

# CREATIVE ECOSYSTEM SERVICES FOR NEW URBAN-RURAL COMMUNITIES: THE "VÀZAPP" EXPERIENCE

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Food cycles, as dynamic and ever-changing systems, need flexible solutions to be co-designed and co-evaluated to generate benefits for people and the environment. Regenerating capital stocks of ecosystem services through urban-rural co-operation requires a "creative capital" which can continuously innovate the use of resources, skills, knowledge, and impact monitoring. Moreover, cultural creative enterprises generate a new value chain in which tangible and intangible assets join the "shared value" perspective to enable a new supply chain as a pillar of the circular economy paradigm. In this perspective, a model for a creative food cycles value chain has been designed, using a Stated Preference (SP) method. A social/creative enterprise—called "VàZapp" (Foggia, Apulia region)—has been selected as a case study for the testing of the proposed model. The research results allow preliminary reflections about the definition of "creative ecosystem services" as tools for overcoming some critical issues concerning urban-rural cooperation.

creative ecosystem services / capital stocks / creative capital / circular economy / urban resilience

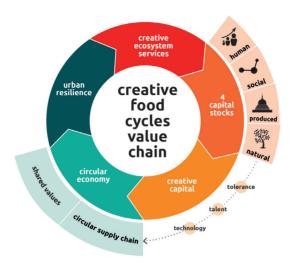


Figure 2. Creative food cycles value chain (authors elaboration)

Food cycles, as dynamic and ever-changing systems, need flexible solutions to be co-designed and co-evaluated to generate multidimensional benefits for people and the environment. Regenerating socio-cultural ecosystem services through the monitoring and management of urban-rural cooperation requires a "creative capital" which can continuously innovate the use of resources, skills, knowledge, and impact monitoring.

The broadest definition of Cultural Ecosystem Services (CES) provided by the Millennium Ecosystem Assessment concerns "the nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience" (MEA 2005, p. 600). Nevertheless, defining the concept of Ecosystem Services as a "boundary object" for sustainability (Abson et al. 2014, p. 29) means setting the relationship among some key-terms linked to the role of an integrated assessment.

In this study, two critical terms have to be considered: "ecosystem service" and "benefit from ecosystem". In 2010, The Economics of Ecosystem and Biodiversity (TEEB) organisation stated that receiving a benefit from an ecosystem means improving the well-being of final users of services. Therefore, it is not possible to define ecosystem services without considering the existence of one or more beneficiaries (Haines-Young, Potschin 2012). As a specification of the MEA definition,

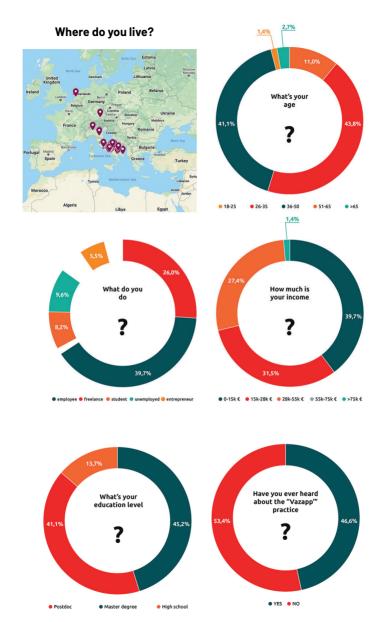


Figure 3. Social profile and statistics of respondents (authors elaboration)

# Which are the most important ecosystem services linked to these practices?

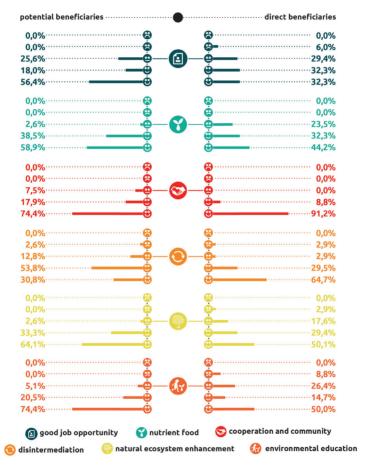


Figure 4. Ecosystem services elicitation and preferences through the qualitative Likert scale (authors elaboration)

## How much time you could spend for the participation in cultural activities?

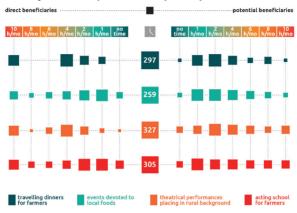


Figure 5. Stated preference about people interesting to be involved in creative agri-food practices activities (authors elaboration).

we use the concept of TEEB—which defines the ES as "the direct and indirect contributions of ecosystems to human well-being"—highlighting four capital stocks referring to "human capital", "social capital", "produced capital", and "natural capital" (TEEB 2010, p. 19). According to the TEEB agri-food framework (2018), these capital stocks represent the foundations of an eco-agri-food value chain in terms of material/immaterial flows, by varying from production to manufacturing, to distribution, and to consumption (TEEB 2018).

All these capitals need to be assessed through qualitative and quantitative indicators; e. g. the "human capital" can be measured through the indicator "good job opportunity"; the "social capital" can be assessed through the observation of "cooperation and community activities".

Despite that the culture and cultural ecosystem services are multifaceted concepts, the "creative capital" becomes an essential catalyst in which Technology, Talent, and Tolerance (Carta 2007; 2009; Florida 2002; 2005) are key-issues referred to the quality and innovation with substantial impacts on the competitiveness of organisations and on local attractiveness.

The creative capital is the engine of "creative industries" which have been defined by the UK Government's Department for Culture, Media, and Sport as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property" (DCMS 1998, p. 4). The creative capital represents the starting point for a culture-led regeneration (Miles, Paddison 2005) in which Cultural and Creative Enterprises (CCEs) have a crucial role. CCEs are oriented to a synergic and symbiotic relationship among community, business, and landscape (Pratt, Jeffcutt 2009; Valentino 2013), highlighting the talents and the convergent interests of citizens, private organisations, and public institutions to transform them into original products and services. In this perspective, creativity, quality, and innovation of CCEs are crucial for the sustainable competitive advantage of urban-rural systems (Troilo 2014; Vorhies, Morgan 2005). Moreover, CCEs generate a new value chain of resources in which tangible and intangible assets join the "shared value" perspective to enable a new supply chain as a pillar of the circular economy paradigm. Within the international debate about Circular Economy (CE) models (Ellen MacArthur Foundation 2013), the need for a new value chain for the "product-as-aservice" lifecycle has been highlighted. A "circular value chain" (ARUP 2017) engages all stakeholders in contributing to generate best value for all of them, to build longterm resilience, and to produce cultural, environmental, and social benefits.

In the Italian CE Story Atlas (CDCA 2017), urban resilience practices have a significant role in implementing the enabling factors recognised by the European Environment Agency (2016): eco-design, repair, refurbishment and remanufacturing, recycling, economic incentives and finance, business models, eco-innovation, governance, skills, and knowledge. These factors enable the Creation of Shared Value (CSV) that is directly functional to the organisations' competitive advantage and profitability. By optimising and using specific resources and skills, CSV builds economic value through the creation of the social value (Porter, Kramer 2011), generating job opportunities and innovation through an advanced form of shared responsibility, which DelBaldo and Demartini (2016) refer to as "Territorial Social Responsibility". According to Mehmood (2016, p. 413) urban resilience can be defined as "[...] a proactive rather than reactive view to planning, policy-making and strategic steering in which communities play a vital role for resilient place shaping through their capacity for active learning, robustness, ability to innovate and adaptability to change". The paper's perspective highlights urban resilience as the capability of innovative micro-networks of creative practices to co-create enabling factors (e.g. social bonds, shared values, cultural co-operation, etc.), responding to urban-rural changes and conflicts.

The contribution explores the this research field considering the following main issues: How do beneficiaries of ESs perceive creative food cycles initiatives? How do creative and collaborative processes facilitate to generate new urban/rural

communities focused on the exchange of skills and knowledge which improve urban resilience? In this perspective, a model for a creative food cycles (CFC) value chain has been designed, using a Stated Preference (SP) method. Section 2 introduces the elaborated methodological approach, while section 3 shows results and conclusions.

A METHODOLOGICAL APPROACH FOR A CREATIVE FOOD CYCLES VALUE CHAIN: THE "VAZAPP" BEST PRACTICE

Within urban-rural innovative productive cycles, the consumer has become more and more a "prod-user" (Rifkin 2014) of cultural contents and services, through technologies, evaluations (Cerreta, Poli 2017; Mele, Poli 2015), and collaborative processes (Clemente et al. 2015; Daldanise et al. 2020) addressing the creation of shared value (Porter, Kramer 2011; 2019). Based on the objectives of the Circular Economy Story Atlas (CDCA, 2017), a proposal for the resilience of urban-rural systems should comprehend a new enterprise model based on a circular supply chain applied to a "cultural ecosystem" and to creative services, which can generate social, cultural, economic, and environmental values and opportunities, as well as continuous forms of innovation.

A social/creative enterprise—called "VàZapp" (Foggia, Apulia region)—has been selected as a case study for the testing of the proposed model. It is a network of people who have been trying to transform the short food supply chain into a cultural food supply chain. "VàZapp" (Figure 1) offers services and events that promote the exchange of skills and knowledge among the actors of the agricultural supply chain, sharing ideas and problems related to these activities. Each member of the network brings an added value which translates into professional collaboration and social innovation through creative solutions oriented to the agro-food sector (Lombardi et al. 2020). Different spatial contexts have been hosting "VàZapp" four creative events for six years: e.g.: in Cascina Savino (Foggia), "We are in Paglia" and "Meloday" has been performed; Elda Cantine (Troia), Teatro Lucio Dalla (Manfredonia), Ente Fiera di Foggia hosted "Teatri del Gargano"; while "Contadinner" spread throughout 18 municipalities of Apulia. Through its methodological approach, which roots in the different backgrounds of this hybrid enterprise, the research aims at defining and evaluating "creative ecosystem services" within a "circular value chain" to investigate the opportunities of food cycles and urban-rural systems that CCEs, such as the good practice VàZapp', have been facing in economic, social, environmental dimensions.

The proposed model for understanding and assessing a value chain of creative food cycles proceeds as follows (Figure 2):

- 1. Identifying the four capital stocks for socio-cultural ES in terms of human, social, produced, and natural benefits. Within these capitals, the following six ecosystem services have been selected, or integrated, according to the priorities of the "VàZapp" practice: "good job opportunity" (GJO), "nutrient food" (NF), "cooperation and community" (CC), "disintermediation" (D), "natural ecosystem enhancement" (NEE), and "environmental education" (EE). The criteria for selecting the six ES can be defined as follows: Exploring GJO means understanding how "VàZapp"", or a similar practice, can contribute to generate an enabling context that promotes employment through funding and formal/informal partnership. NF should be at the foundations of an agri-food value chain that arises as an alternative to mass agricultural production, and, therefore, it has been selected. CC is consistent with the purpose of "VàZapp" aiming at improving the feel of belonging to a community and the cooperation among stakeholders. Moreover, "VàZapp" guarantees D as the most relevant service reducing steps within a supply chain (e.g., a virtual market delivering agri-food to the neighbourhood), enhancing the benefits in environmental terms. NEE and EE have been chosen since the cultural activities of this practice focus on the preservation of local traditions and bequeathed agricultural techniques, the education of new generations in respecting nature and understanding its processes, and the comprehension of the rural "genius loci".
- 2. Determining the creative capital as the fifth ES capital stock in terms of Technology innovation, Talent exploitation and Tolerance implementation for generating cultural and creative services—elicited by the "VàZapp" team—to boost urban resilience:
- 3. Investigating the circular economy relationship in terms of the creation of shared value for a novel food supply chain;
- 4. Evaluating resilience according to ability of practices to generate adaptive food cycles enabling relationship within the local community and promoting innovative services;
- 5. Generating creative ecosystem services that boost local regeneration processes.

The research steps have been addressed through the Stated Preference (SP) method (Adamowicz, Deshazo 2006) which has been operationalised by the "VàZapp' survey" (https://bit.ly/2055BEG).

The SP methods are particularly useful for assessing the demand of individuals for non-market goods. They have been employed to understand how the beneficiaries' preferences concerning cultural ecosystem services can improve the agri-food value chain through the creative capital and CE criteria which define "creative ecosystem services". The SP survey has been addressed to direct users and providers of VàZapp' services (direct beneficiaries) and people interested in the CFC at the foundations of similar agri-food practices (potential beneficiaries).

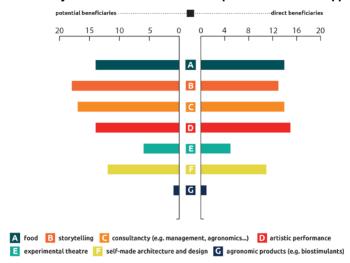
The purposes of the survey proceeds as follows: 1) Scoring the six selected ES, according to preferences which can be expressed through the Likert scale in 5 points; 2) Assessing how much time a person is going to spend to cooperate at the functioning of the experiences in order to highlight the "creative capital" potentials; 3) Detecting typologies of relationships among involved stakeholders (e.g. working partnerships, consultancy, sponsorships, etc.) in terms of the creation of shared value for the "circular supply chain"; 4) Understanding what people are going to share in terms of products, skills, experiences, or services for getting the potentials of local community relationship to emerge in order to boost urban-rural resilience. In the next section, the preliminary results of the SP survey are shown.

### RESULTS AND CONCLUSIONS

The overall number of respondents are 73 people, among which 46,6% (34 persons) include "direct beneficiaries" of the "Vazapp" practice, while 53,4% (39 persons) refers to people that never heard about this practice; nevertheless, they can be considered as "potential beneficiaries" (Figure 3). The "potential beneficiaries" have been sampled according to their interest to be involved in rural experiences, urban resilience strategies and cultural activities linked to agri-food chain discovery and knowledge. The representative sample, indeed, is composed of people with a high education level (45,2% hold a master-degree, while 41,1% are involved in Post-doc) and with job positions as employee (39,7%) and freelance (26,0%).

The first question of the survey relates to the priorities of six ecosystem services which "Vazapp" or similar practices can spark. The results highlight that "cooperation and community" and "environmental education" score at the top of the ranking both for potential beneficiaries and direct beneficiaries. About the first issue, the services linked to the practice aim to enhance relationship among people engaged

# What do you like to share for a creative performace of "VáZapp"?



# Which types of creative collaboration with other Stakeholders can you spark?

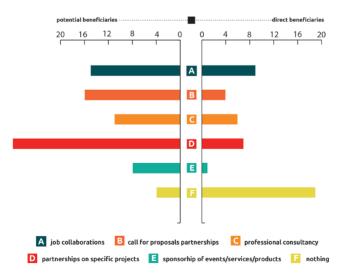


Figure 6. Stated preference about people's willingness to share products, skills, and services (top figure) and creative collaboration among Stakeholders (bottom figure) (authors elaboration).

in socio-cultural activities, strengthening the sense of belonging to a community that shares ideas, skills, knowledge, and problems about agriculture and food chains. 74,4% of potential beneficiaries and 91,2% of direct beneficiaries attribute extreme importance to this service. Nevertheless, there are some discrepancies between potential and direct beneficiaries about the second position in the ranking, since the first class of beneficiaries (74,4% of interviewed people) place the "environmental education" at the top. In comparison, 64,7% of direct beneficiaries rank the "disintermediation" as the second relevant service provided by the "Vazapp" practice (Figure 4).

The second observation aims to understand how much time a person could spend enjoying the cultural and social activities provided by creative agri-food practices. The overall time amounts to 1188 hours per month which 73 people are willing to spend to be directly engaged in the provided activities. Art performances and acting schools emerge as the most interesting activities in which people have stated to spend more time (10 hours per month and more) (Figure 5).

The third question of the survey relates to what people are willing to share in terms of agricultural products (e.g. food, biostimulants, etc.), skills (e.g. management and agronomics consultancies) and services (e.g. artistic performances, storytelling, etc.). According to direct beneficiaries, "Artistic performance" results at the top rank with 44,1% along with "Food" (41,2%). The potential beneficiaries, instead, prefer to share "Storytelling" (46,2%) and "Consultancy" (43,6%).

Finally, the fourth question refers to typologies of creative collaboration which Stakeholders can spark. According to 71,8% of potential beneficiaries, "Partnership on specific project" has been considered as the most likely type of collaboration; while 55,9% of direct beneficiaries stated that no form of cooperation has been activated (Figure 6).

The research results allow preliminary reflections about the definition of "creative ecosystem services" for overcoming some critical issues concerning cultural, economic, environmental, and social conflicts that generally affect the southern Italian communities. Pursuing objectives of effectiveness, efficiency, productivity, and sustainability due to CCEs and CE enabling key-factors that refer to creative capital, shared value, and circular supply chain can contribute to solve structural problems at the foundations of agri-food value chains (e.g. the reduction the quality of agri-food products, low management skills of producers, the deprivation of agri-food producers in social and economic term, etc.). The perspective of "creative ecosystem services", therefore, can deal with these problems through improving the productive capacity and increasing the negotiating power of producers.

### ACKNOWLEDGMENTS

CNR IRISS of Naples and University of Naples Federico II (Department of Architecture) conjointly promoted this study. The authors want to thank VäZapp' team and Dr Mariarosaria Lombardi - Assistant Professor at the University of Foggia (Department of Economics) - for their support in survey elaboration and dissemination

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