

Towards Sustainable Rural Communities

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Abstract: The future of rural communities relies on managing knowledge transfer and sharing in order to advance towards sustainable rural development. Investing in knowledge sources and management helps rural organisations to drive social growth, fostering cohesive and socially open rural communities. Rural communities may address a knowledge-driven pathway for sustainable rural development. Rural actors and stakeholders contribute to shaping wealthy rural communities by employing the potential of knowledge management, transfer and sharing. Regulatory frameworks support collaboration within rural communities that benefit of knowledge management issues and practices.

Keywords: Rural development, Rural communities, Knowledge sharing and transfer, European rural policies

1. Introduction

Rural communities identify the needs of the community, taking into account local traditions, cultural values, integrating broader societal objectives in planning and managing initiatives for sustainable rural development (Robinson, 2008). As social systems, communities enable individuals, groups, and organisations as actors that communicate and share resources, improving their life and meeting their interests collectively (Fesenmaier and Contractor, 2001). Managing knowledge supports community development. Knowledge is a driver of value within rural economies. Rural development relies on driving collaborative frameworks and managing knowledge transfer and sharing in order to drive social and economic growth of rural communities (Mardsen *et al.*, 2001).

Knowledge management views the firm as a social community or knowledge system capable of generating information (Sporleder and Peterson, 2003). Social capital and networks play a critical role in supporting knowledge transfer. Managing efficiently knowledge transfer relies on organisations capable of managing and building social capital proactively (Inkpen and Tsang, 2005), driving and managing effectively knowledge transfer (Argote and Ingram, 2000; Argote *et al.*, 2000). Knowledge is dynamic and dependent on social relationships that contribute to its creation, sharing, and use (Ipe, 2003). Communities act as gate-keepers to explicit and implicit knowledge that the core group of stakeholders contribute to create and share (Wiltshier and Edwards, 2013). Collective action helps support healthy and effective rural development, mobilising local actors to develop knowledge sources and practices for value creation processes (Meinzen-Dick, DiGregorio and McCarthy, 2004). Cooperation, interaction and social exchange contribute to shaping and forming collective knowledge (Hecker, 2012). Wealthy rural development relies on encouraging the sharing of knowledge within rural communities and agriculture (Girard, 2015).

Knowledge-driven co-production systems support multi-actor collaboration within rural communities (Vincent and Feola, 2020), and drive sustainability-oriented rural innovation (Testa *et al.*, 2022) for wealthy rural communities and revitalization (Yin, Chen and Li, 2002).

Sustainable rural communities rely on knowledge sharing practices and culture as drivers of social inclusion and innovation. While several studies investigate the role of knowledge management within rural areas and other studies focus on the perspectives for rural development, few studies interrelate the knowledge and rural development management as enablers of sustainable growth within rural communities. The research question refers to understand how rural actors and organisations contribute to shaping wealthy rural communities. The motivation of the study comes from considering that no much research concerns how to drive rural growth for wealthy rural communities.

The aim of the study is to elucidate how rural actors and stakeholders contribute to shaping sustainable rural communities by employing the potential of knowledge management, transfer and sharing, relying on regulatory frameworks and guidelines in order to drive rural development. Knowledge management issues and practices support the interaction and enable rural actors to strengthen collaborative efforts. Regulatory frameworks and guidelines help facilitate knowledge sharing and transfer, and drive social and economic exchanges among rural actors and stakeholders. This interplay supports some pathways leading to achieving sustainable rural development and healthy communities. The study is conceptual and relies on analysis and review of literature on the relationships between innovation and knowledge sharing as a means for sustainable rural community development.

The paper is structured as follows. The introduction elucidates the aims and motivations of the study. In the second paragraph the theoretical background is presented. Understanding the role of knowledge transfer and sharing within and across organisations and the pathway to sustainable rural development are elucidated. In the third paragraph methodological section is presented. In the fourth paragraph the relationship between knowledge management and policies for rural development is presented. The analysis of studies that elucidate the role of knowledge management as a driver to support knowledge exchange and drive collaboration within healthy development of rural communities is elucidated. European framework, guidelines and regulations contribute to modernising and improving agrifood and rural development. Finally, discussion and conclusions are outlined.

2. Theoretical Framework and Background

2.1 Understanding the Role of Knowledge Sharing and Transfer Within and Across Organisations

Investing in knowledge sharing and transfer helps to support social capital and social interaction as drivers for promoting community development (Fesenmaier and Contractor, 2001). Knowledge helps for sustainable communities and agrifood systems (Feenstra, 1997). Knowledge supports both innovation and social and economic growth within communities. Knowledge is a critical organisational resource for competitive advantages (Davenport and Prusak, 1998). Knowledge is a core resource for successful organisations that contribute to social value creation within communities. Investing in knowledge management nurtures knowledge sharing culture among the actors involved in creating new knowledge. Investing in knowledge assets helps to drive value creation processes, restoring the value of social relationships, and developing knowledge capital of communities and collective intelligence within social systems. Investing in knowledge supports the organisations to develop social growth and social capital, and fosters cohesive and socially open communities. The knowledge created by communities develops within social ecosystems, enabling organisations to evolve in a sustainable way, fostering social capital, for building strong economic, social and environmental ecosystems. Collaboration is recognised as a key element to foster the responsibility of each actor in the cooperative framework and to achieve social, economic and environmental objectives. Knowledge transfer contributes to competitive advantages. Successful organisations are able to drive and manage effective knowledge transfer. Effective organisations transferring knowledge internally are more successful than those lack knowledge management and transfer. Knowledge transfer refers to the process through which one unit is affected by the experience of another one within organisations (Argote and Ingram, 2000). Social capital and networks play a critical role in supporting knowledge transfer. Managing efficiently knowledge transfer relies on organisations managing and building social capital proactively (Inkpen and Tsang, 2005). While knowledge transfer relates to the «movement of knowledge between different units, divisions, or organizations», and «involves both the sharing of knowledge by the knowledge source and the acquisition and application of knowledge by the recipient» the «knowledge sharing refers to the provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas» (Wang and Noe, p. 117).

2.2 Towards Sustainable Rural Development

Creating value in rural areas relies on promoting social and economic value creation within rural communities. Sustainable development of rural communities relies on enhancing rural resources as capital assets that contribute to wealthy local communities by providing opportunities to improve the quality of rural environment (Garrod, Wornell and Youell, 2008). The pathway leading to sustainable rural development relies on open and socially proactive rural communities. Akgün, Baycan and Nijkamp (2015) have defined the sustainable rural development as the call of maintaining sustainability and continuity of rural areas while exploiting their opportunities in the global scene. Sustainable agricultural practices contribute to shaping healthy and sustainable rural development and societies (Mardsen *et al.*, 2001). Rural resources enable rural and agrifood organisations to entrepreneur initiatives and to drive economic and social growth within rural communities. Investing for enhancing rural resources helps to drive rural development as paradigm leading to wealthy rural communities and driving value creation. Rural development is emerging as a new paradigm that places the agriculture at the interface between actual and potential rural and no rural activities for constructing viable rural livelihoods (Ellis and Biggs, 2001). Agricultural activity can also shape the landscape, providing environmental benefits in terms of land conservation, sustainable management of renewable natural resources, preservation of biodiversity and contribution to the socio-economic viability of rural areas (Oecd, 2001). Rural areas and resources contribute to sustainable and smart growth, and provide an added value and potential for creativity and innovation (Commission, 2017). In the post-industrial stage of rurality there is an integration between economic and social activities within the territory. The preservation of the environment, the security and quality

of food are becoming the main priorities of policy agenda. Rurality becomes as a synonym of diversity in terms of landscape, historical and heritage asset, tradition and values related to agriculture, and natural asset (Sotte 2008).

3. Methodological Section

The study relies on qualitative and archival data drawn by both analysis and review of literature that aims at investigating the relationship between agrifood and rural sector and knowledge management practices, and the documents related to European policies with regards to rural development and agricultural sector. The European frameworks and guidelines governing the design of rural development and defining policies for agriculture are presented and analysed. The aim of documentation's analysis is to elucidate how regulations and guidelines contribute to improving social and economic activities that concern rural development, fostering knowledge sharing and exchange, leading the actors to identifying new opportunities for rural value creation. The study aims at introducing a proposal for rethinking the development of rural communities. At this stage of research as exploratory study and analysis, no systematic literature review was no set. In particular, with regards to literature analysis, the selected contributions are interpreted in a narrative synthesis in order to elucidate new perspectives and advance theoretical frameworks on emerging issues (Denyer and Tranfield, 2006; Dixon-Woods, Agarwall, Young, Jones and Sutton, 2004).

4. Knowledge Management Between the Development of Rural Communities and the European Policies for Rural Development

4.1 The Role of Knowledge Management Within Rural Communities

Knowledge management practices and issues help for building wealthy rural communities. Knowledge management views the firm as a social community or knowledge system capable of generating information in the agricultural context (Sporleder and Peterson, 2003). The sustainability of communities and enterprises relies on encouraging knowledge sharing between stakeholders to increase effective measures for social and economic growth in agriculture and rural areas (Girard, 2015) by following a knowledge management view and developing knowledge sharing and knowledge transfer in order to support the building of partnerships within rural communities (Wiltshier and Edwards, 2013). Managing knowledge in the agricultural systems helps to facilitate a continuous exchange of knowledge generation processes, localised practices, collective needs, and research results across farmers, development experts, scientists, citizens, and policy makers. Knowledge is enabling a networked innovation as a multi-sided process that relies on driving knowledge creation, transformation and distribution that involve a wide variety of diverse and several actors that contribute to value creation within rural communities (Abdirahman *et al.*, 2014). Knowledge is becoming a driver of the land development, supporting the pathway for sustainable development (Maizza, Fait, Scorrano and Iazzi, 2019). The future of sustainable rural development relies on driving the interaction among actors that are dealing with knowledge-based practices that involve the combination of different kinds of knowledge, leading to shaping knowledge-driven rural communities (Buckmaier and Tovey, 2008). Governing agrifood systems and rural development and communities towards sustainability relies on managing, sharing and transferring knowledge as a critical resource for driving healthy and safe rural and agrifood ecosystems. Developing knowledge issues and practices within rural and agrifood ecosystems helps to support social and community innovation, leading to effective rural development and communities coherently with sustainable development. Introducing knowledge management practices helps rural actors to work collaboratively and contribute to innovation that helps to facilitate the itinerary of agrifood systems and communities towards sustainability (Brun *et al.*, 2021) leading to alliances that open to democratising knowledge access and utilization. In particular, driving knowledge sharing supports for innovation enabling cooperative frameworks and collaborative efforts towards value creation within rural communities (Gardezabal *et al.*, 2021). Managing and sharing knowledge helps communities to drive rural innovation, enabling the participant actors to create new technical, managerial and institutional knowledge. Sustainable rural development relies on structural, relational, and cognitive dimensions of social capital with regards to the ability of firms to engage with networked stakeholders in bottom-up knowledge sharing for innovation (Go, Trunfio and Della Lucia, 2013). Ammirato *et al.* (2021) have stated that «the agri-food sector is characterized by a constellation of heterogeneous actors sharing values, culture and infrastructures that have the potential and the will to cooperate in order to pursue the general long-term objectives of territory development and competitiveness» (p. 3). Collaboration is emerging as a driver of rural actors taking the responsibility to achieve social, economic and environmental objectives. Collaboration helps rural firms and several stakeholders to contribute to value creation processes within rural ecosystems.

4.2 The European Framework as an Enabler of Rural Development and Knowledge Sharing Practices

European policies contribute to facilitating interaction, economic and social exchanges among rural actors, supporting the development of knowledge sharing practices. As centres of renewable energy production, European rural areas contribute to driving biodiversity preservation and protecting environmental resources (Commission of the European Communities, 1988). Following the Cork Declaration (1996) rural policies support rural communities to preserve and improve the quality of rural environment, valorising natural resources, biodiversity and cultural identity coherently with a multi-disciplinary and multi-sector approach.

Recently, the European rural development planning was emerging as a priority to drive social and economic growth of rural communities (Commission of the European Communities, 1996). According to the article 4 of the EU Regulation No 1305/2013 for the European Union rural development policy (2014-2020) three long-term overarching strategic objectives were identified and translated into six priorities for rural development: a) fostering the competitiveness of agriculture; b) ensuring the sustainable management of natural resources, and climate action; c) achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment. In particular, the role of knowledge transfer and innovation is an important asset to modernise rural areas and communities: fostering knowledge transfer and innovation in agriculture, forestry and rural areas; fostering innovation, cooperation and the development of the knowledge base in rural areas; strengthening the links between agriculture, food production and forestry, research and innovation for improved environmental management; fostering lifelong learning and vocational training in the agricultural and forestry sectors; enhancing the viability/competitiveness of all types of agriculture, and promoting innovative farm technologies and sustainable forest management: by improving the economic performance of all farms and facilitating farm restructuring and modernization, increasing market participation and orientation as agricultural diversification; by facilitating the entry of skilled farmers and generational renewal; promoting food chain organisation and risk management in agriculture by improving competitiveness of agrifood and rural systems; restoring, preserving and enhancing ecosystems related to agriculture and forestry by enhancing biodiversity and improving water management and soil management, preventing soil erosion; promoting resource efficiency and supporting the shift toward a low-carbon and climate-resilient economy in the agriculture, food and forestry sectors.

The Cork 2.0 Declaration (2016) supports innovation within European rural areas by: promoting both rural prosperity relying on the identity and dynamism of rural areas; fostering diversification, entrepreneurship and employment for wealthy and resilient rural communities and farms; strengthening rural value chains by promoting policies that open to emerging business opportunities for agriculture and forestry, and rural enterprises related to circular and green economies; investing in rural viability and vitality, promoting rural quality of life and meeting the aspiration of rural youth, strengthening and aligning the development of rural and urban areas.

The Common agricultural policy (CAP) refers to bringing together food, the environment and the countryside. The CAP is a partnership between society and agriculture that ensures a stable supply of food, safeguards farmers' income, protects the environment and keeps rural areas vibrant. The CAP 2023-2027 focuses on a new way of working. It is a modernised policy, with a strong emphasis on results and performances. It focuses on ten specific objectives, linked to common EU goals for social, environmental, and economic sustainability in agriculture and rural areas. The CAP 2023-27 is built around ten key objectives, and focuses on social, environmental and economic goals: to increase competitiveness and contribute to food value; support initiatives and actions for managing climate change; to provide environmental care; to preserve landscapes and biodiversity; to support generational renewal; to drive vibrant rural areas; to protect food and health quality; to foster knowledge and innovation; to ensure a fair income for farmers. These objectives are the basis upon which EU countries designed their CAP Strategic Plans.

5. Discussion and Conclusions

The study aims at identifying the role of knowledge management practices in terms of knowledge transfer and sharing as drivers of sustainable rural development and communities. Driving rural development and enabling communities to achieve conditions of sustainable and wealthy development relies on fostering and managing knowledge sharing practices. Investing in knowledge sharing and transfer helps to drive collective knowledge as a driver for shaping sustainable rural communities within agrifood systems. Sustainable rural development relies on strengthening collaboration within rural communities through knowledge sharing practices. The future of rural development and communities relies on managing knowledge transfer and sharing for shaping effective rural communities and organisations that contribute to value creation within rural ecosystems and open to

wealthy and sustainable rural communities, driving social and cohesive rural growth. Promoting knowledge sharing within rural and economic ecosystems helps to support sustainable, social and economic growth. Rural development policies contribute to designing sustainable rural ecosystems and communities by enhancing knowledge management practices and issues for innovation and wealthy rural communities. Investing in initiatives and actions that implement knowledge sharing and transfer practices enable rural enterprises and organisations to interiorise a culture of sustainability.

With regards to policy aspects, European institutions encourage all the rural stakeholders and actors to promote rural development as a key strategy for sustainability. Designing policies for sustainable rural development helps to revitalise rural economies and communities by creating and consolidating new linkages between agriculture and society, bridging rural and urban realities. European regulations and guidelines contribute to strategic and organisational changes by encouraging the rural actors to adopt and construct business models that support the to design of sustainable and cohesive rural communities. Promoting sustainable rural development and encouraging a culture of sustainability in agriculture and rural areas relies on strengthening initiatives that empower rural actors to engage in knowledge transfer and sharing practices.

Driving the future of social, economic and ecological frameworks for human and non-human life depends on changing the trajectories of dominant agrifood systems, shaping rural ecosystems that contribute to sustainable rural development and communities. There are some organisational, managerial and social implications of the study. Firstly, developing knowledge sharing practices helps to enhance the construction of collaborative spaces within agrifood and rural systems, and asks for identifying coherent frameworks for cooperative design. Secondly, promoting sustainable rural development and communities relies on training specific managerial capabilities and skills. Thirdly, developing knowledge sharing practices helps to drive social innovation and inclusion issues within rural communities building social ties and cohesion among the actors involved in value creation process. There are some limitations. The study aims at introducing a new proposal for driving economic and social growth of rural communities and agrifood systems. Sustainable rural communities drive social and economic development relying on knowledge management practices and issues. This study does not propose a systematic literature review. There are no case studies. The study is exploratory and investigates new perspectives for rethinking rural community development. Further research perspectives imply to investigate how farms in agriculture are developing hybrid pathways to designing structures and business models for healthy and sustainable value creation processes in rural areas and communities.

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