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**Project ERMES: - Development of a reliable rice information system on  
the basis of remote sensing, in-situ data and crop modelling**

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**Abstract**

The main target of the ERMES\*\* project is the development of knowledge and innovation for rice crop aiming at the accurate and timely prediction of rice yield, based on a compilation of data by performing remote sensing technology e.g. satellite radar /optical images, in situ crop data and the analysis of these data by using models. More specifically in-situ information will be provided to the crop model by field operators and/or sensor technology using advance smart applications and technologies. These data will be used to perform crop monitoring, bio-parameters retrieval and meteorological variables estimation. Biotic and abiotic factors and their influence on the crop yield will be also measured.

The specific objectives of the project at the European level include: a) the contribution to the Regional authorities for the implementation of agro-environmental policies related to rice crop and the new CAP, b) the support of rice growers on the implementation of sustainable strategies and reduction of the inputs (fertilizers, pesticides, energy) in the field c) early warning to the growers related to dangers due to biotic ( pests, weeds, diseases) and abiotic (drought, salinity, high temperatures) stresses and d) the provision to the agri-business of rice crop reliable information related to rice crop, assisting them in the decision making process concerning their commercial and exportation decisions. A further goal of the project is to extend and test the developed system to extra European context in order to verify its capability to predict rice yield in other areas such as Asia & Africa, where rice is a major crop. This might be an important aspect concerning - the EU policy on rice- , since EU may, depending on the annual conditions, adapt its policy (imports/exports) and define goals for its Member States

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