

AGRI 4.0 - A new integrated approach for the optimization of resources in agriculture and the preservation of the environment

Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

AGRI 4.0

Tematica

Gestione aziendale

Information

Time frame

2018 - 2019

Durata

18 months

Partners (no.)

5

Regione

Provincia autonoma di Trento

Comparto

Multifiliera

Localizzazione

ITH20 - Trento

Costo totale

€280.748,54

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP011: Italy - Rural Development

Programme (Regional) - Trento

Parole chiave

Fertilisation and nutrients management

Water management

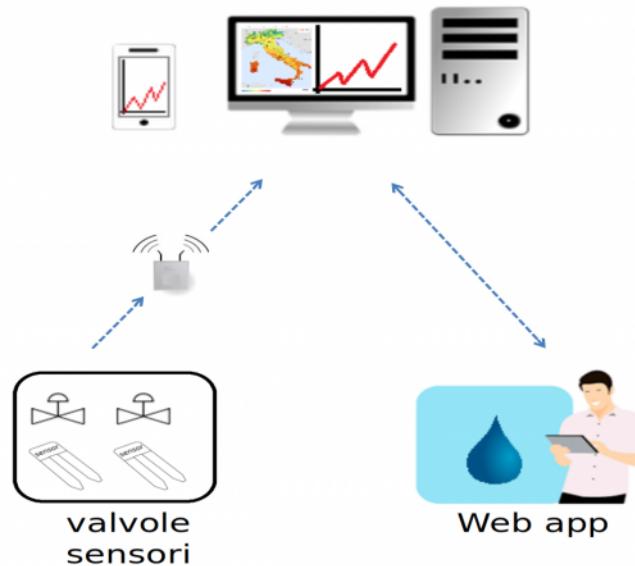
Energy management

Sito web

<http://www.f360.it/agri4.0/>

Project status

completed



Objectives

The AGRI 4.0 project aims to create a new integrated system for the optimization of energy and water resources, the preservation of the environment and the increase of resilience to climate change, in agriculture. AGRI 4.0 wants to implement in the agricultural context of the irrigation consortia those aspects of the Industry 4.0 that, maximizing through IoT devices the generation of digital data related to the production and management of a plant, will allow the project to develop automatic systems of monitoring, prediction and support decisions capable of facilitating the identification of strategies and actions.

Activities

The activities of the project are grouped into three main macro-areas, namely: Action 1) Coordination and monitoring: has two objectives of ensuring the correct interaction between the partners and of coordinating the project through an effective monitoring activity, Action 2) Dissemination of results: has the objective of promoting and disseminating project results through both traditional information materials and digital channels (social media, project site, NRN) Action 3) Technical activities: has the objective of creating a web interface and a GIS mobile app that improves the management of resources in the consortia by creating a DSS.

Partenariato

Role	Azienda	Address	Telephone	E-mail
Leader	EFFETRESEIZERO s.r.l.	Via dei Solteri 37/1 38121 Trento TN Italy	0461 931764	info@f360.it
Partner	CREA-ING - Unità di ricerca per l'ingegneria agraria	Via Milano 43 24047 Treviglio BG Italy	0363 49603	
Partner	Italy Energia Ambiente e Sviluppo economico sostenibile	Via dell'Accoglienza 6 87040 Mendicino CS Italy	346 3875637	italyeas@gmail.com
Partner	Consorzio di Miglioramento Fondiario di Tenna	Piazza San Rocco 2 38050 Tenna TN Italy	347 2900165	sergio1motter@gmail.com
Partner	Consorzio di Miglioramento Fondiario di Ala Bastie	Via Tambuset 38061 Ala TN Italy	347 5603902	consorziobastie@gmail.com

Pratice abstract

Description

The innovation to be diffused to farmers consists in the adaptation, configuration and improvement of a geographic information system (GIS), integrated with field sensor networks and extended with predictive modeling functions, for the optimization of resources management and interventions in agriculture. The system will be available at the consortium level and by the individual consortium members both via a web interface (web-GIS) and via smartphone App (mobile-GIS).

A Decision Support System (DSS) integrated in the Web-GIS will be implemented and calibrated at the level of the irrigation consortium in order to support the consortium members in the analysis of the status of their crops and in the decision-making of the actions to be taken on them. Thanks to the information system, a new agrarian planning will be possible. It will be based on the real needs of the crops and on the efficiencies obtainable by the agricultural system management.

Link utili

Titolo/Descrizione	Url	Tipologia
Sito web del progetto	http://www.f360.it/agri4.0/	Sito web