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The Urban Lab of Europe!

# The OpenAgri Project Journal N°2

Project led by the City of Milan



JOBS & SKILLS
IN THE LOCAL ECONOMY





#### The OpenAgri project

Open Innovation Hub on Peri-Urban Agriculture integrates several food policy experiments in a single strategy and operating as a living lab to foster innovation in the entrepreneurial, social, sustainable and technological dimensions of the agri-food sector. At an entrepreneurial level, the Hub promotes development projects involving SMEs and 'startuppers', and experiments with innovative tools for increasing and transferring capacities. At the social level, community-led initiatives for inclusion, urban regeneration, social, and territorial cohesion projects will be implemented, aiming to change the "Porto di Mare Area" from what is currently a problematic suburb into a great experience of collaboration and sharing of new knowledge and opportunities, targeted, in particular, at young people, disadvantaged groups and migrants. At the sustainable and technological levels, the project is developing disruptive and innovative solutions for peri-urban agriculture based on new approaches and tools for food production.

As a result, besides its potential to increase food availability, while assuring food safety and improved eating habits, the project aims to develop the zone's peri-urban agrifood sector in a way that will attract investments for further innovative processes. Last, but not least, the OpenAgri project will regenerate this peri-urban zone of the city by making it an example of social inclusion and innovation.

The content of this journal does not reflect the official opinion of the Urban Innovative Actions Initiative. Responsibility for the information and views expressed in the journal lies entirely with the author.

#### 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

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#### 1. Executive summary

The second edition of OpenAgri Journal describes and analyses the progress of the project in the last six months, from September 2017 to February 2018. During this period the progress of the project is in line with what was planned although the renovation works at Cascina Nosedo are somewhat behind schedule.

The content of this second edition is based on my site visit to Milan that took place on January 2018 and on regular online meetings with the OpenAgri team. From these exchanges, I would notably like to highlight in the first sections three areas that are particularly interesting at this development stage of OpenAgri.

Section 2 — "Integration as a strategy, not as a challenge" — addresses the integration of OpenAgri in the municipal strategy called "Innovate for including" that frames the huge amount of experimental initiatives which have been promoted in recent years in the field of labour and innovation policy.

Section 3 – "Innovativeness of OpenAgri" – sketches the capacity of OpenAgri to attract talents, creators, entrepreneurs, business and others, in a unique experimentation laboratory that follows a place-based approach.

Section 4 – "#MilanoUpsideDown" – highlights the communication strategy, which is based on the assumption that OpenAgri needs a permanent and inclusive approach to avoid irrelevance and the top down feeling.

Section 5 – "Main Implementation Challenges" – outlines the main implementation-related challenges faced by the project. Although progress is very good overall, special attention is needed on two of the UIA implementation-related challenges, namely: "Smart Public Procurement (using public spending to leverage more local innovation)"; and "Participative approach for co-implementation (incl. private partners)".

Section 6 – "Key Learning Points and Next Steps" – addresses the need of a cultural shift and launches the next six months of the project.

The subsequent journals will pay further attention to the advancements of the implementation process. **Enjoy this second journey into the OpenAgri world!** 

## 2. Integration as a strategy, not as a challenge

The Open Innovation Hub on Peri-Urban Agriculture, is located in Porto di Mare, an area defined as an "urban fringe", representing the transition zone between the consolidated part of the City and the agricultural lands. This is the part where the City ends. Together with the agricultural lands, the ancient farmlands and the historical sites (like the beautiful Chiaravalle Abbey), it is also home to what the City has rejected and expelled: discos, scrapyards, Roma camps, a water treatment plant etc. On the other hand, this area presents important endowments and significant social resources (in terms of NGOs and community actors working there).

The place is a strategic area, confluence point of urban and peri-urban realities, at the edge of the city of Milan, in a critical but promising periphery.

An interesting mix of uses and activities characterizes the area: agricultural land, Parco della Vettabbia and Roggia della Vettabbia, a network of cascine (traditional rural buildings refurbished by other initiatives), the Abbazia di Chiaravalle, a popular neighbourhood with social housing, a nomadic settlement and important signs of the territory, like the wastewater treatment plant of Milano Nosedo, important public and private transportation infrastructures and the European Institute of Oncology.

Because of its unique characteristics, in terms of location and capacity if link different stakeholders that normally do not cooperate, City of Milan aimed to make this area key experimentation site for implementing its food system strategy.

Benchmarking with other cities, several have adopted an urban (or metropolitan) food system strategy, resulting in planning tools (e.g. the Amsterdam's Green Metropolis Plan), policy agendas and charters (the same Milan Urban Food Policy Pact), institutional settings (Food Board in London and Mayoral Food Office in NYC), governance arrangements (Food Policy Committees, in Bristol and Toronto), financial schemes (land partnerships in England).

"The Hub is the tool to integrate in the food policy, start-ups promotion, capacity building initiatives, technological projects, community involvement processes."

Source: Municipality of Milan (2017)

The OpenAgri Hub seems to be a step forward in the capacity to deliver an innovative integrated strategy. The Hub is fully consistent with and delivering against the municipal strategy called "Innovate for including". It represents the framework of the Milan Municipality that frames the huge amount of experimental initiatives which have been promoted in recent years in the field of labour and innovation policy.

OpenAgri is thus a policy experimentation project that follows a place-based approach, integrating several dimensions in the city of Milan, such as:

- Educational and training environment: competencies validation and certification, educational services delivery, business planning, linkages with educational establishments;
- Local and city-wide economy: production (products immediately accessible),

- entrepreneurship (innovative start-ups and supply chain integration);
- Social (and recreational): inclusion, community engagement, training for vulnerable targets, awareness and information;
- Environmental production and agriculture: such as pollution reduction/prevention, soil conservation and environmental protection, renewable energy use, biodiversity safeguard and, food security;
- Resilient territorial development: environmental modelling and impact.



Source: Miguel Sousa

Facing integration as a strategy not as a challenge means inherent design flexibility, coupled with an evolving policy and planning agenda, to be shaped through community involvement. Although there is an innovative integrated strategy in the city of Milan, the urban metabolism of Porto di Mare, with the presence of OpenAgri Hub will change due to important impacts in terms of energy, water and land consumption, environmental effects, use of chemicals and others. Some inefficiencies will be identified, such as the presence of linear flows instead of more circular approaches. A periurban farm belt could have an important role in this context. In this belt, many recycling and reuse processes can take place.

OpenAgri team is aware of these threats and is working on a framework, based on a previous multidisciplinary project about institutional catering in Lombardy<sup>1</sup>. A method and a tool were developed to evaluate indicators related to the production of foods: non-renewable energy, productive land, productive cost and global warming potential. These indicators can be used to understand the main impacts of food processes adopting a tool with a simple structure and a limited number of parameters, but providing transparent quantitative evaluations, achieved by a rigorous approach, but understandable for a large audience.

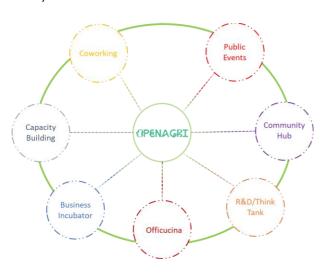
The use and evaluation of this method in OpenAgri will be followed, documented and shared because it presents a high potential of replication in other EU cities.

<sup>&</sup>lt;sup>1</sup> Project name: BioRegione, confinanced by Fondazione Cariplo. The research was carried out by DiProVe (Department of Crop Production) of the University of Milan with the partnership of Polythecnic University of Milan.

## 3. Innovativeness of OpenAgri

The innovativeness of OpenAgri does not lie in the regeneration of Cascina Nosedo and surrounding agricultural land. Rather, it lies in the capacity of attracting talents, creators, entrepreneurs, business and others, to develop new practices in peri-urban agriculture in a unique experimentation laboratory that follows a place-based approach. The renovation of the area and the buildings is not seen as an aim in itself but rather as an important catalyst for the development of a policy experimentation that will stimulate jobs and skills in the local economy.

The project approach, is based on an "innovation playground", which combines innovation, social and commercial activities. The project approach was put to test on a two-stage public call in August 2017<sup>2</sup>. Fifty applications were submitted and at the end eighteen projects were selected to join the acceleration program (more information about the 18 projects will be available in the OpenAgri Zoomin - Experimentation Laboratory in Urban Agriculture – to be published during summer 2018).



<sup>2</sup> <u>www.comune.milano.it</u>, Economic Planning Unit Direction Urban and Labor Economics However, having an idea is one thing, turning it into an innovation action is another. The **Experimentation Laboratory in Urban Agriculture** is pushing the selected projects to become successful business or social organisations and is working with them on different dimensions:

- Co-creating the acceleration program: based on the critical needs of the projects, such as: water and irrigated land; energy; warehouse for storing tools, cold room for storing fresh products; readiness of the soil to be used; safety of equipment's and products; funding needs for market uptake; time needed at the experimentation laboratory; selling point needs; delivery service and others, a co-creation process between OpenAgri team and the selected projects took place during the workshop held on 17 January 2018, where both parties were active, learning together and influencing each other. The outcome of the workshop was a customised acceleration program for the 18 selected projects.
- Engaging them in a multi-actors approach: engaging end-users and multipliers such as farmers and farmers' groups, advisers, enterprises, research organizations, and which others, are closely involved throughout the whole acceleration program. This should lead to innovative solutions that are more likely to be applied in the field, because those who need the solutions will be involved right from the start: from defining the questions, to planning, implementing, experimenting and right up until possible demonstrations and dissemination. The involvement of relevant groups operating in Milan has been strongly recommended by the OpenAgri team.

Coordinating synergies and interdependencies within the selected projects: synergies and interdependencies are seen by the OpenAgri team as a critical aspect of the Experimentation Laboratory coordination. Together with the 18 projects OpenAgri team is working in the perspective of interdependencies between activities and the perspective interdependencies between actors. Many agricultural issues are in fact a series of linked processes or activities that involve multiple actors, e.g., supplying agricultural inputs, cultivating, harvesting, post-harvest handling, transporting, processing, marketing, and distributing. The 18 projects were clustered in 3 themes: Technological innovation in the agri-food chain (8 projects); Productive and agro-ecosystem services (5 projects) and Sharing economy and social innovation (5 projects). Synergies are being established between projects and some good examples are already happening. Some projects are supplying others with seeds, sharing training and workers for different activities of the agrifood value chain, as well, plans to share the network of suppliers, logistic and delivery services. Synergies will more effective when all the projects are installed at the Hub, which is expected to happen in the second semester of 2018.

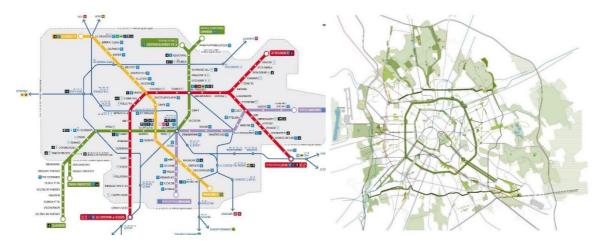
The needs as well as the opportunities for innovation are high, leading to a higher intensity of technical innovation, more diversity in farming types, and new forms of organisation and cooperation. Creating an innovative ecosystem, connecting stakeholders at different level and territorial scales, linking economic development and social inclusion challenges, will foster mutual learning, co-creation and new skills.

## 4. #MilanoUpsideDown

Creative, original and surprising is the communication strategy developed by the OpenAgri team. **#MilanoUpsideDown** tag has the ambition to be the label of any idea, action and actor in Milan who questioned with a positive and proactive practice the consolidated

hierarchies: *Close vs Far; Centre vs Suburbs and Rural vs Urban*.

Any communication of the project and any content tagged in #MilanoUpsideDown will be accompanied by a visual and / or text meme rotated 180 degrees as the 2 images explain.



#MilanoUpsideDown: The Underground system and the green network of parks; Source: OpenAgri communication team

The communication strategy is based on the assumption that OpenAgri needs a permanent and inclusive approach to avoid irrelevance and the top down feeling. The communication strategy is based on 3 ingredients and 7 keywords:

#### **Ingredients:**

- Innovation Hub (startups, entrepreneurs, associations, innovators, new skills produced, academic researches)
- Rural-Urban Fringe (PeriUrban agriculture, landscape, agro-eco systemic services, green areas, urban farming chain)
- Urban renewal (farmhouse, suburbs, smart city projects)

#### **Keywords:**

- Replicable: Every tool we use is to reuse without control
- **Open**: The project is communicated bottom
- Decentralized: The communication power relay in anyone share the value of the project
- Diffuse: Out of the project's area, out of Milan
- Viral: Not for partners only
- **Unexpected**: It's not the usual governmental communication project

 Powerful: People should get aware of what's happening

For 2018 and 2019 at least 15 #MilanoUpsideDownLabs will be organized, everyone (Local/citywide Stakeholders; SMEs, entrepreneurs; Students and near-graduates; NEETs and young people; Local and national media; Citizens; scientific community involved in agri-food research and urban planning; EU project networks on periurban agriculture) from every part of Milan will be invited to present a project related to the values attached to the overall Tag and Claim. Also, some "Urban Activations" events: a series of artistic actions and activities involving the surrounding territory, the neighbourhood, the project area and the whole city caught up in a continuous dialogue of mutual inspiration. Those events would become crucial moments to engage with stakeholders, disseminate projects results and best-practices and share replication strategies. These events will allow reaching out to different target groups and maximising replication at all levels.

As stated by the communication team, OpenAgri will be the flagship project of the Food Policy agenda promoted by Milan Municipality and the Smart City strategy.

## 5. Main implementation challenges

This section outlines the main implementationrelated challenges<sup>3</sup> that emerged from the past six months of the project:

 (Smart) Public Procurement (using public spending to leverage more local innovation) The public procurement processes related to buildings renovation are delayed. Buildings 9 and 10 are those clearly involved in OpenAgri project since their deep renovation is among the main actions of the project.

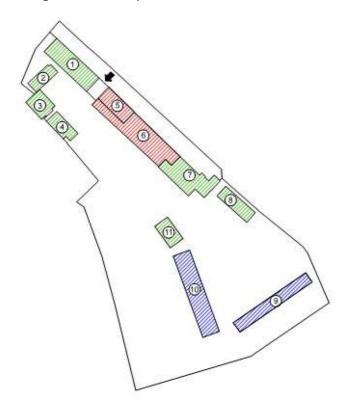
The buildings of Cascina Nosedo present critical aspects related to their age, history and management. This results in a bad state of conservation of the buildings (1) (scarce information is available), in a total degradation of the courtyard (2) and in a difficult social

http://www.uia-initiative.eu/sites/default/files/2017-12/FINAL%20VERSION Milan.pdf

<sup>&</sup>lt;sup>3</sup> For more information about these challenges, please read the first OpenAgri Journal:

context with current inhabitants (3). The combination of these 3 factors, together with delays on the public procurement process for the renovation works, has generated delays in

the renovation of the buildings and it has led the OpenAgri partnership to come up with some creative decisions.



Map of Cascina Nosedo (red: collapsed buildings; green: existing buildings; blue: buildings to be refurbished by OpenAgri project; Source: OpenAgri team

Some of the Hub functionalities will be held on a temporary basis at the premises of some partners, like the co-working activities, the incubation of the 18 selected projects for the Experimentation laboratory, the space for the social innovation activities and others. So, while the entire space is predicted to be fully in operation by the summer of 2018, provisional spaces can already host some of the activities linked to the nurturing and support of the new 18-selected projects.

#### Participative approach for coimplementation (incl. private partners)

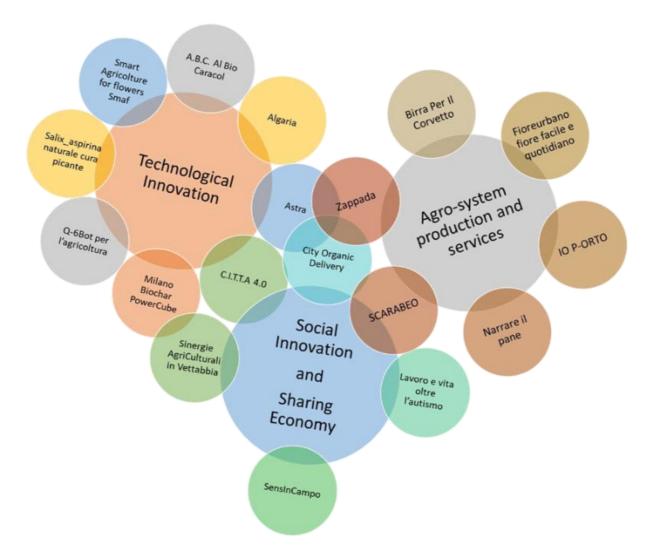
The Experimentation Laboratory (Lab) selected 18 projects with innovative techniques and approaches in peri-urban agriculture, educational and training initiatives and awareness campaigns (more information at OpenAgri Zoom-in to be published over summer 2018).

The Experimentation Laboratory in Urban Agriculture is the heart of the OpenAgri project, in which infrastructures and services are jointly and dynamically discovered by providers and users.

It provides the perfect conditions to create open communities of farmers, advisors, researchers, businesses, and others, building 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.

As such, the open innovation hub envisaged by OpenAgri should become a specific urban setting, or an "innovation playground", which combines innovation and social and commercial

activities, to enable open innovation and showcase the benefits that may be reaped by localities through growing smarter and in a more sustainable manner.



18 projects selected by the OpenAgri Experimentation Laboratory organized by theme; Source: Miguel Sousa

However, this poses a challenge to OpenAgri team. The complexity and the expansion of the pool of people and projects involved will require a greater organizational capacity, more collaborative and strategic environments, communication flows, more flexibility in terms of bureaucratized and proceduralized urban government systems.

In this sense, complexity implies a high level of informality that implies in turn the availability of

abundant social capital and trust in order to be effective.

OpenAgri partnership is aware of this challenge and have in mind that to be trustable it needs to deliver the expectations raised in the local community that is population the Hub.

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

Culture is like an iceberg. The part that can be seen above the waves reflects the isolated behaviours and outcomes that can surprise and sometimes frustrate policymakers. Over the last 6 months OpenAgri looked to the bulk, the submerged part that comprises the "shared beliefs and assumptions" that are often shaped over generations.

An example of this "shared beliefs and assumptions" that I had the opportunity to discuss with participants of the workshop organised in January 2018, was the preconceived idea and misleading vision of the metropolitan city, by ascribing Milan and its surroundings as a consume centre rather than a productive one. When, in fact, Milan counts the biggest agricultural area around a metropolis at national level.

A cultural shift is needed, that is a fact! The communication strategy based on #MilanoUpsideDown tag moves towards that direction. It seeks to create a narrative that shows the value of the widely held beliefs, but also the pitfalls and inappropriateness of the beliefs in other contexts. It will be useful to articulate, in detail, the beliefs, behaviours, and outcomes that are desired by OpenAgri.

The main steps over the next 6 months are:

- Renovation works (permanent activity) –
   The renovation of the buildings is among the main actions of the project. There is a need to speed up the renovation works to catch up with the original planning timetable to rebuild the buildings at Cascina Nosedo;
- Start-up acceleration programme implementation – in the next six months the Experimental Laboratory in Urban

Agriculture will accelerate the 18 selected projects by providing training, facilitating knowledge sharing and searching for innovative solutions to support the market uptake;

- Jobs awareness Organisation of visits, work experiences or job shadowing for both managers of the hub and new entrepreneurs. The objective is to complement the training phase through the opportunity for practical learning experiences, exchanges of good practice, acquire key competences and build longterm partnerships;
- Project pilots implementation In this period OpenAgri will kick start 3 pilot projects on: New products and new technologies for agricultural production based on a) the AQUAPONIC SYSTEM, b) an "OFFICUCINA" for transformation and processing of food and c) new LOGISTIC SOLUTIONS for last mile transportation and waste management;
- Project-based internship evaluation report
   Internship programmes for young graduates, including certification of competencies and skills through Open Badges and valorisation of new emerging professions, such as aquaponics professional, food innovator and other hybrid profiles;
- Open Badges playlist Implementation of a 'Learning playlist' on peri-urban agriculture using open badges into the 'Bestr' digital platform;
- Awareness and communication (permanent activity) – Implement the #MilanoUpsideDown communication plan at the local, national and EU level.



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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.