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Author: **Miguel Sousa** *UIA Expert*



The OpenAgri project Journal N° 4

Project led by the City of Milan



JOBS & SKILLS IN THE LOCAL ECONOMY





OPENAGRI

The OpenAgri project

The City government of Milan decided to set up an urban coalition with a series of partners (Universities, companies, associations) in order to apply for the first call of UIA Initiative (Urban Innovative Actions), with the desire to scale up this positioning in the peri-urban agricultural industry, setting up a stable growth and creating new jobs and skills.

OpenAgri is mainly an urban policy experimentation that follows the place-based approach, focusing on new skills for new jobs in peri-urban agriculture. The project area can be defined as an "urban fringe", representing the transition zone between the consolidated part of the City and the agricultural lands. The challenge is to locate here an innovative urban service aimed at creating new jobs, skills, start-ups and innovation in agri-food sector (including production, processing and food waste) while increasing the level of resilience and sustainability of the City. With this in view, a series of selected partners have been engaged on using in the best possible way a public owned 30 hectares plot of land surrounding the south Milan Parco Sud boundaries.

OpenAgri in 3 highlights:

- 1. Improving entrepreneurship by fostering the creation of *new innovative firms and social enterprises* focusing on *sustainability in periurban agriculture* and the agri-food sector
- 2. Contributing to the overall *regeneration of a fringe area* promoting a strong focus on social inclusion
- **3.** Exploiting the potential of several *food policy experiments* within a *single integrated*

Partnership:

- Comune di Milano
- Camera di Commercio, Industria, Agricoltura e Artigianato Chamber of commerce
- Fondazione Politecnico di Milano Research Centre
- Fondazione Parco Tecnologico Padano Incubator dedicated to technological companies and startups
- Università degli studi di Milano University
- Politecnico di Milano University
- Avanzi Think Thank
- Cineca Research Centre
- FUTURE FOOD INSTITUTE Trust (FFI) Research Centre
- ImpattoZero Srl Private Company
- La Strada Società Cooperativa Sociale NGO
- Sunugal NGO
- Poliedra Centro di servizio e consulenza del Politecnico di Milano -Research Centre
- IFOA Istituto Formazione Operatori Aziendali Training Centre
- Mare s.r.l. impresa sociale NGOFOOD PARTNERS SRL Private Company



Telling OpenAgri stories

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1. Executive summary

The fourth edition of **OpenAgri** Journal describes and analyses the progress of the project in the last eight months, from December 2018 to July 2019. The content is based on my site visit to Milan that took place on June 2019 and on regular online meetings with the **OpenAgri** team. The journal is organized in 5 sections.

Section 1: OpenAgri is part of a broader Milan strategy – addressed the synergies and integration of **OpenAgri** in a broader Milan Circular city strategy. Milan is at the state of the art on circular cities and is exploring innovative approaches for implementing the circular economy agenda at the urban level. By addressing trade-offs with other sectors and emphasising the identification of synergies, the approach provides support for better decision making.

Section 2: The Widespread Hub – sketches the main transformations during project implementation on the concept of the "widespread hub" which consists on the test and validation of some activities of the project in temporary premises before moving in a permanent basis for the Cascina Nosedo hub. Section 3: What's going on with the 18X30 Lab? – describe the phase 3 of the acceleration plan which consists in delivering methodologies to design the business plans, based on lectures, practical exercises and individual or group tutoring session. Training on subjects such as: Agro-ecology services and local supply chains, support for the creation of partnerships & Governance, strategy and market, marketing and communication, management control, will be delivered on phase 3.

Section 4 – "Main Implementation Challenges" – outlines the main implementation challenge of this period which is the development of a monitoring and evaluation matrix based on the project baseline, the expected results, results indicators, expected impacts and project beneficiaries.

Section 5 – "Key Learning Points and Next Steps" – highlights two learning points of the period: Capitalization Event that gathered 4 UIA projects to share their findings and Open Badge activity. Also, launches the next six months of the project with focus on the Cascina Nosedo Test Period.



OpenAgri Lab

2. OpenAgri is part of a broader Milan strategy

These days, cities are at the centre of the sustainability agenda. Current economic and urbanization trends place significant pressure on urban resources, systems and infrastructures, and demand for novel approaches in governing, financing and monitoring urban performances. In this perspective, cities, as Milan, are laboratories where innovative approaches can be tested, and the energy food-water-climate can be implemented with a circular perspective. Milan is at the state of the art on circular cities and is exploring innovative approaches for implementing the circular economy agenda at the urban level.

OpenAgri project is part of broader Milan Circular city strategy. Creating systemic change takes time, investment, and the involvement of many different actors. **OpenAgri**, with the support from **Urban Innovative Actions**, is leading the development of an open innovation hub on periurban agriculture and act as a laboratory for innovation, acceleration programmes, and skills training that are opening up employment opportunities along the agri-food supply chain.

The project started under the wider policy framework of the *Milan Food Policy* and now logically embedded within the wider strategy on *Circular Economy*. The Milan Circular city has three-pronged focus: food policy; fashion and design; and urban metabolism. Milan is already experiencing the benefits of managing its relationship with food in different ways, with citizens and businesses active players in this shift. The Open Innovation Hub is the bridge with Nosedo Wastewater Treatment Plant with a focus on water recycling in peri-urban agriculture, with Milan Food Policy, Food Hot Pot (with Cariplo Factory) and other related initiatives that are taking place in the city.



Milan Duomo

Decreasing the amount of food that is treated as waste is not only reducing greenhouse gas emissions but also reducing disposal costs for the city. Through the generation of compost, periurban crop land can be regenerated, securing the long-term productivity of farmland. By increasing awareness through communication of the key issues, citizens are empowered to be part of the change, and through a renewed sense of connection with the food system that supports them, they may feel encouraged to adopt healthier diets and reduce food waste as a higher value is placed on food.

The following table presents the role of **OpenAgri** in the Milan Circular strategy:

Circular Milan and the idea of a circular economy hub at Cascina Nosedo»

20% greenhouse gas emissions by 2020 (SEAP) -

25% traffic by 2030 (Urban Mobility Plan)

142% population served by public transport within 2030 (Urban Mobility Plan)

70% recycling rate by 2030 ("towards zero waste" declaration)

70% soil consumption by 2030 (PGT) 3 million trees by 2030 (urban forestation program)

| Areas Tools | Waste | Energy | Food | Creativity | Manifacture | Mobility |
|---|--|---|--|---|---|--|
| Awareness and networking actions | Declaration "towards zero waste" | C40 Network | Milano Food City, Food Policy | 100 Italian Circular Economy Stories | "Manifattura Milano" urban production circuits | European week of sustainable mobility |
| Regulation actions | Sustainable Energy Action Plan (SEAP), Food Policy | PGT, SEAP | Food Policy | Convention with Chamber of Fashion | PGT | PGT Urban Mobility Plan SEAP |
| Procurement / PPP | Smart Bin (AMSA) | Public LED lamps (A2A) | Food Hot Pot (with Cariplo Factory) | BASE Milano | Incentives for self production (Makerspaces and FabLab) | Renewal of electric bus fleet (ATM) |
| Fiscal policies and business support | Reduction of urban waste tax | Call on energy efficency, call on heating boilers | Reduction of urban waste tax, Street Food call, Agreement with Ellen Macarthur Foundation | Incubators for circular start-ups (ex. Orange Fiber) | FabriQ III call, Bando FabriQ IV "Neighborhood innovation" | Carpooling call, electrical vehicles call (cars & scooters), company car calls |
| Pilot Project | Environmental counter, Milan Plastic Free Experimentation | Sharing Cities (Smart Cities Lighthouse) - H2020 | OPENAGRI – UIA | Green Carpet Fashion Awards Italy, Fuorisalone | REFLOW – H2020 | Sharing Cities (Smart Cities Lighthouse) - H2020 .9 |

Milan Circular City – Matrix Tools and Areas:

The table demonstrates how the *areas* (*waste*, *energy*, *food*, *creativity*, *manufacture* and *mobility*) and *tools* (*awareness and networking*, *regulation*, *procurement*, *fiscal policies and business support*) are related to each other, and

how *pilot project* supported by regional national and European funds, such as Urban Innovative Actions, are driving the circular strategy to a reality.



Milan is intensifying efforts to be prepared for global change, including climate change, which adds a certain degree of uncertainty to the future availability and demand of natural resources. *The matrix means that the areas of intervention are inextricably linked, and that actions in one area more often than not have impacts in one or both* of the others. The matrix approach aims to reduce trade-offs and enhance the efficiency of the entire system rather than increasing the productivity of specific sectors, often at the expense of other sectors. For example, the positive effect on food security may be compensated by reduced water security as the downstream water is unfit for certain purposes due to water quality deterioration.

These trade-offs are the reason why a *Milan Circular* city approach is needed: in order to systematically address what is often hidden or not being considered in planning and management, given that a "silo" approach (i.e. single minded pursuing individual goals) has no means to consider these types of externalities.

By addressing trade-offs with other sectors and emphasising the identification of synergies, the approach provides *support for better decision making*. This approach shows the mutual benefits of cooperation (between ministries, sectors, stakeholders, etc.). By accounting for the complex interdependencies between the different areas systems, such an approach can support decisionmakers in managing resource trade-offs across different economic sectors and actors.

The **tools** in use represents new approaches to integrate and harmonise public policies, creating awareness, quantifying and addressing trade-offs between areas and creating incentives to develop aligned strategies and providing investments for projects which prove to contribute to achieve *Milan Circular* city development goal.

3. The Widespread Hub follow up

As presented in **OpenAgri** Journal Nº3, due to delays in the renovation works at Cascina Nosedo, the project come up with a solution to test and validate the project activities and to reinforce the presence in different locations of the city. The solution named **The Widespread Hub**, it's been a success for project activities such as: *Temporary OffiCucina, Aquaponics Greenhouse and Prototype Development Center*.

The capacity to find solutions for unexpected problems is "business as usual" when cities are implementing innovative and risky projects, as the UIA projects. The progress and delays of renovation works caused changes in **OpenAgri** that without putting in risk the project goals and objectives forced the implementation team to make options and establish synergies to overcome barriers.

The *initial scenario* for Cascina Nosedo, as presented in detail in *Journal Nº1*, focused in renovate building 10, for offices and co-working spaces, renovate building 9 for labs and officucina, to have premises to accommodate aquaponics greenhouse and an open area for environmental requalification.

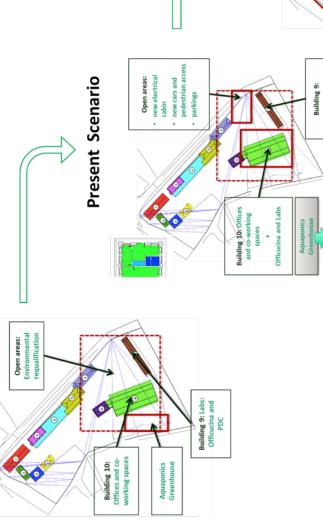
At present, due to the implementation of The Widespread Hub, building 10 will accommodate offices, co-working spaces, labs and officucina. The Aquaponics greenhouse will move to a new location, close to Cascina Nosedo allowing that synergies with the other activities of the project are not lost. Building 9 is undergoing safety works. The open area will receive a new electrical cabin, new cars and pedestrian access and parking.

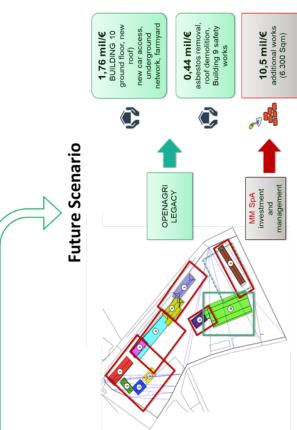
In the future, due to UIA investment through **OpenAgri**, the location attractiveness will increase for investors and other local partners such as the Metropolitana Milanesa spa (MM), that already gave the first steps to exploit the area. MM is an inhouse company of the Municipality of Milan and manage wastewater treatment plant in the area and expressed the intention to candidate as new manager and investor for Cascina Nosedo and Vaiano Valle plots.

The following diagram summarizes the transformations in the area since the **OpenAgri** project started:

OpenAgri evolution over time

Initial Scenario





Building 9: Safety works

New location Ц

4. What's going on with the 18X30 Lab?

The **18X30** Lab is the heart of **OpenAgri** project, in which infrastructures and services are jointly and dynamically stimulating open communities of farmers, advisors, researchers, businesses, and others, building new collaborations and networks so cities can understand innovation, innovators can understand cities, citizens can become effectively engaged and users can become content providers, service producers and deliverers.

The *selected 18 projects* are a source of learnings due to the heterogeneity of agri-food business operating in the area. Also, the different ages and backgrounds of the entrepreneurs, many of them not professional farmers but amateurs, with a higher focus on social innovation business than on technological businesses.

The projects are characterized by a strong integration with the cultural and creative field, providing innovative inputs for other areas of activity in the local economy, such as agriculture, handicrafts, tourism and gastronomy, promoting their development and prosperity. The effects of knowledge spill overs derived from geographical proximity, induce the transfer of information, technologies, innovative business models and organization forms, to the overall economy. Also, there is a strong evidence that individuals with artistic and creative skills are working in other areas of activity.

The next step is to support entrepreneurs 'to anchor innovation on the ground'

Rossana Torri, OpenAgri project manager

OpenAgri team now realises that supporting agri-food business to grow and scale up is much

more different of supporting business in other sectors more based on technology driven. The incubation of projects of this nature requires new methods and tools '*tailored made*' to push innovation from farm to fork. There is a lack of innovators on the territory that can systematically create new products and services based on the local characteristics of the territory.

The **18X30** Lab programme consists of multiple phases to specifically consider the diversification of projects, professional profiles and development stages of the business ideas. The Phase 0 was dedicated to *Territorial Adaptation*, Phase 1 to *Pre-incubation of the selected projects*, Phase 2 focus on the *Organization of the Campus* to provide training and search for synergies between the projects and Phase 3 that, kick-off in 2019, is supporting the projects with incubation and training.

Phase 3 consists in delivering methodologies to design the business plans, based on lectures, practical exercises and individual or group tutoring session. The partners: *Fromaper, Chamber of commerce, IFOA and Cineca* are responsible to deliver the training on subjects such as: *Agro-ecology services and local supply chains, support for the creation of partnerships & Governance, strategy and market, marketing and communication, management control.*

Attendance to the *Phase 3* training path will generated 1 Macro badge on Business Planning in Peri-urban Agriculture and 4 badges (more information about the badges available on OpenAgri Zoom-in https://www.uia-initiative.eu/ en/news-events/open-badge-innovative-toolenhance-individual-skills).

5. Main implementation challenges

The main implementation challenge of this period is the development of a *monitoring and evaluation matrix* based on the project baseline, the expected results, results indicators, expected impacts and project beneficiaries.

At the core of the project there is an *"Open Innovation Hub on PeriUrban Agriculture"* as an integrated strategy to deliver innovation in existing and newly created nodes of the agri-food value chain, focusing on new skills, training, pilot projects for SMEs and startups ideas.

The project will result in improved interactions between traditional knowledge holders and other more innovative actors between local and citywide realities engaged in product, services or process innovation. It is also expected to *foster cross-sector linkages and hybridization between different fields* (agriculture, food industry, culture, education...) and actors (SMEs, NGO, PA) with the ultimate aim of testing an innovationdriven inclusive growth model.



OpenAgri e-bike

Project results will be assessed against both *key performance indicators* (KPIs, during an activity implementation) and *deliverable indicators* (DI, by end of activity) and their related target value.

KPIs will have an important role, representing "milestones" for the achievement of a given activity. The degree of deviation from this "milestones" will be monitored. At the same manner deliverable indicators are essential for

the achievement of main results. These will be assessed at the end of each activity. The degree of deviation from target values will be monitored to evaluate the performance of the project against the expected results.

The results of the project will also be measured in a long-term perspective in order to show how the project has contributed to some changes in the target groups. The impact assessment is based on the **Theory of Change** that defines the impact of an activity in terms of perceived value of target groups. The "change value" will then be assessed against the real change in the lives of target groups and beneficiaries.

The Theory of Change first *identifies the desired long-term goals* and then works back from these to map how the projects' activities and interventions (performance) lead to the outcomes identified as preconditions for achieving the changes in target groups (impact).

The impact assessment framework is an ongoing discussion on *OpenAgri* and all the partners are involved in the discussion. Each partner involved in project actions will propose impact indicators to measure the outcomes. Indicators could be both quantitative and qualitative.

In order to assess the *"change value"* perceived by the beneficiaries and to verify the materiality of the impacts, in particular for the qualitative impacts, specific focus groups with stakeholders will be organised before the end of the project.

The need to develop a model that can **combine social objectives with economic sustainability**, closely linked to the territory and the need to create a complex system of activities and services that can be sustainable from an economic and financial perspective when Urban Innovative Actions funding comes to an end is a key activity for the next months. A new strategic partnership with *Metropolitana Milanesa spa (MM)* and the willingness to develop a wider area of Nosedo Farm to ensure sustainability beyond UIA opens promising perspectives for the future of *OpenAgri*.

Other implementation challenges already mentioned in previous editions of this journal, such as: **Leadership for implementation and Upscaling** have been overcome.

The widespread hub it's being implemented with success due to the strong leadership of the project management team but also to the commitment of project partners, as described in section 2.

The OpenAgri digital platform is in progress as planned. The next edition of OpenAgri will bring more news about how the digital platform is contributing to leverage the project knowledge.

In future editions of the OpenAgri journal we will revisit the UIA challenges and assess the progress made and lessons learned.

6. Key Learning Points and Next Steps

First key learning point – Capitalization Event



UIA projects getting together to share their findings and to learn with each other is an activity to replicate and to scale up to other project and UIA themes.

On June 20th-21st Municipality of Milan organized "Promised Land: the future of urban consumption", a two-day event discussing about future skills, new technologies, narratives and policies with which cities are imagining new relations between production, consumption and sustainability of their agri-food systems. For that, five cities in the process of implementing 5 Urban Innovative Actions projects, Milan (OpenAgri), Madrid (Mares), Maribor (Urban Soil for Food), Pozzuoli (MAC) and Lille (Tast'in Fives) were invited to share the first results of the their projects.

The capitalization event was an opportunity for the five projects to share the challenges and learnings of their projects at this stage. The five cities, together with rich and diverse groups of local stakeholders are now in the last year of their three years implementation phase. All are implementing activities to **promote the reconnection of citizens** with food fostering behavioural change towards healthy sustainable diets and nutrition, responsible production and consumption.



Legend: OpenAgri Lab

The five projects made evidence of the potential to act as *ecosystems of innovation facilitating experimentation and multi-stakeholder engagement*, to establish long-term evidencebased strategies that will ultimately ensure safe, healthy, sustainable and nutritious food to their inhabitants and surrounding communities. They are playing a key role in assembling, connecting and supporting food system actors and citizens to build and deliver transformative solutions with real societal impact based on sound science, research and innovation.

This are being supported by non-traditional policy approaches, with a strong political support and vision, new skills and internal organizational models. *Cities are acting as frontrunners towards a new economic paradigm*. Although from different angles and with very different local contexts, they all try to build solid ecosystems for growing economic sectors, such as the food sector, to prosper (helping them to anticipate major

Second key learning point – Open Badge

Learning takes place everywhere. While attending *OpenAgri* training program, entrepreneurs learn, but the value of these training is recognized as a badge from *OpenAgri* certifying the entrepreneurs skills and competences.

The entrepreneurs holds an **OpenAgri Open Badge** showing the skills, and containing his or her own data (name, email, date when the Badge was obtained) and possible evidences used to claim it, adding up to the skills description as defined by the issuer.

At OpenAgri, the selected projects for incubation receive training in the competencies they need and share the competencies they have. Open Badges have been selected as a way to highlight competencies, whether they are the outcome of training or not (recognition!)

More about the **Promised Land** event is available on the following links:

https://www.youtube.com/watch?v= yZubuWok2WU&list=PL5LCmU96Ntnf 2fuogZ43EpPvaSn3LZCFr&index=2&t=14s

https://www.youtube.com/playlist? list=PL5LCmU96Ntnf2fuogZ43EpPvaSn 3LZCFr

https://www.facebook.com/pg/ openagrimilano/photos/?ref=page_ internal

https://www.uia-initiative.eu/en/news -events/openagri-presents-promisedland-future-urban-consumption

technological disruptions) while investing on local people and their skills to ensure that they will contribute to and benefit from the new growth.

More about **Open Badges** on the following links:

https://www.uia-initiative.eu/en/ uia-cities/milan https://bestr.it/badge/show/800 https://bestr.it/project/show/97 https://www.youtube.com/ watch?v=ehfJDGjaQ6s

OpenAgri's currently published 8 badge and 1 pathway. Most are management oriented and connected to explicit learning experiences.

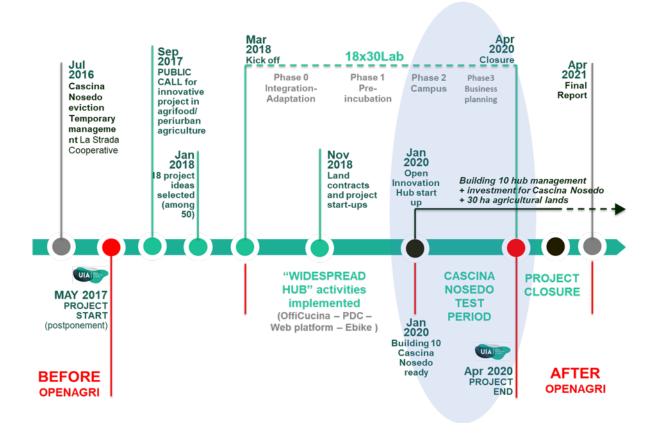
Next Steps

The main steps over the next month's will fully dedicated to the Cascina Nosedo Test Period and can be summarized on the following steps:

- 18X30 Lab phase 3 business planning closure April 2020;
- Open Innovation hub start-up building 10 Cascina Nosedo ready to use – closure January 2020;
- Sustainability plan and business model for OpenAgri – January 2020;
- Preparation to close the project report, final event, evaluation, after OpenAgri – April 2020;

- Piloting an OpenAgri value chain from production (Acquaponics) to transformation (Officucina) to distribution (e-bike and web platform).
- Awareness raising and community engagement through the «Social Lab» network action (NGOs, cultural associations, artists in residence...)

The following diagram summarizes the project steps since the beginning until the end of the project:



OpenAgri is coming to an end and the next two edition of the journal, we will make known the main achievements and the plans for after project period!

Urban Innovative Actions (UIA) is an Initiative of the European Union that provides urban areas throughout Europe with resources to test new and unproven solutions to address urban challenges. Based on article 8 of ERDF, the Initiative has a total ERDF budget of EUR 372 million for 2014-2020.

UIA projects will produce a wealth of knowledge stemming from the implementation of the innovative solutions for sustainable urban development that are of interest for city practitioners and stakeholders across the EU. This journal is a paper written by a UIA Expert that captures and disseminates the lessons learnt from the project implementation and the good practices identified. The journals will be structured around the main challenges of implementation identified and faced at local level by UIA projects. They will be published on a regular basis on the UIA website.



Urban Innovative Actions

Les Arcuriales 45D rue de Tournai F- 59000 Lille

+33 (0)3 61 76 59 34

info@uia-initiative.eu www.uia-initiative.eu

Follow us on **twitter** @UIA_Initiative and on **Facebook**.

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