This thought-provoking book Smart Development for Rural Areas questions the framework of the Horizon 2020 strategy and the policies of smart development. Various contributions are presented, with several case studies about different rural and peri-urban areas in Europe. The conclusions drawn from these studies are that smart development policies are well adapted to the developed or intermediate regions containing at the same time rural and urban areas, but do not really function for the more rural or more peripheral regions.

These results are very important because they question the validity of the H2020 policy, and the smart development and smart specialization policies, and their applicability to the whole European area, and not only to the most urban and rich areas. It will be valuable reading for students, researchers, and policymakers in regional development, rural studies, spatial planning, and economic geography.
Main questions

The purpose of the contributions of the book is to provide clear answers to two major questions:

a) Is there a possible smart development policy for European rural areas?

b) Which type of smart development solution (agriculture, business/industry, peri-urbanization, tourism/leisure ...) should be selected in view of regional specificities?

The book also aims to provide recommendations regarding new policies and stakeholders-relevant knowledge on conditions for and factors behind rural development, which can be useful for improving rural and peri-urban development policy at local/regional, national, and European levels.

Based on detailed analytical studies, empirical and econometric methods, as well as various European case studies, the book identifies issues of smart specialization and forms of development of rural and peri-urban areas, and their relationships with urban dynamics, given the diversity of local configurations. It also examines the contribution of public policy and governance patterns as a consistent and innovative means of intervention to support the smart development of rural areas. The chapters aim to identify the main conditions for a Smart Rural Europe and to shed light on the possible role of rural areas in the regional dynamics of Europe, in view of the orientations defined by the Horizon 2020 strategy, the smart development policies launched by EU and of the profound changes that are taking place in rural areas.

Conclusions

Smart development is not well suited for the more rural or more peripheral regions

The question of the validity of rural smart development or smart growth policies is relevant, because, unlike other European economic policies, those policies take explicitly into account the differences between the various European territories and are supposed to be tailored to the specificities of each type of region in Europe. However, these policies are based on principles — embeddedness, relatedness, connectedness, entrepreneurship, critical mass — which might be
very difficult to apply in rural regions. Indeed, the latter are often known to suffer from several limitations related, precisely, to the underdeveloped entrepreneurial network. The resulting absence of a critical mass effect seriously hinders possibilities of connectedness and prevents the emergence of mechanisms of embeddedness and related variety on a large scale. These insufficiencies condemn those areas to slow or even deficient development.

More precisely, the study conducted over several years on the various dimensions of development, in a wide range of territories in Europe, shows that the Smart development strategies are suited to well-developed or intermediate regions combining both urban and rural areas, provided they have a sufficiently large population base. But they only offer very limited possibilities for peripheral/remote regions, because of the lack of scale, which results in the following problems:

- low density (lack of – strong – relations)
- lack of diversification (technological relatedness only applies to a highly diversified industrial structure)
- lack of intermediate organizations and innovation brokers

However, it is necessary to consider the great diversity of rural areas, which produces a very different relationship to smart development principles and policies. For simplicity’s sake, let us state that:

- Rural areas close to cities are good candidates for smart development policies as defined by the EU: this group includes areas that are more or less integrated into cities, and intermediate regions combining urban and rural areas
- The more peripheral rural regions have characteristics that limit their potential to gain from smart development policies. Those characteristics include: a lack of embeddedness, relatedness, connectedness, entrepreneurship, critical mass
- However, some of them might have the potential to achieve smart specialization through exploiting local amenities and other resources (like tourism, natural resources, or service economy for elderly people)

Moreover, regarding smart development principles in rural or peri-urban areas, two additional dimensions (land uses and agriculture) must be considered.
The first dimension is related to land uses and their evolution, which plays a crucial role in the development capacities and development policies of the European rural regions, because they determine the implementation of new activities or the replacement of existing activities with new ones. For example, competing for land uses in a context of land scarcity can lead to the emergence of conflicts and obstacles to governance processes. On the other hand, excessive specialization of land uses can lead to a high degree of vulnerability in a situation of economic crisis or climate shock for example.

The second dimension is related to the possibility of implementing a process, given the key role played by farming activities in rural land use on the one hand, and in supplying food for European populations. The limitations of the conventional agricultural model require that alternative solutions and resilient production systems be developed. The prospects offered by new technologies and digital technology certainly open interesting possibilities for adaptation but cannot be the only answer to the challenges posed by the agro-ecological transition.

In short, rural and peripheral regions vary in their potential for smart development, because they differ in their access to and capacity to utilize resources and social infrastructures:

- access to different types of amenities (tourism, leisure)
- value creation and innovations based on local resources
- the ability to mobilize financial internal and external resources
- access to land suitable for economic development

**Recommendations**

The development policies of rural areas must be adapted to their characteristics, the structure of their economies (agriculture, small firms), as well as in their diversity (distant regions, intermediate regions, rural areas near the urban areas). It appears interesting to exploit natural and cultural amenities, develop the multifunctional character of the agriculture, promote territorial innovation under all its forms, favour the synergies between the various uses of land and space, and develop the knowledge of the ecological, socio-economic processes, as well as on the mechanisms of territorial governance.

Based on the considerations and empirical evidence produced in the project, five
key factors must be considered to build an efficient smart development strategy.

**a) Support variety and diversity**

Rural areas not only change their image but also their economic base – they are more than agricultural areas. Their development does not just rest on single (traditional) key target sectors. The case studies show that rural areas are quite diverse and heterogeneous. Yet it is not diversity per se that creates growth, but diversity in related business sectors with a common knowledge base. Related variety plays an even bigger role in innovation and growth in rural areas than in larger urban centers, where the diffusion of knowledge is facilitated by the presence of many related sectors.

Diversity in related business sectors can take several forms. It is linked to the identification of the core sector of a region, which paves the way for a process of smart specialization in the region. As a first step, regional stakeholders (politicians, development agencies, business owners, unions, and interested public) should strive to identify and understand the competitive advantage of their region.

**b) “Borrow size”**

The standard smart approach normally focuses on the expansion of knowledge within a region. Yet rural and peri-urban areas often lack the regional R&D centers or educational facilities needed to intensify research and development, through which they can technically enhance their products or services.

Local entrepreneurs in rural areas can be encouraged to “borrow size” – and with it, knowledge — in several ways, among which the most standard is direct subsidies or tax incentives for R&D. But at a more regional level, another means through which businesses can “borrow size” is temporary geographical proximity. The latter can be achieved through short visits and through the organization of or participation in congresses or conferences on topics related to the core activities of the region concerned, and relevant to regional businesses. Besides presenting the latest research results, such events can serve as starting points for cooperation and network building.

**c) Implement education measures**
In addition to encouraging regional entrepreneurs to cooperate with external R&D centers, education measures must also be implemented in regions. Once the competitive advantages of a rural region have been identified, the adoption of measures to support education could help regional firms to secure their position in the global economy, by giving them easier access to a well-trained and educated workforce. These complimentary educational instruments can also contribute to related variety. It is a specialized form of support for knowledge creation and exchange between firms forming the core of a region’s strength.

**d) Making use of amenities**

Amenities – as place-specific assets and services that make a given location attractive to individuals and firms – deserve attention in the context of policies intended to promote smart development in rural areas. They can range from natural amenities (land and water resources, mountains, and lakes) to build amenities (thanks to which natural resources can be utilized for summer and winter-based recreational activities) to social and cultural amenities (special sites and buildings, local culture and tradition including food, crafts, festivals, and lifestyles).

**e) Improving the multidimensionality of infrastructures**

The main characteristics of rural areas are the geographical distance separating individuals and villages from one another, on the one hand, and their lower density on the other. The common solutions for compensating for this distance – besides the ones already mentioned concerning smart development – are better transport facilities and improved ICT infrastructures, such as high-speed internet. It reduces the importance of distance – supply and demand are no longer spatially linked to each other. It has also enhanced the possibility to work from home.

Consequently, long-term strategies for smart development in rural areas must aim at helping the latter to reinforce their core by promoting the development of various economic and social activities and cultural services. Instead of encouraging uncontrolled development, what must be promoted is rural growth through the reinforcement of the core activities and assets of those areas. Thus, a challenge for spatial planning resides in developing rules and incentives to promote a concentration of economic and social activities and facilities in these rural centers, which are vital for rural development.
About the Editors

André Torre, Professor at the National Institute for Agronomic Research, and the University of Paris-Saclay, France.

Stefano Corsi is a researcher in the Department of Economics at the University of Milan, Italy.

Michael Steiner is a Professor in the Department of Economics at the University of Graz, Austria.

Frédéric Wallet is a researcher at the National Institute for Agronomic Research and the University of Paris-Saclay, France.

Hans Westlund is a Professor at KTH Royal Institute of Technology, Stockholm, Sweden, and the Jönköping International Business School, Jönköping, Sweden.