Creativity and digital strategies to support food cultural heritage in Mediterranean rural areas

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Abstract

Purpose – The purpose of this study is to address the challenges faced by rural areas and promote their sustainable development. It emphasizes the importance of re-establishing connections and cultivating a sense of belonging within rural communities, while safeguarding their cultural heritage. The study explores the potential of digital and creative tools in enhancing learning, supporting food production and tourism, facilitating research and providing engaging experiences. It also examines the economic condition of rural areas and the potential for their contribution to the national economy. Additionally, the study highlights the significance of sustainable community development, the role of rural areas in resilience and climate change adaptation and the complexities surrounding rural migration. The aim is to provide insights and recommendations for policymakers and stakeholders involved in rural development initiatives, focusing on the Mediterranean region.

Design/methodology/approach – This study develops an understanding of the role of digital and creative strategies in rural communities, highlighting their significance in preserving food heritage, culture and community capital while driving economic development. It specifically focuses on the Unesco Intangible Mediterranean Diet (UIMD) as a potential catalyst for regeneration through the integration of creative and digital tools and three cases are presented. The first is the impact of the Future Food Institute (FFI) ecosystem in the Living Lab in Pollica (Salerno, Italy); the second focuses on the digital tools provided by the CKF to support rural areas; and the third is a new identity and promotion of territorial development, co-designed in the Val di Vara (VdV) a rural region of the Ligurian inland in Italy, through digital strategies, heritage preservation and slow tourism development. The three cases highlight different ways of enhancing environmental and cultural heritage and demonstrate how collaborative creativity and digital tools contribute to the co-construction of knowledge and addressing critical issues to promote sustainable growth in rural areas.

Findings – The findings of this study indicate that re-establishing connections and fostering a sense of belonging within rural communities is crucial for their sustainable development. The use of digital and creative tools presents significant opportunities in enhancing various aspects such as learning, food production, tourism and research in rural areas. The study also reveals the potential economic contributions of rural areas to the national economy. It emphasizes the importance of sustainable community development and highlights the role of rural areas in resilience and climate change adaptation. Additionally, the study addresses the complexities surrounding rural migration and emphasizes the need for comprehensive policies to ensure the well-being and rights of migrant workers. The insights and recommendations provided in this study aim to guide policymakers and stakeholders involved in rural development initiatives, particularly in the Mediterranean region.

Research limitations/implications – Nonetheless, it is imperative to acknowledge certain limitations within the scope of this study, primarily associated with the specific sample selection, potentially influencing the broader applicability of the findings. There is potential to explore a wider geographic area in future.

Lesson learned from the Pollica Living Lab, the Creative Knowledge Foundation and the “Rurality Hub” in Val di Vara.
The study and project aim to illustrate the feasibility of initiating a transformative process, centered on a visionary approach with a core focus on creative knowledge and the Mediterranean diet as a means to revitalize marginalized communities. Furthermore, it seeks to emphasize that these neglected regions possess untapped potential for innovative ideas and opportunities. Rural communities, in their role as farmers of primary goods, are the ones who nurture the environment, and the landscape, and are the true protagonists of every era. Rurality is the place that preserves the most resources and potential in terms of biodiversity and rural knowledge. Every territory, like every human being, has its own characteristics and vocations to pursue. The existing Genius Loci is already an existing value that requires policies and governance to rediscover roots, identity and worth. The stratification of existing collective intelligence must become central and must be individually assessed and enhanced, also taking advantage of new digital technologies.

**Practical implications** – The study and project aim to illustrate the feasibility of initiating a transformative process, centered on a visionary approach with a core focus on creative knowledge and the Mediterranean diet as a means to revitalize marginalized communities. Furthermore, it seeks to emphasize that these neglected regions possess untapped potential for innovative ideas and opportunities. Rural communities, in their role as farmers of primary goods, are the ones who nurture the environment, and the landscape, and are the true protagonists of every era. Rurality is the place that preserves the most resources and potential in terms of biodiversity and rural knowledge. Every territory, like every human being, has its own characteristics and vocations to pursue. The existing Genius Loci is already an existing value that requires policies and governance to rediscover roots, identity and worth. The stratification of existing collective intelligence must become central and must be individually assessed and enhanced, also taking advantage of new digital technologies.

**Social implications** – The social implications of this study are significant. By emphasizing the importance of re-establishing connections and cultivating a sense of belonging within rural communities, the study recognizes the social value of strong community ties. This can lead to increased social cohesion, a sense of identity and improved overall well-being within rural areas. The study also highlights the potential of digital and creative tools in enhancing learning, which can contribute to the empowerment and educational opportunities of individuals in rural communities. Furthermore, by promoting sustainable community development and addressing the complexities surrounding rural migration, the study acknowledges the social impact of inclusive policies that protect the rights and well-being of both local populations and migrant workers. Overall, the study’s recommendations have the potential to foster social resilience, equity and a more vibrant social fabric within rural areas.

**Originality/value** – This study can offer valuable insights and recommendations for policymakers and stakeholders involved in rural development initiatives, particularly those focused on preserving food and cultural heritage in rural areas. By analyzing real-life examples, it bridges the gap between theory and practice, illustrating how these ideas have been effectively applied in specific contexts. This paper emphasizes the potential of the Mediterranean Diet as a sustainable and nutritious model with sociocultural, health, economic and environmental benefits, highlighting the importance of bottom-up approaches that empower local communities as custodians of knowledge and culture. It also provides practical strategies, such as investments in educational programs, the establishment of international campuses and the use of multichannel platforms for immersive experiences, which can be adapted for broader rural development initiatives, promoting sustainability and community engagement.

**Keywords** Heritage, Creativity, Rural development, Creative knowledge, Mediterranean diet, Slow tourism

**Paper type** Research paper

### 1. Introduction

Rural areas are repositories of rich heritage that encapsulate centuries of accumulated history through their landscapes, traditions, cultures and artistic creations. Nevertheless, these inland regions have often been overlooked and marginalized, resulting in the desertification of their vital ecosystems and a decline in social standing. Numerous challenges impede progress in these areas, including bureaucratic inefficiencies, limited local capacities, community resistance, inadequate financial resources and complex procedures.

These elements emerged in the qualitative analysis of Fabrizio BARCA presented at the Congress on “La Strategia Nazionale per le Aree Interne: Riconoscimento e Futuro delle Aree Interne Marginali” which took place in Rome in January 2022 and had the participation of one of the author of this paper. “Re-establishing connections between rural areas and cultivating a sense of belonging within communities is paramount for the exchange of stories, experiences, resources, and knowledge across borders” (Lucarelli et al., 2022). It is through the restoration of the “genius loci” and reconnection with the essence of these places that critical issues can be addressed and sustainable rural development can be fostered (Massari et al., 2023). Digital and creative tools present significant opportunities to safeguard cultural assets by enhancing creative learning, supporting food production and tourism, facilitating research endeavors, and providing informative and engaging experiences. The digitization of cultural experiences has revolutionized interactions, enabling broader participation, access, creation, production and dissemination of knowledge, as stated by Fabrizio Barca during the Congress.
In 1979, Moseley authored the book “Accessibility: The Rural Challenge” which was derived from the author’s report prepared for the Department of the Environment, focusing on rural transport and accessibility. This seminal work critically examines the trajectory of the decline that has given rise to the current situation in rural areas. This book explores the concept of accessibility and proposes its utilization as an analytical framework for evaluating the efficacy of alternative policies (Johnson, 2001). The present condition of rural areas and the emerging factors that are shaping rural life in the early twenty-first century are the detrimental impact of technological progress throughout the twentieth century, which has led to diminished employment opportunities within rural communities. This consequence has led to a significant decrease in income levels and substantial migration of the population away from these regions. As a result, there has been a notable increase in economic disparity among different rural communities due to these circumstances. The results of the study indicate that specific rural regions are grappling with economic declines, while others are facing unique challenges, including rapid population growth, disputes over land usage and increased demand for public services.

However, there is potential for positive change. Economic and demographic trends suggest that geographical distance is becoming less of a barrier, and spacious environments are gaining value. Technological advancements are reducing the need for local labor, and there is a growing desire for rural lifestyles. Effective rural policies can enable these communities to contribute significantly to the national economy. The development of a nation depends on the interaction between rural and national development, with rural development policies impacting critical issues like economic growth, poverty reduction and environmental sustainability (De Ferranti, 2005). De Ferranti continues by stating that to achieve sustainable environmental development in rural areas, it’s crucial to prioritize sustainable community development. This entails addressing various challenges, such as historical legacies, rural poverty and local context understanding. It requires creating customized programs, avoiding superficial approaches, fostering collaboration among stakeholders, balancing conservation goals with tourism interests and actively involving the community as partners in conservation efforts (Beer and Marais, 2005). Understanding the complexities of promoting sustainable community development underscores the need for effective strategies and strong stakeholder engagement to achieve environmentally sustainable outcomes in rural areas is the outcome of this investigation. There is a need to promote environmentally friendly economies in rural areas by enhancing agricultural and tourism activities. This encouragement should be grounded in a thorough understanding of the complexities involved in promoting sustainability. In contrast to urban areas, which often prioritize sustainable city development to address environmental issues, rural regions often lack well-defined strategies that acknowledge the ecological significance of rural productivity. These areas play a pivotal role in climate change adaptation and building resilience, and it is crucial to recognize and address their unique challenges and opportunities in the pursuit of sustainability (Echave and Palladus, 2019). A noteworthy illustration of this approach is evident in the “Thematic Communities of the Interreg Med Program,” which actively engages in initiatives focused on rural Mediterranean regions. These efforts span various sectors, including Renewable Energy, Green Growth, Sustainable Tourism and Efficient Buildings. Considering the environment, society and economy, this comprehensive approach provides valuable insights for policymakers and stakeholders involved in rural development. Through systematic evaluation, the above-mentioned study assesses the effectiveness, feasibility and potential challenges of the proposed strategies, enhancing our understanding of rural areas’ focal role in sustainable development and emphasizing the need for integrated approaches to achieve rural development objectives effectively.

Moreover, the intricate dynamics inherent in contemporary migratory patterns within rural European regions serve to enhance the discourse while simultaneously emphasizing an
evident lacuna within the extant scholarly literature pertaining to this subject. The presence of immigrants in these regions is mainly shaped by changes in agricultural practices and their integration into global agri-food networks. As local populations show decreasing interest in agricultural work and rural life, these areas offer favorable conditions for international migrants to access essential livelihood resources (Nori and Farinella, 2020). Migrants often find work in the informal agricultural sector, but this situation can also make them vulnerable to illegal labor practices and exploitation. An examination of rural migration complexities highlights the need for comprehensive policies and frameworks capable of addressing the various consequences arising from these dynamics. Preserving the rights and welfare of migrant laborers in agricultural settings is a crucial aspect that requires increased attention (Corrado, 2022). Studies on rural migration in Mediterranean EU countries underscore the significance of inclusive policies in addressing socioeconomic disparities and vulnerabilities affecting both local inhabitants and migrant communities. Furthermore, the adoption of digital and creative strategies to safeguard heritage, culture and community assets can serve as catalysts for economic development.

UNESCO’s primary objectives encompass the preservation of cultural and natural heritage, along with addressing the global digital skills gap. Acknowledging the essential role of individuals in preserving and passing down intangible Cultural Heritage (ICH), UNESCO initiated efforts to acknowledge and advocate for living human treasures. These individuals are defined as those who possess an exceptionally high level of knowledge and skills necessary for performing or recreating specific aspects of ICH. As per UNESCO’s findings ICH plays a vital role in enhancing social cohesion and inclusion by shaping the lives of communities through practices like rituals and festive events. Various social practices, from intimate gatherings to large-scale celebrations, contribute to strengthening social bonds and the cohesion of communities by forging a shared identity among participants.

The objective of this study is to understand the potential contribution of the Unesco Intangible Mediterranean Diet (UIMD) to the regeneration process of rural and marginal territories, and more specifically what is the role of creative and digital methodologies in this process. In summary, this paper begins with a theoretical framework on rural areas, new ruralities and cultural heritage as an instrument for preserving cultures, traditions, social and environment ecosystems (chapter 1). In chapter two, the three case studies are presented, as well the methodology used for analyzing the cases. The three case studies presented in this paper are: (1) the employment outcomes of the tools implemented in the Pollica Living Lab by the Future Food Institute (FFI), which has fostered collaboration and co-creation of new models of prosperity; (2) the Creative Knowledge Foundation (CKF), which provides digital tools for the dissemination of heritage and creativity, engaging local practitioners to share their stories; (3) the experimental project that one of the authors of this paper activated in the Val di Vara bio-district, grappling with the challenges of rural desertification, benefiting from the knowledge and tools gained from the previous two cases, created a new identity for promotion and sustainable growth and revitalization.

In chapter three a collection of findings and lesson learned from the three cases is provided and finally chapter four summarizes the conclusions of the authors. The research paper’s conclusions strongly endorse the practical benefits of the proposed development project named “Rutality Hub” undergoing in the Val di Vara region since February 2023 through support for administrative bodies, tourism and cultural departments, and conservation advocates. These advantages may span various academic disciplines, such as history, archaeology, art and knowledge management. Additionally, reviving elements related to the ICMD, evaluated for their roles in heritage preservation, knowledge dissemination, community cohesion and promoting a healthy lifestyle, has the potential to restore resilience and equilibrium in specific communities that blend heritage, production and clan culture.
2. Rural areas and cultural heritage

Food heritage, as described by Brulotte and Di Giovine (2016), encompasses the standards of taste and practical knowledge within a cultural context. This concept encompasses various aspects, such as agricultural products, ingredients, culinary creations, dining etiquette and the symbolic significance attributed to meals (Ramli et al., 2016). Families frequently play a pivotal role as custodians and conveyors of food heritage and traditions, diligently preserving these legacies through their entrepreneurial pursuits.

Moreover, the food industry, particularly in small- and medium-sized family enterprises, is marked by deep-rooted traditional knowledge (Dana et al., 2014). These traditional skills emphasize the substantial contribution of family businesses to the preservation of food heritage. Food tradition can be seen as a representation of a valuable legacy intricately linked to the collective memory of communities and families (Bessière, 2013). The framework of this paper aims to explore and go beyond the transfer of heritage knowledge through family transmission and aims to investigate the feasibility of a bottom-up approach that involves all stakeholders and leverages existing resources within a specific territory.

The primary objective is to determine if such an approach can facilitate the adoption of a novel mindset and design for the future, one that originates from the community’s inherent potential and harnesses the values and lifestyle associated with the Mediterranean Diet (MD). This, in turn, is envisioned to serve as a cornerstone for enduring territorial development, coupled with the infusion of creative knowledge that has historically nourished rural communities.

2.1 Are rural areas really marginalized?

“Rural areas refer to those territories that are located far away from major centers that provide essential services. In Italy, internal areas make up approximately 60% of the country’s territory, yet only 22% of the Italian population resides in these regions (data from 2016). In the Western world, the ability to access healthcare, education, and transportation plays a crucial role in ensuring the full enjoyment of citizenship rights. However, since the Second World War, rural areas with limited-service availability have experienced a gradual abandonment in favor of urban areas as preferred living and working locations” (Lucaelli et al., 2022). To properly understand the discomfort of the citizens who live there, we can highlight the following issues: the loss of population and the rising level of aging; educational fragmentation and the risk of school closures; the inappropriate use of hospitals and weak territorial health care; the double levels of the digital divide between telephone and broadband compared to the rest of Italy; the diminishing number of enterprises and growth rates of the territories; and the consequent loss of identity and heritage. With the implementation of the European Green Deal, a new development model is being promoted that prioritizes investment in agriculture and moves beyond the outdated notions of rural area modernization. This initiative brings forth new opportunities and necessitates the adoption of location-specific policies to ensure the appeal and competitiveness of regions that harbor biodiversity, social cohesion and agricultural/economic resources. The initial concept of the Pac’s for rural areas lacked differentiation concerning the diverse territorial situations, as it primarily focused on interventions targeting agricultural enterprises, such as the “Farm to Fork” and “Biodiversity” initiatives. At the forefront of Italian discourse, the national strategy for internal areas (Strategia Nazionale delle Aree Interne) has successfully repositioned rural areas and their small municipalities. Since its establishment in 2014, a “place-based” policy has been crafted, prioritizing the needs and aspirations of these regions through attentive engagement with local territories. The proposed vision highlights three significant elements of this impact.
Enhancement of the unique characteristics of local agricultural production and the connection between the territory’s vocation and production techniques.

Exploration of alternative markets beyond traditional channels, fostering direct relationships between producers and consumers through short supply chains, and development of new marketing channels.

Implementation of partnership models to facilitate close collaboration among different stakeholders and operators.

The critical issues include the need for associations to address diverse regional legislative and regulatory contexts. Another challenge is managing personnel turnover, which leads to the loss of valuable skills and expertise. Additionally, internal areas face continuous erosion of their already limited technical equipment, which is a crucial resource that is currently lacking in these regions.

However, rural areas are not only a burden but also represent a reservoir of legacy and ideas that require new creative strategies to transform the disadvantage from which they start today into a great resource for all.

2.2 The role of community connections for revitalizing emerging rurality

The concept of “rurality” represents a new cultural model geared toward environmental conservation, preservation of traditions, protection of diverse cultures and recognition of the individual as an integral part of a community (Basile and Cavallo, 2020). This concept is also gaining increasing interest in Italy, as indicated by significant social surveys conducted by Censis in 2012. The scientific literature and studies conducted by Censis, highlight how appreciation for agriculture is growing among citizens, dispelling the idea that this interest is limited to a sector that offers more job opportunities, especially for young people. However, to interpret this interest only as a choice dictated by agriculture’s greater employment stability than other sectors may be reductive. The concept of new rurality would seem to be able to go further, representing a process of socio-economic and cultural recomposition that integrates rural areas into the economy and society in a more organic way (De Pascale et al., 2014).

In the context of these newly emerging ruralities, revitalized community connections, civic economies, inventive agricultural practices like agricultural services, and enduring networks of support rooted in longstanding rural customs and cultures take center stage. These networks can be seen as precursors to formalized welfare systems. As society’s focus on agriculture intensifies, there is a need for a comprehensive analysis that spans a wider temporal scope, aiming to grasp the fundamental drivers and dynamics, ultimately leading to a global redefinition of the development paradigm. What could be the characteristics and benefits of the development of this new rurality?

Within contemporary discussions on regional development, there is a growing exploration of innovative approaches aimed at overcoming developmental inertia and fostering progress. One such trend is the increasing settlement in peri-urban and rural areas, often prompted by the exorbitant urban rent costs. This migration pattern opens-up opportunities for young couples to engage in urban employment while allocating their leisure time to land-related activities, such as gardening and cultivation. This phenomenon, in turn, offers the potential for the reconstruction of local residency and welfare models, specifically tailored to address the challenges posed by peri-urban and metropolitan regions.

This evolving landscape seeks to promote lifestyles grounded in simplicity and moderation, blending essential urban elements, such as communication technologies, with the unique offerings of rural environments. The integration of practices like participation in
social networks and the enjoyment of gardening and traditional culinary pursuits has become emblematic of this lifestyle shift. Illustrating the transformative potential of this urban-rural interplay is the concept of social agriculture, exemplifying a multifunctional perspective within the agricultural sector. Social farming, as an integral part of civil economy, provides diversified services and employment opportunities that not only enhance physical well-being but also incorporate educational components, agritourism and cooperatives involving disabled workers. A critical underpinning of these developments is the recognition of the indispensable role of human presence in safeguarding rural environments and landscapes. The abandonment of these areas poses significant environmental and ecological threats, necessitating a concerted effort to revitalize and sustain these regions. Consequently, a new generation of farmers, often referred to as “new peasants,” is emerging with a broader mandate beyond traditional food production. These individuals aim to generate public goods that cater to collective needs and actively seek collaboration with fellow farmers at both local and national levels. Establishing connections, forming associations and exploring alternative markets beyond conventional distribution chains are pivotal components of their approach. This transformative paradigm also extends to consumers, with a novel category of individuals desiring active participation in the agricultural production process, a role often referred to as the “prosumer.” These prosumers engage in purchasing groups or food communities, actively interacting with producers and reshaping the dynamics of food production and consumption (De Pascale et al., 2014). In sum, the evolving discourse on regional development and the intertwining of urban and rural elements underscores a dynamic landscape where innovative approaches, collaborative efforts and active engagement are central to addressing the complex challenges and opportunities in contemporary society.

2.3 The role of innovation in emerging and marginalized rurality

In response to the need for revitalizing more marginalized rural areas, reducing environmental pressures caused by overly intensive production techniques (also aimed at reducing surpluses) and addressing the demands of a market increasingly focused on high-quality goods and recreational environmental services, there has been a reevaluation of agricultural activities (O’Shaughnessy, 2022). This has led to the recognition, even from a regulatory perspective, of certain functions that have traditionally been performed or have the potential to be performed. In other words, agriculture is acknowledged to have a multifunctional role, encompassing the production of both food and non-food items, including processed goods, as well as the provision of protective, guardianship and recreational services for the environment. This recognition involves the activation of a resource enhancement process. From this perspective, the significance lies in initiating a process that draws upon the local community’s heritage and expertise, while also capitalizing on the existing assets within a particular geographical area. Such an approach has the potential to enhance value and introduce novel prospects (O’Shaughnessy, 2022). This article aims to argue, using some concrete and tangible case studies that ‘intertwining rural innovation and the presence of creative knowledge may be able to create an impactful dynamic and change. Especially in non-metropolitan areas, the innate importance of natural and cultural resources could take on a greater role in promoting prosperity and fostering economic progress, surpassing their metropolitan counterparts. The field research conducted by one of the two authors aims to demonstrate how the appeal of a high quality of life, enriched by heritage, creativity and culture, can be embraced as a catalyst for innovation in various sectors, including crafts, tourism and food production. It can emerge as a key force in attracting and retaining the creative cohort of knowledge, effectively channeling their inventive potential and innovative ability.
2.4 Tourism and food cultural heritage in emerging and marginalized rural areas

Recent studies (Saygi and Shipman, 2021) related to the geography of tourism have identified new attractors that are no longer identified in monuments, cities or regions, but territorial identity is sought, with a range of customs, and gestures full of amazement in the eyes of the visitor. These aspects are therefore primarily needed for competitive positioning and, at the same time, to preserve the best culture. The complex connection between food and tourism development holds significant importance, especially in preserving cultural heritage and empowering local communities. Food acts as a mean to transmit traditional skills and conserve biodiversity, playing a multifaceted role that not only boosts tourism but also contributes to the sustainability and resilience of local societies. This has the potential to not only enrich the cultural heritage of the region but also benefit tourism organizations and economic investors. Culinary tradition is widely acknowledged as an integral part of local and national culture, representing a significant aspect of identity and symbolic meaning (Chevrier, 2011).

Globally, destinations are leveraging their ICH to enhance their appeal and stand out in the competitive tourism industry. This shift from quantity to quality underscores the rising importance of ICH elements, surpassing traditional material aspects in destination competitiveness, highlighting the growing recognition of cultural heritage and experiences in shaping a destination’s appeal to travelers (Gursoy et al., 2015). Also stating that numerous destinations now acknowledge the value of their culture, cuisine and culinary traditions as assets for tourism enhancement and differentiation. Through the promotion and presentation of their ICH, these destinations strive to enhance the visitor experience and establish a distinctive identity within the competitive tourism sector.

Recent developments in heritage concepts and policies, as explored by Kelly (2009), have witnessed significant changes in the utilization of both tangible (e.g. buildings) and intangible (e.g. culture) heritage elements by the cultural and tourism industries. These elements are harnessed to generate economic value through heritage tourism sites, museums and related activities. Moreover, the correlation between cultural heritage and tourism-driven clusters, as exemplified by the Motor Valley Cluster in Italy encompassing Parma, Modena, Bologna and Rimini, underscores the interplay between tourism and cultural heritage in these clusters, fostering a self-reinforcing mechanism that enhances regional competitiveness and benefits key local stakeholders, as demonstrated in the 2012 study by Alberti and Giusti (Alberti and Giusti, 2012).

In the context of regional development, the combination of social capital and tourism potential represents available resources within a geographical area, as noted by Attanasi et al. (2013). The tourism potential consists of two dimensions:

1. **Material/Tangible Dimension**: This encompasses the physical aspects of a region that tourists can experience, including natural heritage like landscapes and geographical attractions, as well as historical and cultural heritage like monuments, architecture and museums. Built elements such as infrastructure, equipment and networks also fall under this dimension.

2. **Intangible Dimension**: This component includes intangible elements contributing to the region’s tourism potential, such as social capital, representing relationships and networks among individuals and communities. It also comprises knowledge, skills, expertise, heritage, tradition, culture, local identity and knowledge as a reference for identity and symbolic values.

In the province of regional development and tourism promotion, both tangible and intangible elements are vital for attracting visitors, creating a strong sense of place and improving the overall tourism experience. Harnessing these resources can pave the way for sustainable and
inclusive tourism development that benefits both local communities and tourists alike (Attanasi et al., 2013). Tourism centers on the interplay between hosts and travelers, highlighting the significance of human capital, social capital and a destination’s human resources as pivotal intangible elements. In a globalized and fiercely competitive tourism market, destinations confront the task of prioritizing, cultivating and utilizing their intangible assets (Gursoy et al., 2015). To attain qualitative revitalization and dynamic growth, adept management of spaces, resources, stakeholders and activities within the geographical zone is imperative.

Effectively harnessing local resources and emphasizing intangible aspects is crucial for developing a regional tourism offering that delivers enriching experiences to visitors. This strategy seeks to elevate the overall attractiveness of the tourism destination, fostering its sustainable development and competitiveness within the global tourism arena.

2.5 ICTs and the valorization of food cultural heritage in rural areas
Greater endeavors are required at the local and regional levels to conserve ICH and to utilize digital tools for its dissemination and preservation. The Slovenian register on ICH serves as a positive model in this endeavor and could serve as a replicable example in other regions. Often, heritage assets, in their current presentation, fail to capture the interest of young individuals. Concurrently, young people are enthusiastic users of contemporary technology, and digital solutions can play a significant role in kindling their interest in historical areas, cultural heritage, museums and rural areas. Enhancing the digital skills of both public and private sector operators and professionals is imperative to make rural areas more accessible and engaging. Rural areas should explore opportunities to facilitate partnerships between cultural institutions and the private sector. This collaboration can help establish innovative funding mechanisms for digitizing cultural heritage and knowledge. Furthermore, it can drive the creative use of expertise to regain a sense of identity and encourage participation within these rural communities. With regards to cultural tourism, information and communication technology (ICT) play a crucial role by adding economic value through tourism applications that offer high-quality information about heritage sites, enriching visitors’ experiences. Moreover, the adoption of innovation and digital solutions contributes to a more sustainable and responsible tourism sector (Muongasame and Tan, 2023).

In the scientific literature, several instances exist that illustrate the importance of accelerating rural development through innovative digital strategies tailored to promote and enhance local regions, leveraging their unique heritage, biodiversity, skills, knowledge and gastronomy (Aritenang and Giroth, 2022; Raisnen and Tuovinen, 2020; Kasimov et al., 2021; Raju, 2004). The findings reveal that a “phygital” approach to rural cultural heritage effectively bridges the gap between the tangible and digital aspects of a destination’s cultural heritage tourism, enhancing its inherent value, significance and experiential dimensions. Introducing a community-centric digitalization strategy that involves extensive grassroots participation in all phases of rural cultural heritage and tourism projects holds the potential to promote recovery and resilience within a destination. This approach establishes a collaborative, community-based framework for heritage management, emphasizing local engagement. Its goal is to strengthen the digital capabilities of rural communities and foster innovative partnerships among various stakeholders (Muangasame and Tan, 2023).

Furthermore rural tourism destinations have embraced digital tools for showcasing products and interacting with visitors. While advanced data management might not be widespread, the focus has shifted to engaging visitors. Remote rural areas faced challenges in supply chains and transportation, unless accessible by car. Nonetheless, these areas enhanced their public image and attractiveness by providing alternative vacation options to visitors (Farman, 2014).
In recent decades, UNESCO has recognized the need to protect the well-being of humanity, ecosystems and ancient cultures, leading to the adoption of international agreements to safeguard natural and world heritage. The Convention for the Safeguarding of the Intangible Cultural Heritage of Humanity was established in 2003 with the goal of protecting the non-material aspects of culture and promoting cultural diversity in the face of globalization. ICH encompasses various elements, including practices, representations, expressions, knowledge, skills, instruments, objects, artifacts and cultural spaces that communities and groups recognize as part of their heritage. This intangible heritage is constantly recreated and passed down through generations, providing a sense of identity and continuity and promoting respect for cultural diversity and human creativity. ICH can be identified in five areas: traditions and oral expressions, performing arts, knowledge, and practices related to nature and the universe, and traditional craftsmanship. It is important to understand that cultural heritage extends beyond tangible aspects such as monuments and objects. Recognizing ICH in different communities fosters intercultural dialogue and respect for diverse ways of life, including minority communities within a nation. Food production and consumption are integral parts of cultural heritage that reflect the wisdom and knowledge of rural communities. Food serves as a common bond connecting people and carries symbolic and ritual value. It transcends its nutritional dimensions to become a tool for social interactions and relationship building. Food practices, shaped by environmental, productive and historical-cultural characteristics, encompass the complete meaning of society’s life. Traditional agricultural practices and foodways play vital roles in environmental resilience, cultural preservation and community empowerment. However, these heritage sites face sustainability challenges due to factors such as population growth, globalization, capitalist influences, and industrialization of farming and production. These changes in dietary patterns and food choices not only impact traditional food and product patterns but also threaten the diversity of animal and plant species that are crucial to traditional recipes. The Mediterranean Diet, recognized as an Intangible World Heritage, holds great potential for addressing important global issues, such as hunger, sustainable agriculture, food safety, biodiversity and food waste. A paradigm shift is necessary to ensure a more sustainable food system and protect agricultural traditions and foodways as valuable living heritage sites. By doing so, we can safeguard cultural identity, foster resilience and achieve several Sustainable Development Goals (SDGs).

The complexity inherent in the comprehensive concept of the Mediterranean Diet (MD) presents challenges in directly transplanting its material elements to non-Mediterranean contexts. This challenge arises from the necessity to also transfer a unique set of knowledge, skills and traditions that have been intrinsic to Mediterranean regions for centuries. Rather than a straightforward replication, it is advisable for each country to reconnect with its own cultural roots to establish a nourishing dietary model. This approach has been endorsed by authorities for decades, leading various countries to formulate national food-based dietary guidelines. Nonetheless, the endeavor to adapt the health-promoting Mediterranean Diet to non-Mediterranean regions with less cardio-protective food traditions holds promise. The UNESCO designation of the MD as cultural heritage serves as an invitation for nations to rediscover their unique culinary heritage, fostering a health-conscious relationship between places, food and productions. This global recognition underscores the universal significance of reclaiming the true essence of the term “diet,” originally a Greek word (διήται) denoting “lifestyle” rather than a mere “list of foods.”

The Mediterranean diet (MD) stands out for its alignment with recommended nutrient and micronutrient intake guidelines, as well as its association with reduced mortality and a lower risk of metabolic chronic diseases. It also boasts low ecological, carbon and water footprints, mainly due to its emphasis on plant-based foods. Notably, the Mediterranean region is a rich source of plant and crop diversity, with Mediterranean populations utilizing and consuming approximately 2,300 plant species. This review paper has the dual purpose of highlighting
the nutritional and health advantages of the MD while examining the primary environmental impacts of Mediterranean dietary patterns. The substantial body of scientific evidence supporting the health and nutrition benefits of the MD, coupled with its minimal environmental footprint, underscores the urgency of preserving and promoting the Mediterranean diet as a sustainable dietary model.

A meta-analysis conducted on the Mediterranean diet (MD) and its impact on health outcomes has revealed significant benefits as delineated within the MOLI-SANI Study, as depicted in Figure 1. Adhering to the MD has been associated with a notable reduction in several health-related factors. These findings highlight the substantial health benefits of adopting the Mediterranean diet, emphasizing its positive impact on overall mortality, cardiovascular health, cancer prevention and neurological well-being.

Numerous studies have investigated this matter, and Figures 2 and 3 illustrate the progression of the hazard rate for Coronary Heart Disease (CHD) across seven countries over 40 years, as observed in the Menotti et al. study. Demini et al. (2017) introduced the Med Diet 4.0 framework, which integrates the established health and nutritional benefits of the Mediterranean Diet (MD) with three additional dimensions of sustainability: low environmental impacts and biodiversity richness, high socio-cultural food values and positive local economic impact. This framework provides a holistic view of the MD, emphasizing its multifaceted advantages for health, culture, sustainability and local economies.

3. The research: the role of creative and digital strategies for the cultural heritage in Mediterranean rural areas

The MD is widely acknowledged as a healthy dietary pattern, but its adherence is decreasing worldwide, including Mediterranean regions. However, the MD faces challenges in adopting

![Figure 1.](image-url)

The study focused on 2,001 participants from the Moli-sani study cohort in Italy between 2017 and 2020, examining their adherence to a traditional Mediterranean diet and their consumption habits of locally-grown or organic food.

**Note(s):** The participants were divided based on their adherence to a Mediterranean diet, with scores above the population median of 4 considered high adherence, and scores below as low adherence. Additionally, the study investigated the correlation between high consumption of locally-grown food or any organic food intake about Mediterranean diet adherence.

**Source(s):** Bonaccio et al. (2017)
new cultural and dietary models due to insufficient institutional support, limited resources, and the need for innovation and collaboration.

This research paper aims to highlight the importance of institutions, national networks and partnerships in supporting and promoting the MD as cultural heritage in rural areas. Through a comprehensive analysis of pioneering and sustainable initiatives geared toward the revitalization of the Municipal District (MD), this study endeavors to underscore the profound cultural heritage significance attributed to the MD. Furthermore, it seeks to elucidate the inherent potential of the MD as a catalyst for sustainable development. This investigation accentuates the pivotal role of collaborative endeavors, innovative approaches and the dissemination of knowledge in the preservation of this cultural heritage and the consequent enrichment of local communities.

The recognition of diet’s pivotal role in global health, partially attributed to observations concerning the Mediterranean Diet (MedDiet), has underscored the pressing necessity for its worldwide dissemination. The MedDiet’s straightforwardness, particularly its reliance on legumes, cereals and various plant-based elements, renders it potentially adaptable to regions

**Figure 2.** Evolution of hazard rate for CHD in seven countries over a 40-year period

**Source(s):** Pitsavos, et al (2003)

**Figure 3.** Med Diet 4.0 framework showing the four benefits of the Mediterranean diet

**Source(s):** Dernini et al. (2017)
where such components are already integral to local culinary traditions. Its evolution over centuries, shaped by diverse cultural influences, highlights the wealth of knowledge it encompasses. In their ninth meeting in Malta on September 27, 2012, the Mediterranean Agriculture Ministers emphasized the Mediterranean diet’s significance as a catalyst for sustainable food systems in regional development strategies. They highlighted the importance of traditional local products and the need for qualitative approaches to complement quantitative food security efforts.

With this paper, the authors seek to address the research question: “What creative and digital strategies are essential for nurturing cultural heritage in Mediterranean rural areas?” The principal aim of this research is to scrutinize successful case studies in order to discern the framework for constructing a comprehensive conservation plan and strategy. This strategy encompasses critical measures required to ensure the safeguarding of the diverse cultural heritage associated with Mediterranean culinary traditions. The authors contend that a systematic approach, incorporating co-creative strategies, digital resources and the aspiration to co-create regenerative ecosystems, serves as the foundational framework for preserving the MD as a cultural system. The case studies presented in this paper illuminate exemplar instances and underscore that effective preservation strategies must prioritize educational initiatives, awareness campaigns, capacity-building projects and training in the management of ICH. Additionally, these efforts should be coupled with the judicious use of suitable digital tools, collectively contributing to the successful preservation and propagation of the heritage intrinsic to the Mediterranean diet.

3.1 Methodology

This empirical exploratory study follows a three-stage approach, which incorporates the application of two distinct research methodologies. Firstly, it examines the utilization of cultural heritage and knowledge in Pollica through the outputs of the ICHMD (Intangible Cultural Heritage Mapping Database) and the Paideia Campus Living Lab. It serves as the foundational stage, allowing for a systematic examination of existing cultural heritage outputs and initiatives. This initial stage provides a broad overview, identifying key themes and areas for further exploration. The choice of an exploratory approach was driven by the need to understand the multifaceted dynamics of cultural heritage within the specific context of Pollica.

Secondly, it employs participatory action research (PAR) in collaboration with the Creative Knowledge Foundation published (more information about the project can be found here [https://ckp.creativeknowledge.foundation/view-projects/18:32/en?section=home]). The utilization of PAR, in collaboration with the CKF, added a collaborative and community-engaged dimension to the study, emphasizing the involvement of local stakeholders in shaping the research process. This methodology not only facilitated a deeper understanding of the local context but also aligned with the foundation’s commitment to fostering creative and sustainable solutions. PAR emphasizes active engagement with local stakeholders, ensuring that the community’s perspectives, needs and aspirations are integrated into the research process. This stage not only enriches the data with on-the-ground insights but also fosters a collaborative approach, aligning with the ethos of co-creation and community involvement.

Lastly, the research encompassed conducting face-to-face interviews with local stakeholders situated within the Val di Vara (VdV) region. These interviews focused on examining the distinctive characteristics, production activities, tourism patterns, as well as identifying critical issues and weaknesses within the realms of land, heritage, community and infrastructure. These interviews not only enriched the empirical data but also established a direct connection with the local community: they serve as a vital component for triangulating data, providing a more holistic and contextually embedded understanding of the cultural landscape. Through semi-structured interviews conducted with a sample of 100 stakeholders...
encompassing institutions, cultivators, breeders and producers, it was possible to identify common issues that allowed the authors to comprehend the topics constituting a shared sense of criticality. Specifically, the questions posed were as follows: 1. **Availability of agricultural resources**: What extent of cultivable land is currently utilized? Are there difficulties in accessing land for agricultural purposes? 2. **Sustainability of agricultural practices**: Which agricultural practices prevail? Are there issues related to the use of sustainable techniques or the adoption of modern practices? 3. **Access to water resources**: How is water supply managed for agriculture? Are there issues regarding water availability or access? 4. **Markets and distribution**: What is the situation concerning local and national markets for agricultural products in the Val di Vara? Are there obstacles in accessing markets or distribution networks? 5. **Infrastructure and transportation**: What is the state of infrastructure in the region? Are there transportation issues influencing the distribution of agricultural products? 6. **Institutional support**: What role do local institutions play in supporting agricultural development? Are there support programs or incentives for local farmers? 7. **Community involvement**: In what ways is the local community involved in decisions regarding agricultural development? Are there initiatives fostering participation and collaboration among farmers? 8. **Rural tourism**: What is the potential for rural tourism in the Val di Vara? Are there initiatives promoting tourism linked to agriculture and local culture? 9. **Education and training**: What opportunities exist for education and training for those interested in working in the local agricultural sector? 10. **Environmental and climatic challenges**: How do climate change and environmental issues affect agriculture in the Val di Vara? Are there challenges related to the environmental sustainability of agricultural practices?

Subsequently, the insights garnered from the Val di Vara study have been applied to inform and contribute to the ongoing project, recognized as Rurality Hub, aimed at fostering local development within the same region. Overall, the combination of observation and database analysis, participatory action research and stakeholder interviews has allowed for a nuanced exploration of cultural heritage issues, providing valuable insights for both academic discourse and practical applications in regional development initiatives.

The two case studies, FFI and CKF, were selected because they implemented the following criteria as essential elements of their projects. These criteria, focused on the preservation and modernization of rural lifestyles through tradition preservation, adaptation to contemporary demands, revival of knowledge and skills, fostering social cohesion, community empowerment and overall well-being, were integral to their success. Now, these same criteria have been identified as crucial for the development of the third case study, VdV, as outlined in this study. They have been chosen intentionally to address a diverse range of considerations, including cultural, economic, social and practical aspects. The overarching aim is to strike a harmonious balance between preserving cherished traditions and ensuring the community’s ability to thrive effectively in the modern world.

The Val di Vara project concept originates from the study of the Pollica case study, one of the seven rural emblematic communities within the ICMD. Located in southern Italy (in Campania Region) Pollica stands as a pivotal hub for Mediterranean heritage, encompassing elements of history, culture and anthropology. In 2020, Pollica embarked on a comprehensive initiative aimed at revitalizing its abandoned areas, following the guidance provided by UNESCO. This initiative fosters collaboration among various stakeholders, including the municipality, public and private entities, and local communities, with the shared goal of enhancing the unique characteristics of this specific territory. The research conducted herein primarily assesses the employment-related outcomes stemming from the tools and strategies implemented within the Pollica Living Lab. This Living Lab initiative is spearheaded by the Future Food Institute (FFI) and is primarily focused on fostering collaboration and jointly
developing innovative models for prosperity within the Pollica community. Notably, a
significant component of this endeavor is the “Paideia Campus” situated in Pollica. This
experimental hub serves as a platform for promoting a novel form of social engagement and
embodies the concept of integral ecology, with the Mediterranean diet serving as a tangible
illustration. This holistic perspective underscores the intricate interplay between
environmental conservation, human well-being, territorial rejuvenation, community
welfare, social equity and climate change. The establishment of the Paideia Campus aims
to impart the capacity to recognize and appreciate these interconnected facets, envisioning a
more promising future not only for Pollica but also for the broader Mediterranean region and
the world at large. Notably, Pollica and its Paideia Campus are dedicated to investing in the
future, with a particular focus on young individuals, emphasizing the core values of
nurturing a harmonious relationship between humanity and nature, deeply rooted in
Mediterranean culture. The case of Pollica was studied in its structure, with its actors,
methodologies, tools and impacts achieved. The research results were then employed by one
of the authors of this paper to facilitate the analysis and exploration of pioneering solutions
suitable for rural regions and communities (to be later implemented in the Val di Vara).

Furthermore, the CKF provides digital resources for the dissemination of heritage and
supports creative endeavors while actively engaging local practitioners in sharing their
narratives. CKF is dedicated to safeguarding Creative Knowledge Systems and promoting
the thriving of “Creative People,” including family farmers, artisans, artists and similar
individuals, within their original communities. An illustration of their efforts is the “Breads of
the Creative Cities” project, an ongoing initiative supported by the CKF in collaboration with
the UNESCO Creative City of Gastronomy in Tucson.

The third case study within this research is centered on the Val di Vara (VdV) region and
its associated bio-district. Of particular significance is the Val di Vara bio-district, which
grapples with challenges related to rural depopulation and abandonment. Notably, this
region has experienced substantial positive outcomes stemming from the effective utilization
digital tools. These outcomes have led to the emergence of a revitalized regional identity
and have propelled sustainable growth and rejuvenation initiatives.

Following the comprehensive process of gathering interviews with all relevant
stakeholders and convening municipalities alongside other public and private entities for
dialogue and brainstorming, the “Rurality Hub” project is now in its nascent stages. This
project was inspired by the approaches, outcomes and results of FFI Living Lab model
implemented in Pollica and leverages digital tools in collaboration with the CKF. The primary
objective of the “Rurality Hub” project is to underscore the significance of incorporating
creativity, innovation and the Mediterranean diet as a way of life. This endeavor seeks to
attract new stakeholders, conserve the territory, enhance practices related to slow tourism
and empower local communities in alignment with the broader goals of sustainable rural
development.

3.2 Case study Pollica Living Lab and the Future Food Institute ecosystem: background
information
The Future Food Institute (FFI) is a global social enterprise that serves as a foundation for
future food ecosystems. This ecosystem encompasses various research laboratories,
partnerships, initiatives, platforms, networks, entrepreneurial projects and academic
programs. It operates based on the principles of integral ecological regeneration with the
overarching goal of creating a more equitable world. FFI brings together a diverse group of
leading innovators, enhances entrepreneurial capabilities and fosters the development of
skills and traditions within the agricultural and food sectors. Aligned with the Sustainable
Development Goals (SDGs) set forth by the United Nations, the FFI is dedicated to advancing
its transformative mission. Through a range of interconnected activities, the FFI aims to guide individuals and ideas along a progressive journey from initial awareness to concrete action and implementation. By fostering collaboration, knowledge sharing and practical initiatives, the Food Institute strives to positively impact the global challenges outlined by the SDGs. Pollica, known as the heart of the Mediterranean, holds special significance as the capital of the Mediterranean Diet—a lifestyle that emphasizes the harmonious connection between humanity and the land that sustains us. The Paideia Campus represents the FFI’s initiative, specifically tailored for the Pollica community’s future. It aims to create a thriving environment that fosters education, innovation and sustainable practices in the field of food and agriculture. Today, it is the FFI-integrated International Living Lab.

The FFI’s living lab, situated in Pollica, Italy, represents an innovative endeavor aimed at addressing challenges related to food sustainability, agriculture and rural development. Located in the town of Pollica within the Campania region, this living lab serves as a hub for interdisciplinary collaboration, education, research and experimentation with the goal of promoting sustainable food systems. Pollica’s unique attributes, including its agricultural heritage, local culture and access to both traditional farming methods and modern agricultural technologies, make it an ideal site for this initiative. The convergence of historical farming practices and contemporary technological advancements provides a distinctive platform for testing novel approaches to food production, distribution, and consumption. The living lab serves as a testing ground for inventive strategies that combine technology, sustainable practices, and community involvement. Collaboration among researchers, entrepreneurs, farmers and local residents leads to the development of solutions addressing food security, environmental preservation and economic viability for rural communities. The lab’s multifaceted methodology encompasses precision agriculture, agroecology, circular economy principles and community-driven efforts. By integrating these components, the living lab aims to establish a comprehensive model for food systems that can be adapted globally. Through partnerships with local stakeholders, academic institutions, government entities and industry stakeholders, the FFI’s living lab in Pollica facilitates knowledge exchange, capacity development, and practical insights contributing to the broader conversation on sustainable food production and rural development. Its role as a living lab extends beyond conventional research paradigms by actively involving the community, testing innovative concepts, and providing a real-world environment for experimentation and learning.

3.3 Case study the creative knowledge foundation: background information
The CKF is a nonprofit organization that supports and promotes the role of “Creative People” as protectors of Creative Knowledge. Formerly known as the International Traditional Knowledge Institute Foundation (ITKI F), it underwent a name change on September 16, 2022, to better align with its emphasis on Creative Knowledge (CK) and the significance of “Creative People” who preserve diverse practices. Creative Knowledge represents the adaptation of traditional knowledge-based methods that work in harmony with nature to foster collaboration. The foundation’s mission revolves around fostering a sustainable and resilient world by safeguarding and nurturing knowledge. Their goal is to raise awareness and reinforce the importance of Creative Knowledge in modern society. Given the ongoing changes in contemporary societies, including climate issues, environmental concerns and increasing urban density, both Traditional Knowledge (TK) and Creative Knowledge (CK) systems offer valuable and sustainable solutions. These knowledge systems can be harnessed and adapted to address modern challenges. By leveraging the wisdom embedded in TK and CK, innovative approaches can be developed to tackle these pressing issues in a way that is both effective and in harmony with society’s changing needs. The CKF has the following values:
3.4 Case study Val di Vara district: background information
The research conducted in the Val di Vara (VdV) region aimed to comprehensively analyze the territory, identify its strengths and weaknesses and explore potential opportunities and threats related to implementing the Intangible World Heritage-Mediterranean Diet (IWH-MD) model, as seen in Pollica. The goal was to engage and empower the community by utilizing the intangible aspects already present in the valley. The study employed various research methodologies, including examining institutional websites, conducting interviews with stakeholders and institutional representatives, and participating in discussions during the Bio Festival. The VdV region, located in the Ligurian Region, is a rural area known for its organic terrain, historical-cultural significance, and its role as a crossroads between Genoa and Parma. It is situated near the Montemarcello-Magra-Vara Regional Natural Park, Cinque Terre National Park and Ligurian Apennines. The primary economic sectors in VdV are agriculture, trade and construction, with a focus on organic production. The establishment of the VdV Bio-district has facilitated the transition to organic farming and aims to promote organic products, sustainable living and cultural preservation. Slow Food initiatives, such as the Black Rooster Presidium and Food Communities, contribute to safeguarding traditions and biodiversity. The tourism sector in VdV has experienced growth, particularly due to its proximity to the renowned Cinque Terre National Park. Outdoor activities and agritourism have also attracted visitors. The region’s emphasis on preserving the natural environment, promoting agro-food production and offering unique culinary experiences has supported sustainable tourism. The presence of a wind farm in Passo della Cappelletta further contributes to sustainable energy initiatives in the region.

4. Lessons learned from the 3 case studies: assessing the effectiveness of their tools and identifying the drivers of change
4.1 Pollica Living Lab tool of Pollica and the Pollica 2050 strategy
The “Pollica 2050 – Mediterranean Living” model, focused on the Mediterranean Diet as a model for integral ecological regeneration, is used as an approach and roadmap to unlock untapped, undervalued or dormant resources. Through collaborative co-creation and validation (Massari et al., 2023) via active prototyping, the project established a strategic framework that nurtures inclusive prosperity through an integral ecological approach. By leveraging the developed management tools and prototypes, the ongoing implementation of the
Pollica 2050 project focuses on cultivating a tangible ecosystem capable of self-sustenance and long-term nourishment. In its fourth phase, the project actively engages in regenerative initiatives spanning six vital domains: Political, Environmental, Human, Social, Cultural and Economic. The project aims to foster holistic and sustainable development by comprehensively addressing regeneration across diverse realms.

The primary objective of the project was to cultivate awareness and a sense of responsibility within the community, empowering them to enhance the local environment. The project area is characterized by picturesque landscapes, valuable cultural heritage and high-quality agricultural production. To foster this awareness and understanding of the complex dynamics at play, both permanent and temporary residents have been actively engaged as “active participants.” This inclusive approach has allowed for a deeper exploration of the underlying causes of generational abandonment and associated challenges. Through this collaborative process, proposals and recommendations have been collectively identified to protect and enhance available resources, particularly those that have been underutilized or dormant. As a result, the village has transformed from being solely a cultural element in need of revitalization to becoming a vital node within an ecosystem that triggers a wider process of regeneration for the entire territory. This holistic approach recognizes the interconnectedness of the village with its surroundings and emphasizes the role of community-driven initiatives in achieving sustainable regeneration. Several initiatives have been promoted: a) Education and Awareness b) Collaboration and Partnerships c) Policy Support d) Innovation and Adaptation e) Sustainable Food Systems f) Capacity Building and g) Cultural Preservation.

In summary, the quantifiable outputs presented above provide a comprehensive overview of the diverse and significant impacts of the FFI. These outputs underscore the organization’s role in fostering innovation, knowledge dissemination, skills development and community engagement, ultimately contributing to the advancement and transformation of sustainable food systems in line with the UN’s Sustainable Development Goals.

4.2 The creative knowledge foundation and its digital outcomes

Overall, the CKF focuses on collaboration, sustainability and community empowerment to nurture and advance Creative Knowledge to improve society. The CKF, established as a non-profit organization, reinforces the pivotal role of “Creative People” who serve as the custodians of the world’s Creative Knowledge. Creative Knowledge (CK) represents the contemporary evolution of traditional knowledge-based practices that have adapted to the principles of nature and have learned to collaborate with it rather than oppose it. CKF offers communities essential digital tools to rediscover and enhance their heritage and knowledge, primarily through the Creative Knowledge Platform, available both on the web and as a mobile application. The CKF offers a range of digital tools that provide users with various digital outcomes. They include:

(1) Digital Library: A repository that houses multimedia content such as stories, images, and videos related to the community’s heritage and culture.

(2) QR codes for participants: Links participants’ profiles to the CKF website, social media accounts and other relevant online platforms, enhancing their visibility and connectivity.

(3) Interactive E-Booklet and Book: Descriptive materials that showcase specific projects and initiatives undertaken by the community, providing in-depth information and insights.

(4) Geo-tagged travel itineraries: Web-based interactive maps that connect geospatial data with different territories, allowing users to explore and discover local points of interest and travel routes.
(5) “Around Me” Feature: Shows the locations of Knowledge Keepers and local points of interest, facilitating navigation and exploration of the community’s cultural and natural assets.

(6) Quarterly Marketing Reports: Provide detailed insights and statistics on engagement rates for local Knowledge Keepers, territories, local communities, tourists, and visitors, helping to assess the impact and reach of CKF initiatives.

Following the successful model of previous projects like “Breads of Creative Cities” the opportunity is extended to all organizations, including Creative Cities, communities and local entities, as well as knowledge keepers such as local bakers, farmers and millers, who are eager to showcase and narrate the tales behind the traditional breads specific to their regions. This project encouraged participants to develop and present their contributions in their native languages, fostering cultural authenticity at the local level. To facilitate the process, CKF provides a dedicated instance on the TRusT™ platform, where participants can upload their traditional breads. Additionally, the foundation utilizes its official Facebook pages and websites to promote and communicate its initiative, while participants leverage their own social channels to invite their followers to explore their unique and cherished traditional recipes.

The digital outcomes in question serve the purpose of augment user experience, facilitate knowledge dissemination and foster active engagement with the cultural heritage and resources of the community. These digital assets have been seamlessly integrated into an ongoing project slated for official presentation in the Val di Vara region in July 2023. This endeavor holds paramount academic value, as it exemplifies the efficacious implementation of technology in augmenting user interactions, disseminating knowledge, and forging connections with cultural heritage and abundant resources of the community. Moreover, it contributes to the enhancement of local identity, fortification of heritage, and potential incorporation of these elements into the best practices of slow tourism.

4.3 Val di Vara and the ideation of “Rurality hub” project

The core objectives of RURALITY HUB – a rural development project are multifaceted and pivot around several significant aims. Foremost among these objectives is the endeavor to rebuild trust and foster collaboration within the community and with institutions. This is to be achieved through the promotion of existing skills and the cultivation of new ones, facilitated by an inclusive and participatory model, education and training. Another paramount focus of this initiative is the preservation of heritage, with a keen emphasis on preventing the erosion of knowledge, skills and resources endemic to the region. To this end, a primary course of action involves the meticulous preparation and presentation of candidacy for admission to the Emblematic Communities of the Mediterranean Diet Project. This effort necessitates close engagement with local institutions and organizations, facilitating the exchange of best practices, enhancing digital competencies, and the widespread dissemination of pertinent information among communities, schools, producers, and relevant institutions.

Furthermore, this endeavor delves into the intersection between the MD and the region, with due consideration for alignment with the UNESCO ICH program. This alignment underscores the importance of promoting traditional foods associated with the Mediterranean Diet within the tourism sector. Additionally, the development of an innovative methodology that actively involves communities and leverages their natural heritage sites is deemed imperative. The concept of Living Labs emerges as a recommended approach, capable of fostering co-creation and open innovation. These Labs serve as platforms for engaging various stakeholders, advancing local self-sufficiency, and
generating novel services and products, thereby contributing significantly to sustainable rural development.

Integral to the project’s objectives is the utilization of online platforms as instrumental tools for disseminating skills and knowledge, supporting data collection efforts and preserving the local cultural heritage. These platforms are viewed as catalysts for promoting social, economic and environmental development, all harmonious with the distinctive Mediterranean lifestyle.

The “RURALITY HUB” project introduces an innovative model distinguished by four fundamental pillars. Its primary aim was to facilitate the cultural, social, and economic advancement and rejuvenation of the municipalities located in the Alta Val di Vara region. This ambitious undertaking draws its inspiration from key principles intrinsic to the Mediterranean Diet, encompassing cultural components and lifestyle practices. Initiated in January, this experimental project embodies a purposeful and long-term commitment with an extended temporal scope. It encompasses an all-encompassing developmental trajectory spanning a duration of three years, with the prospective outcome of generating tangible, empirically substantiated data. The “Preservation and Modernization of the Rural Lifestyle” project comprises a series of interconnected steps aimed at reviving and contemporizing the traditional rural way of life that has historically thrived in the region. This multifaceted endeavor involves not only safeguarding this heritage but also adapting it to align with the demands of the contemporary world. One crucial aspect of the project is the recovery of lost knowledge, skills and traditional productions. This component seeks to retrieve knowledge, skills and traditional practices that have either been lost over time or are currently at risk of fading away. The goal is to reinvigorate these valuable elements of the rural lifestyle, thereby promoting growth and development within the community.

Another significant focus of the project is community empowerment, which is achieved through the recognition of Key Figures in Local Production Networks. This entails identifying and acknowledging pivotal individuals within the local production networks. By highlighting their contributions and expertise, the project aims to contribute to the revitalization of these networks, fostering a sense of pride and purpose within the community.

Additionally, the project places great emphasis on fostering Social Cohesion as a driving force. It seeks to promote social cohesion among community members, uniting them toward the shared objectives of regeneration and communal revival. Through this collective effort, the project aspires to strengthen the bonds within the community and create a supportive environment for the preservation and modernization of the rural lifestyle. The project also proposes educational and training initiatives designed to create employment opportunities within the local region, with a special emphasis on the younger demographic. It advocates for the introduction of digital tools for the purpose of showcasing the territory and its community. Additionally, the project aims to establish virtuous and sustainable economies, particularly through the implementation of circular economic principles, which serve to uphold and reinforce the cultural identity of the Alta Val di Vara. Lastly, it endeavors to enhance and promote local knowledge and productions from a tourist perspective, recognizing their potential as catalysts for economic development, with a particular focus on promoting “slow tourism.”

5. Conclusions
The scientific literature states that creativity can have a positive impact on individuals and organizations. Wadhawan (2020) argues that creativity can be developed and fostered, leading to higher-order thinking and cognitive skills. Kules and Shneiderman (2008) discusses the importance of designing tools that support creativity. Meinel (2016) found that
creativity techniques positively affect idea generation in innovation management, but are not systematically applied. Chin et al. (2015) highlights the importance of creativity in enhancing organizational competitiveness and innovation diffusion. In conclusion, the literature confirms that creativity can lead to discovery, innovation, and competitiveness and that tools and techniques can be developed to support and enhance creativity.

This paper presents three case studies that illustrate how theoretical concepts or models can be put into practice and produce tangible change. These concrete cases help bridge the gap between theory and practice by showing how theoretical ideas are operationalized and how they have been successful or impactful in specific scenarios.

Analysis of emblematic rural communities in the context of the Mediterranean Diet (MD) reveals that MD is not only designated as an Intangible Heritage of Humanity but also functions as a sustainable and nutritious food model, offering significant sociocultural, health, economic and environmental benefits. MD has the potential to stimulate sustainable development in rural areas of the Mediterranean basin. Over time, traditional practices of food production and consumption in the region have evolved into a distinctive way of life, interwoven with various skills, songs, legends, tales and customs, this evolution was notably explored by Sotiriadis (2017). The strength is the adoption of a bottom-up approach that restores dignity and identity to local communities, which play an authentic role as knowledge keepers and are emerging as generators of culture and heritage.

The establishment of the Paideia Campus in the Pollica Living Lab demonstrates that it is possible to convey the ability to recognize and appreciate these interconnected facets, envisioning a more promising future not only for Pollica but also for the broader Mediterranean region and the world at large. This holistic perspective used in Pollica emphasizes the intricate interplay between environmental conservation, human well-being, land rejuvenation, community well-being, social equity and climate change. In particular, Pollica and its Paideia Campus are dedicated to investing in the future, with a focus on youth and creativity, emphasizing the core values of cultivating a harmonious relationship between humanity and nature, deeply rooted in Mediterranean culture. The Pollica Living Lab model was one of the focuses of this study for exploring pioneering solutions suitable for rural regions and communities.

The case of the Foundation, through its creative use of digital media, demonstrates how it is necessary to adapt and tailor the goals of the target community in order to develop different frameworks, with local communities taking center stage as the main promoters of their territorial brand. For example, through photos, videos and stories, natives can showcase their traditions, creativity, culture and local supply chain. Notably, these aspects are prominently featured in research conducted within Carrara, a small town renowned for its marble industry in Tuscany, Italy. Carrara’s inclusion in the UNESCO Creative Cities program in 2016 further accentuates its cultural significance. This portrayal of interconnected cultural elements is notably expounded upon in Giuseppe Biagini’s contribution titled “Hands at Work,” part of the Editorial Project ITKI US chapter. By promoting the use of digital technologies, improving local economies, promoting community building, and embracing sustainable practices using local resources, rural areas can pave the way for a promising future.

The research conducted in Val di Vara early on highlighted challenges at the institutional level, including a lack of long-term goals and community participation.

Creativity and digital strategies
skills and knowledge, while outside professionals could bring new ideas and expertise. Raising awareness of MD as a way of life would increase demand for local products and foster cooperation between the restaurant and hospitality sectors and local producers. Redefining spaces and territories with a view to sustainability, in cooperation with municipalities and villages, would promote the consumption of local, high-quality and healthier foods through short supply chains. This approach would benefit future generations by changing their lifestyles and creating new job opportunities. Sustainable tourism, which focuses on the environment, authentic experiences, traditions and local products, can also contribute to regional development. Innovation strategies would facilitate community involvement and empowerment, further improving a region’s prospects.

Through the analysis of the three cases, interesting and impactful creative and digital strategies for fostering innovation cultural heritage in Mediterranean rural areas were identified and were implemented concretely by one of the authors in the case of “Rurality Hub” applied in the VdV.

This study can offer valuable insights and recommendations for policymakers and stakeholders involved in rural development initiatives, particularly those focused on preserving food and cultural heritage in rural areas. By analyzing real-life examples, it bridges the gap between theory and practice, illustrating how these ideas have been effectively applied in specific contexts. This paper emphasizes the potential of the Mediterranean Diet as a sustainable and nutritious model with sociocultural, health, economic, and environmental benefits, highlighting the importance of bottom-up approaches that empower local communities as custodians of knowledge and culture. It also provides practical strategies, such as investments in educational programs, the establishment of international campuses, and the use of multichannel platforms for immersive experiences, which can be adapted for broader rural development initiatives, promoting sustainability and community engagement.

5.1 Implication and recommendations
The study and project aim to illustrate the feasibility of initiating a transformative process, centered on a visionary approach with a core focus on creative knowledge and the Mediterranean diet as a way of life, to revitalize marginalized communities. Furthermore, it seeks to emphasize that these neglected regions possess untapped potential for innovative ideas and opportunities. Rural communities, in their role as farmers of primary goods, are the ones who nurture the environment, and the landscape, and are the true protagonists of every era. Rurality is the place that preserves the most resources and potential in terms of biodiversity and rural knowledge. Every territory, like every human being, has its own characteristics and vocations to pursue. The existing Genius Loci is already an existing value that requires policies and governance to rediscover roots, identity and worth. The stratification of existing collective intelligence must become central and must be individually assessed and enhanced, also taking advantage of new digital technologies.

5.2 Limitations and future research suggestions
Nonetheless, it is imperative to acknowledge certain limitations within the scope of this study, primarily associated with the specific sample selection, potentially influencing the broader applicability of the findings.

It is crucial to recognize and reflect on two limitations inherent in the design of this study. First, while the specific sample selection provides valuable insights into the Pollica region, it may not fully capture the diversity that may exist in other geographical areas. Future research could consider expanding the geographical scope to include a wider range of contexts, thus ensuring a more representative understanding of the dynamics of heritage use.
Secondly, this study sheds light on the importance of living labs in the cultural heritage context, highlighting their potential to foster innovation and sustainable development. However, the relatively recent emergence of living labs as a research and development approach implies a lack of comprehensive scientific research on their effectiveness. Therefore, the nascent state of living lab research is a limitation that requires more in-depth and rigorous scientific investigation. Future studies should explore the nuanced mechanisms and outcomes of living labs, providing a more robust basis for understanding their role in cultural heritage initiatives. Furthermore, the acknowledgement of the limited scope of the existing literature on the subject highlights the need for a broader and more diverse exploration of living labs, ensuring a comprehensive understanding that goes beyond the current limitations of academic discourse.

In addition to these considerations, the study confronts the constraint of a limited body of scientific literature, particularly concerning the intersection of cultural heritage, creativity and digital elements within the context of living labs. While the research acknowledges the potential of creativity and digital technologies to enhance the preservation and utilization of cultural heritage, the current academic landscape lacks an extensive exploration of these dimensions. The limited literature poses a challenge to fully grasping the multifaceted impacts of creative approaches and digital interventions within living labs. Future research should strive to fill this gap, delving into the nuanced dynamics between cultural heritage, creativity and digital innovation to provide a more holistic understanding of their interplay.

Furthermore, recognizing the evolving nature of technology and the growing emphasis on digital platforms in cultural heritage initiatives, future studies should aim to not only address the current limitations in the literature but also contribute to shaping a more comprehensive knowledge base that aligns with the dynamic and transformative nature of the digital realm.

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Further reading


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