POLITECNICO
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SCUOLA DI INGEGNERIA INDUSTRIALE
E DELL'INFORMAZIONE

# DREAM - Data-dRiven PrEdictive FArMing in Telengana

## RASD
## Software Engineering 2


TEAM MEMBERS:

**Simone Brunello - 10831750**
**Nicholas Nicolis - 10867841**


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# 1 | INTRODUCTION

## 1.1. Purpose

The Indian's population counts 1,8 bilions people and their main source of incomes come from the agriculture sector. More precisely 80% of farmers own less than 2 hectares of cultivable land. Nowadays, as a consequence, an important part of the population is already below the poverty threshold, and if nothing will be changed during the next decades this condition will become even worst.

In addiction to this, the productivity will decrease due to many factors: for example the increasing demand of food caused by the growth of the population and the aggravation of climate conditions as a consequence of irresponsible behaviour towards the environment.

An improvement in the communication and data management system could potentially avoid and prevent production problems and lack of food for the poorer part of the population.

Our main goal is to help both farmer and Talengana's policy makers to improve their communication with the focus in quality and quantity of information. The farmer need to receive more technical and environmental advice in order to develop their working skills and consequently their productions. On the other hand policy makers should have available enough data and feedback about farmer's performances in order to improve their economical policies and the country general welfare.

## 1.2. Scope

In order to manage more efficiently the communications between farmers and policy makers our DREAM application will provide an easy way to access the system which will make available to all different users a dedicate set of tools and information.

Farmers will be able to monitor weather conditions, crops and fertilized suggestions. They will have the possibility to send direct requests to expert or other farmers in order

to receive advice. The ease of communicating their production data and problems will be a key point.

Telengana's policy makers will be able to monitor farmers performances and decide if current policies are providing good results. They will also be supported in the visualization of critical situations in order to intervene in advance.

## 1.3. Definitions, Acronyms, Abbreviations

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