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Abstract

Smart Villages: the use of technology for a new concept of rurality

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The planetary health emergency linked to the covid-19 pandemic, which exploded in early 2020 in Italy as well as in the rest of Europe, has prompted governments to establish measures to contain the virus, resulting in restrictions on the movement of people, social distancing and temporary closure of all aggregative economic activities not considered essential, projecting the European communities and the entire planet towards a generalized lockdown lasting several months. Metropolises and large cities immediately appeared as ideal places to encourage the spread of contagion and the proliferation of outbreaks. The rapid spread of practices related to smartworking, has made it unnecessary to face the costs of staying in large urban agglomerations, both economic costs (rent, means of transport, cost of living in general) and human (distance from the affections, family, hometown). In such a context, the forced domestic confinement has led to a parallel rediscovery of rurality, seen as value, opportunity and better quality of life. From the city to the village. The rural village becomes the archetype of a new model of development whose imperative is to combine the quality of life to the opportunities of the metropolis, taking advantage of technological solutions that have become widespread during the lockdown (smartworking, distance education, etc. ...). At the center of this revolutionary concept of human and urban organization, there can only be the Smart Village.

Smart Villages can be described as communities located in rural areas that adopt innovative solutions in order to increase their resilience, taking full advantage of the strengths and opportunities that rural contexts offer. The strategic development trends undertaken by Smart Villages are based on participatory approaches whose ultimate goal is to design and implement strategies aimed at progressively improving the economic, social and environmental conditions of their communities, through the use of solutions offered by the evolution of digital technology. They can benefit from forms of cooperation and alliances with other communities and actors in rural and urban areas.

By digital technologies we mean information and communication technologies, the exploitation of big data and innovations related to the use of the Internet and IT tools, that is all those solutions that offer Smart Villages the possibility to equip themselves to become more agile by making the best use of the resources at their disposal and raising the levels of attractiveness of rural areas, as well as the quality of life of their residents. The use of broadband connection to facilitate the spread of technology is a fundamental element.

The strategies developed and implemented by Smart Villages must identify short, medium and long term objectives, while progress must be measurable on the basis of performance indicators clearly identified in the roadmaps, to be reviewed continuously and at regular intervals, in order to optimize their functions. The objectives of the strategies might include, for instance: to improve access to services in the areas of training, transport or health; to enhance business opportunities and create new jobs; to make food supply chains and agricultural practices more efficient; to promote the development and diffusion of renewable energy, the circular economy and to ensure a more efficient use of natural resources with a special focus on climate

change, care and conservation of the natural environment and biodiversity; to enhance the protection and enhancement of cultural heritage in order to increase the attractiveness of the area for tourism.

Smart Villages should, therefore, be interpreted as a concept for the development of a community located in a rural area, able to provide self-sufficient and independent services to its citizens. In short, it is not simply an approach aimed at preserving the natural environment of a rural urban area; it also defines a scenario in which the community is able to listen to itself and provide for its needs. Although the depopulation of rural areas in favour of urban areas is often seen as an element of modernity, it should be emphasized that rural areas are rich in natural resources and skills that can and should be supported and sustained through the direct use of technology.

The intervention and use of technology in local development processes in these areas can contribute to the creation of an increasingly diverse and functional set of livelihoods for local communities. The use of technology is as important as the creation of adequate infrastructure, the development of business areas and human capital, capacity and community building. Smart Villages, in order to increase the quality of life of their inhabitants, focus primarily on the development of so-called e-literacy, i.e. computer literacy, widespread and functional access to e-health and other basic services, innovative solutions for environmental issues, innovative solutions and circular economy in the management of agricultural and agro-food waste, promotion of agro-food production through the use of technology and ICT, implementation of smart specialization projects in the agri-food sector, development of initiatives for the promotion of tourism and cultural activities.

This contribution aims to describe the salient elements that make the Smart Village initiatives points of reference for the implementation of technological solutions that provide different application possibilities, from agriculture to public health, from infrastructure planning to lifestyle, proposing an analysis of the possibilities that this representation of human and urban organization is able to offer in the pandemic context in which the entire planet has been projected.

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