

# *The Smart Village Approach, a Solid Approach for the Development of the Albanian Agriculture* \_\_\_\_\_

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## **Abstract**

*This paper focuses on the issues facing Albania as a country aiming the membership to the European family. First, European policies for rural areas revitalization are presented and then, the challenges Albania has to overcome to become a EU member and second, to revitalize the rural areas. Small holding size is a major concern as it does not stimulate cooperation amongst farmers. Land legal issues is another problem that needs to be addressed. The revitalization of Albanian rural areas demands investments in ICT and a collaboration between the public and the private sectors.*

**Keywords:** *smart village, IT, economic growth, integrated approach.*

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## 1. Introduction

As Albania is paving the path to enter Europe, the number and the size of challenges to overcome are of noticeable relevance. One of the most daunting challenges is the revival of Agriculture, as it is one of the most important economic sectors of the country.

Albania does not have to have its original development path of the agricultural sector. Albania must closely follow the European efforts to solve the agricultural economic revival issue as a country is inspiring to be part of the European family.

In September 2016, more than 340 rural stakeholders gathered in Cork, Ireland, intending to develop a vision for the future of EU rural areas (European Commission, 2017). Under the heading “A Better Life in Rural Areas”, the Cork Declaration 2.0 sets out the expectations and aspirations of rural areas (Commission, 2016). The document calls for policymakers to pay particular attention to narrowing the digital divide between rural and urban areas to develop the potential offered by connectivity and digitization of the rural regions. After lengthy discussions, it was agreed to pay particular attention to the need for **integrated approaches** and the interaction between different policy fields in view of increasing complementarity and coherence (European Network for Rural Development, 2016).

Several serious studies have underlined that the most relevant point is providing to rural areas quality utility services like power, water, and sanitation (Aldo et al., 2006). In addition to those services, other essential services such as education, healthcare, transportation, infrastructure (roads, railways, buildings, equipment) must be the priority in the strategy development of every village (Joginder, 2017).

## 2. ICT and Economic Growth

The impact of Information and Communication Technologies (ICT) on economic growth and development has been the subject of analysis by many authors for quite some time ((Elena et al., 2018), (Qiang & Pitt, 2004), (Jalava & Pohjola, 2007). For many years, there has been considerable debate about whether the IT revolution was paying off in higher productivity,

Studies in the 1980s found no connection between IT investment and productivity in the U.S. economy. Most of the evidence in this area confirms that the positive effect of ICT on economic growth is not apparent before the mid-1990s. Nowadays, it would be difficult to consider prosperity and economic growth without the presence of serious investments in ICT.

Thus, policymakers need to consider that the economic revival of Agriculture is strongly related to ICT use. The European Commission sees the use of ICT as

one of the deciding factors for revitalizing Agriculture (3). From IOT (Internet of Things) concept to Smart Agriculture, the rational use of ICT is one of the most predominant factors for restoring rural areas.

The “ smart cities “ initiative is an example of a successful combination of IT investments and economic growth. This initiative showed that without solid support in IT investments, cannot be achieved economic growth. A smart city is a municipality that uses information and communication technologies to increase operational efficiency, share information with the public, and improve the quality of government services and citizen welfare. The United Nations definition of the Smart City initiative is “*A smart, sustainable city is **an innovative city that uses ICTs and other means to improve quality of life, the efficiency of urban operation and services, and competitiveness while ensuring that it meets the needs of present and future generations concerning economic, social, environmental as well as cultural aspects.***”

### 3. Agriculture in Albania

Albania has a total land area of 28,750 square kilometers, of which 24% is agricultural, 36% forest, and 15% pasture or other types of land. While agriculture no longer dominates the Albanian economy, it contributed around 21% to national GDP in 2019. In 2020, imports of agricultural products were slightly more than \$1 billion, almost the same as in the previous year. Exports have continued to rise, reaching about \$365 million in 2022, a 10% increase from 2019 (*Albania – Country Commercial Guide.*, 2021). As of today, Agriculture will remain a main economic activity for Albania.

In its path towards Europe, Albania has to address some issues that are mainly Albanian. One of these issues that need to be addressed sooner rather than later is the minimal size of holdings (average of 1.2 ha - compared to 14 ha in EU-28). The main economic structure is the family-based organization type (family members, one cow, two dogs, and a cat!!) Thus, it isn't easy to apply any substantial form of organization that would be the basis for serious development.

The reminiscence of paranoia of communist cooperatives makes people very uncomfortable trusting each other and cooperating. The typical situation is the distrust among villagers and lack of cooperation of any kind. This issue is a significant obstacle to sustainable development and growth.

In addition to its structural problems, Albania needs to address many severe social issues, such as a massive migration from rural areas towards cities. As a result of this migration, few people are available to work in fields. The most severe human resources-related issue remains the difficulty of finding technologically inclined people. The massive use of ICT in Agriculture will need many savvy people to address the technical problems in front of them.

## 4. Implementing The Smart Village Approach in Albania

There are discussions about the best way to implement the “smart village approach “. The best, quickest, and most efficient way is to build up from the bottom, as suggested by Mahatma Gandhi. According to this philosophy, every community has to address its own issues to become a self-sufficient unit. To address the philosophy issue does not require brave resolutions; it requires bold, corporate, intelligent work.

Collect community efforts and strength of people from various streams and integrate them with information technology to benefit the rural community. To our best knowledge, there is no Master Plan to address rural revitalization. Government should undertake concrete steps for solving land property problems. The land issue is and will remain a fundamental problem for the country’s development.

Another direction where government should focus its attention is education for increasing the trust amongst farmers to cooperate. There is an urgent need to create a smart village ecosystem. An ecosystem requires the coordination of work of several actors of different nature, national and local, and public and private efforts.

Such initiative requires a lot of studying to be undertaken well ahead of the time of implementation. Universities could play an essential role in this effort.

## 5. Conclusions

The smart village approach has been used by many countries in the world and is becoming the way to revitalize rural areas,

Countries with a huge rural population, such as China and India, have given this approach the right consideration and are using it as the only way to diminish the digital gap among cities and villages,

Serious educational efforts must be put in place. A large number of people must be trained and educated to use technology as an everyday tool. Nowadays, technology is a necessary part of economic growth.

These efforts must be directed by the government and universities.

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