# Smart agricultural water management in the periurban area of Florence

Riferimenti
Tipo di progetto
Gruppo Operativo

Acronimo
ORTIBLU

Tematica
Risorse idriche

Information
Time frame
2019 - 2023

Durata
44 months

Partners (no.)
10

Regione
Toscana

Comparto
Orticoltura

Localizzazione
ITI14 - Firenze

Costo totale
€337.661,00

Fonte di finanziamento principale
Programma di sviluppo rurale

Programma di sviluppo rurale
2014IT06RDRP010: Italy - Rural Development Programme (Regional) - Toscana

Parole chiave
Water management
Farming practice
Plant production and horticulture

Sito web
https://ortiblu.ciatoscana.eu/

Project status
completed

Objectives
The Orti Blu project aims to introduce innovative tools for the management of water resources in peri-urban agricultural areas and to experiment with technologies to reduce its use.

Activities
- Introduction of Non-Woven Fabric (TNT) for mulching and for the application of crop protection products and fertilizers, to safeguard both the quantity and quality of water resources, and the use of Arduino technology for monitoring water demand and implement precision irrigation.
- Realization of a pilot study for the reuse of wastewater from the purifier.
- Monitoring of proposed water resource management solutions through a water footprint analysis, with ISO 14046 - Water Footprint methodology, also valid for an international certification.
- Training of stakeholders, represented by agricultural enterprises in peri-urban areas of the Tuscan territory, on the themes of the project.

Context
The development of periurban agriculture is part of the dynamic that is characterizing the global landscape evolution and that, even in our country, has characterized the society from the post-war period until today. If initially these dynamics were characterized by a clear division between urban and rural environment, this dichotomy has been replaced by the evidence of the peri-urban continuum developed as an interface between the two realities. The peri-urban space has acquired its own autonomous identity in which agriculture is a key role. European Agricultural Policy also draws attention to the particular role of farmers in peri-urban areas, believing that farmers and

land managers in peri-urban areas can promote solutions that meet the goals of both Lisbon (knowledge, research, innovation) and Gothenburg (sustainability).

Partenariato

| Role | Azienda | Address | Telephone | E-mail |
|---|---|---|---|---|
| Leader | Water Right and Energy Foundation | Via Niccolò da Uzzano, 4<br>50126 Firenze FI<br>Italy | 348 4410870 | v.striano@wrf.it |
| Partner | Società Agricola Gabbrielli S.S. | Via di Stagno, 14<br>50055 Lastra A Signa FI<br>Italy | 339 8907043 | agricola.gabbrielli@gmail.com |
| Partner | Next Technology Tecnotessile | Via del Gelso, 13<br>59100 Prato PO<br>Italy | 0574 634040 | chemtech@tecnotex.it |
| Partner | Università degli Studi di Firenze - Dipartimento di Scienze e Tecnologie Agrarie, Alimentari, Ambientali e Forestali (DAGRI) | Piazzale delle Cascine, 18<br>50144 Firenze FI<br>Italy | 055 2755700 | direttore@dagri.unifi.it |
| Partner | Università degli studi di Firenze - Dipartimento di Ingegneria Civile e Ambientale (DICEA ) | Via di S. Marta, 3<br>50139 Firenze FI<br>Italy | 055 2758811 | segreteria.dicea@unifi.it |
| Partner | CIPA-AT Grosseto | Via Monte Rosa 182<br>58100 Grosseto GR<br>Italy | 0564 450662 | info@qmtt.net |
| Partner | CNR - Istituto per la BioEconomia IBE | Via Madonna del Piano, 10<br>50019 Sesto Fiorentino FI<br>Italy | 055 3033 711 | |

| Role | Azienda | Address | Telephone | E-mail |
|---|---|---|---|---|
| Partner | Confederazione Italiana Agricoltori Toscana | Via Iacopo Nardi, 41<br>50132 Firenze FI<br>Italy | 055 2338911 | ciatoscana@cia.it |
| Partner | Azienda agricola Beni Piero | Viuzzo di Ugnano, 2<br>50142 Firenze FI<br>Italy | 338 8336826 | |
| Partner | Legnaia Vivai Soc.Agr. a r.l. | Via Baccio da Montelupo, 180<br>50142 Firenze FI<br>Italy | 055 7358221 | simone.tofani@legnaia.it |

Pratice abstract

Description
Monitoring of proposed water resource management solutions through a water footprint analysis, with ISO 14046 - Water Footprint methodology, also valid for an international certification.

Description
Introduction of Non-Woven Fabric (TNT) for mulching and for the application of crop protection products and fertilizers, to safeguard both the quantity and quality of water resources, and the use of Arduino technology for monitoring water demand and implement precision irrigation.

Description
Reuse of wastewater from the San Colombano purifier, managed by Publiacqua.

Link utili

| Titolo/Descrizione | Url | Tipologia |
|---|---|---|
| Sito web del Progetto | https://ortiblu.ciatoscana.eu/ | Sito web |
| La relazione finale del Gruppo Operativo Orti Blu | https://ortiblu.ciatoscana.eu/materiali-download/ | Materiali utili |

| Titolo/Descrizione | Url | Tipologia |
|---|---|---|
| Le presentazioni (file PDF o PPTX) relative agli incontri tematici di Orti Blu | https://ortiblu.ciatoscana.eu/wp-content/uploads/2023/02/ortiblu_incontri-temat... | Materiali utili |
| La brochure del Gruppo Operativo Orti Blu | https://ortiblu.ciatoscana.eu/wp-content/uploads/2021/11/ortiblu_brochure.pdf | Materiali utili |
| Lo speciale Orti Blu uscito sul numero di gennaio 2023 di Dimensione Agricoltura | https://ortiblu.ciatoscana.eu/wp-content/uploads/2023/02/Da_202301_speciale_ort... | Materiali utili |