However, the lack of useful and timely data and information are the main limiting factor for the identification of the objectives of an effective food security policy.

Eritrea is one of the eastern African countries covered by the activities of FAO Africover Project. The establishment of a multi-purpose environmental resources digital database may represent a new source of information to include in food security planning, monitoring and early warning activities.

In order to answer the needs of policy makers, this preliminary study aimed at developing a prototype of information system for the food security assessment by integrating different available data-sets through geo-information techniques.

Eritrea presents a particularly disadvantage condition in terms of available data and information, as consequence the model has been designed trying to cope this situation through a large use of remotely sensed data and geo-information analysis.

Based on the agricultural productivity and on agro-meteorological risk, a structural analysis has been assessed in order to identify vulnerable and insecure areas of Eritrea.

Subsequently the monitoring of crop development allowed to evaluate the impact of the agricultural season on the food security.