Aquaponic Smart: small and medium farm model of
economic improvement, environmental sustainability,
monitoring and simplified big dates management

Objectives
Optimize an efficient work protocol, for small and medium farms, of
aquaponics installed in a greenhouse that is able to define the best balance
between vegetable and fish species;
Valorise important vegetal species that have been forgotten;
Use a work model sustainable both for an energetic and for an economic
point of view (minimize the costs and increase the yields);
Develop a work model usable also for a farmer manager with a few
available time (by automate as much operations as possible) and to provide
a monitoring system of the main parameters to have a 24/24 hours check
and advise system if something is not going to work.

Activities
Coordination activity for the inclusion of vegetable species in the aquaponic
system:
- Development of a management protocol of the vegetable species;
- Monitoring activity for the conversion from a pilot plant in a productive
  plant;
- Monitoring of the vegetable and water parts;
- SmartAPP developing;
- Pilot plant/auxiliary productive achievement;
- Conversion of the Pilot plant productive into a production facility;
- Production facility achievement;
- Vegetable seeds harvesting and sowing in nurseries;
- Plant and Fish species insert;
- Starting the productive activity;
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- Making a short supply chain;
- Making a operative protocol for the short supply chain.

Partenariato

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<tr>
<th>Role</th>
<th>Azienda</th>
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Pratice abstract

Description
In the first phase of the project, the website was created and the project was added to the various social networks, facebook, Instagram and the innovative Agrinnovation (“Agri”social network). The six-monthly news-letter has also been scheduled with updates on the progress of the project. The project presentation meeting was organized and was attended by authorities, local farmers and companies interested in the project. The technical drawings of the plant were also created at this stage through meetings with the whole GO, these drawings concern the greenhouse, the hydraulic system, the tanks, the electrical systems, the water supplies and all the plants in general. Part of the materials necessary for the construction of the greenhouse were also purchased. The prototypes of the vertical cultivation systems were made and the most appropriate variant was selected. Together with the partners, the plant and fish species have been selected which will be included in the productive-experimental system. Based on the selected species, some products have been evaluated that
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could be brought to national and international markets, currently the study and business plan are under construction phase. The SmartAP protocol has also been optimized.

Link utili

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