Urban farming business models

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Brief personal presentation

Direct experiences on management and funding of urban projects and urban-rural initiatives. Some examples:

- **OpenAgri – New Skills for new jobs in peri-urban agriculture** | Urban Innovative Action project | Municipality of Milan

- **RUMORE – Rural-Urban partnerships MOtivating Regional Economies** | Interreg Europe project | Lombardy Region

- **Agro-Millennials – a new metropolitan agricultural generation** | Local project funded by Cariplo Foundation | Municipality of Gorgonzola (Milan)
Executive summary

1. Organizational models and business models in urban farming: a close connection.

2. What are the economic impacts that urban farming produces?

3. Municipalities as activators of new urban and peri-urban farming processes: implications of short value chains

4. Urban farming and urban economies: agricultural projects of circular economy and agro-ecology

5. The role of citizens: from consumers to prosumers

6. Comments on environmental, economic and social sustainability
Guide for the presentation

For each point indicated in the summary I underline elements to be considerate for business modelling in urban farming starting from concrete examples of my experience.

Above all the experiences:

the «pioneer and flagship project» in Italy: the CSA (Community Supported Agriculture) Arvaia in Bologna.

Comments and recommendations raise from these experiences.
1
Organizational models and business models in urban farming: a close connection.
Territorial community model

The **economic sustainability** of urban farming passes through necessary points of interests:

1. **Diversification of activities:** in line with the multifunctional approach of agriculture
   - Niche and specific agri-products;
   - Different urban-rural supply chains;

2. **Keep business costs low:** waste re-use and apply circular economy initiatives
   - Micro-generators for energy demand
   - Raw Materials from organic waste

3. **Establish relationships with citizens who are not farmers** for training and leisure activities
   - Volunteers networks
   - Training courses and workshop

4. **Regulate the use of space as a shared space** for different but compatible uses.
   - Multi-function spaces (outdoor and covered) to be shared and rented

The reference model is:

**CSA - Community Supported Agriculture**
Models

- **MASS MARKET RETAIL SYSTEM**
  - FARM
  - CONSUMERS

- **ONLINE PLATFORMS**
  - FARM
  - CONSUMERS

- **DIRECT RELATIONSHIP**
  - FARM
  - CONSUMERS

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**CSA Model (Community Supported Agriculture)**

- CUSTOMERS
- FARMER MARKETS
- CROP
- SUPPORTERS

START HERE
Arvaia model

Arvaia is a cooperative of citizens, producers, farmers born in 2013 in Bologna.

- In June 2015, through a public call, Arvaia rent from the Municipality of Bologna 47 hectares of land farm in the area.

- Arvaia is a CSA - Supporting Community Agriculture - which produces and distributes organic products to members every week.

The shareholders finance the costs for agriculture production in January, from the budget estimation. The shareholders assume the risks of the CSA and benefit from everything that is produced and distributed weekly in equal parts.

The investments necessary for production are made possible from the capital lent by the shareholders, bound for 3 years and remunerated at 2%/year. No loans from banks.
Arvaia model

**NUMBERS:**

- **493 Shareholders** in 2020 of which **200 funding shareholders**.
- **52 active members, 9 paid workers.** The annual contribution (fee) is defined year by year based on the estimated costs and number of contributors. Annual contribution last year: **€ 780.**

**8830 hours voluntary work**

**8780 hours paid work**

- Weekly distribution through **10 collection points** in city, x **49 weeks**

- Average weight of the weekly: **6 kilos** - meeting the needs of two people (approximately).

**MANAGEMENT:**

- **1 Board** of directors
- **5 Working groups:** Distributions – farmers – Communication/Events – Economy
- **Shareholders’ meetings**
2

What are the economic impacts that urban farming produces?
Economic impacts of UF

Considered as a fact the social and environmental impacts of UF, What economic impacts derive at the territorial level?

1. Property:
   - **PUBLIC**: agriculture as **profitable activity** in comparison to manufacture/retail. No soil consumption. **Urban plans impacted**.
   - **PRIVATE**: less wastelands in urban and peri-urban area. Lower costs for area cleaning, security and indirectly on insurances.

   *For both*: the value of the land increases. Real Estate changed models of development: new urban projects financed UF areas through urban tax or tax deduction, mixing functions and open to neighborhood.

2. Surroundings and neighborhood:
   - **COMMUNITY HUB**: urban farming as «playground» - from private to public. No costs for extra common infrastructures.

3. Health care and Employment
   - **COMMUNITY HUB**: agriculture as «outdoor gym». Less expense on health costs.
   - **COMPETENCES AND JOBS CENTER**: starting from volunteering but also half-time / full time workers. Job reintegration opportunities for “new workers”.
Economic impacts of UF

Example: OpenAgri | Milan

Prototype business ideas on 30 hectares of public agricultural lands made available by Municipality for the duration of the project as experimentation phase.

New companies (4) + New NGO (1) on:

- **Bread** as an agricultural product;
- Subscription of **farm fresh flowers** bike delivered;
- **Organic agriculture**, biodiversity, agro-ecosystem services;
- **Precision farming** focusing on water saving technologies; short supply chains

Existing companies (4) testing new products, services, or a new application of existing techs, on:

- **Syntropic agriculture**;
- **Biomass** from pruning into renewable energy;
- **Superfood Spirulina** seaweed;
- Sustainability of **Local Craft brewery business model**

**After the project, land contracts of 15 years are offered to new farmers**
3

Municipalities as activators of new urban and peri-urban farming processes: implications of short value chains
Municipalities as innovation drivers

**Example: OpenAgri | Milan**

- **Free temporary use** of 33 hectares of agricultural land
- **An extensive program of acceleration and pre-incubation activities**, advanced training, mentorship and strategic networking, depending on the characteristics and the maturation of individual projects.

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<tr>
<th>PHASE 0</th>
<th>PHASE 1</th>
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<tbody>
<tr>
<td>WHAT</td>
<td>TERRITORIAL ADAPTATION</td>
<td>PRE-INCUBATION</td>
<td>CAMPUS</td>
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<td>WHEN</td>
<td>May – Dec 2018</td>
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<tr>
<td>WHO</td>
<td>Universities + local NGOs</td>
<td>Avanzi srl + MakeACube</td>
<td>Chamber of Commerce of Milan</td>
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<td>WHAT (2)</td>
<td>Territorial context workshop</td>
<td>Workshops for: <strong>value proposition</strong>, idea validation.</td>
<td>Interlocution with possible <strong>supply chain partners</strong> interested in open innovation. <strong>Match-making</strong> actions between supply and demand.</td>
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<td>Co-designed Masterplan</td>
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<td><strong>Building the business model</strong>, product and service testing, operational strategy and market access.</td>
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**PHASE 0**
- **WHAT**: TERRITORIAL ADAPTATION
- **WHEN**: May – Dec 2018
- **WHO**: Universities + local NGOs
- **WHAT (2)**: Territorial context workshop, Co-designed Masterplan
4

Urban farming and urban economies: agricultural projects of circular economy and agro-ecology
Agro-ecology and circular economy

Example: from RUMORE Interreg Europe project

Circular Amsterdam: Tuinen Van West – circular lab

Tuinen Van West are 4 agri-food polders focusing on:

1. Energy-neutral
2. Self-maintenance of public space
3. Green ‘waste’ re-used in the area
4. Valuable water and algae/waterplants
5. Local food systems

Vegetable garden «butler»

Wood waste from Food Forest

Mushrooms produced in containers

Worm composting

Vegetable garden «butler»
**Agro-ecology and circular economy**

**Example: from OpenAgri - Milan**

**CasciNet: Milan Porta Verde (Green Door) project**

‘Milano Porta Verde’ aims to transform an abandoned agricultural area in the “fringe” areas of South-East of Milan into a demonstrative, productive and recreational Agroforestry Park linked to a Community Supported Agriculture (CSA) scheme.

10,000 plants per hectare, transforming an agricultural area into an agro-ecosystem capable of offering essential ecosystem services for all Milan citizens.
The role of citizens: from consumers to prosumers
Producers and Consumers

Example: from Agro-Millennials – Gorgonzola Municipality (Milan area) co-financed by Nazca Mondo Alegre Cooperative with Municipality of Gorgonzola and other local institutions as technical schools.

The cooperative works in the fair trade market by importing products from the world. In 2017 decided to invest locally on urban farming for the citizens of Gorgonzola (20,000 inhabitants).

The cooperative invests on social agriculture activating citizens with work problems and young graduated would-be farmers.

The cooperative uses fair trade shops to sell agricultural products, as well as a new farmer's market.
Producers and Consumers

Example: from Agro-Millennials – Gorgonzola Municipality (Milan area) co-financed by

The production area is just on **2 hectares** in the north part of the City, in the surroundings of a residential farmstead and in **«fringe» plots** between the new East Milan ring road. **20 vegetables of different varieties** guarantee the supply for the **hyper local demand**. Revenues were € **20,000 for the first year**.

The **investments in machinery** were financed by the Banking Foundation as philanthropic body.
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Comments on environmental, economic and social sustainability
## Sustainability - comments

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<th>Urban farmers / practitioners</th>
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<td>Incremental growth</td>
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<td>Smart use of wastelands</td>
<td>Mix of employment and volunteering</td>
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<td><strong>ECONOMIC IMPACTS OF UF</strong></td>
<td>Land value increased (public)</td>
<td>Land value increased (private)</td>
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<td>More sustainable real estate project</td>
<td>Less costs in health and employment</td>
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<td><strong>SHORT VALUE CHAINS (PROMOTED BY MUNICIPALITIES)</strong></td>
<td>Territorial and neighbourhood development</td>
<td>New urban-rural economies</td>
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<td>Effects on local and social innovation</td>
<td>Niche products and specific demand</td>
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<td><strong>AGRO-ECOLOGY AND CIRCULAR ECONOMY</strong></td>
<td>Better soils in peri-urban lands</td>
<td>Less costs on materials</td>
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<td>Less waste to be disposed</td>
<td>Community network (citizens, ngos, startups)</td>
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<td><strong>PROSUMERS</strong></td>
<td>Networking with schools and employment offices</td>
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<td>Community Hubs</td>
<td>New jobs and competences</td>
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### Color legend
- **Social**
- **Economic**
- **Environmental**

CityZen Interreg Europe
Questions for open discussion

1. Starting from the Arvaia model and more generally from CSA model, do you think this model could be implemented in your local territory? Do you believe that the answer to the economic sustainability of urban farming is in the community? If yes, what are the elements to start from? If not, what are the constraints?

2. Urban farming and peri-urban farming are not the same things, they are differentiated by the "amount" of space available to work and set up the related business plan. However, they share their proximity to the city and their relations with the "urban economies". In your opinion, what are the assets on which an urban farmer should focus, in addition to agricultural production? (what services for citizens?)

3. Finally, which service do you think most important should be provided by the local public body? Give outdoor spaces, provide business creation support, promote events,…?
Thank you!

Questions welcome