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OREN

MULTI-STAKEHOLDER PLATFORM FOR RURAL ENTREPRENEURS

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PR1 Survey of the most promising rural business models and stakeholders' map



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Author(s)	<i>Matilde Paganini, Linda Schmittmann</i>
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1. Introduction

1.1 Rationale of the OREN Project

The role of rurality in the prosperity of the European Union (EU) is widely acknowledged. Meanwhile, rural areas tend to lose their positions and opportunities in an increasingly urbanizing world. Despite the diversity of rural areas in terms of their socio-economic performances, natural characteristics, and cultural heritage, the majority of them demonstrates intrinsic fragility in social, economic and environmental aspects, and, consequently, different rural areas face common challenges, experience depreciation of their values and underutilization of the opportunities they are able to provide. In the 2016 High Level OECD Seminar “Delivering productivity and competitiveness for rural areas” four “areas of opportunity” emerged: forestry, local foods, tourism, and renewable energy. Forestry is considered to be an integral part of rural development. Beyond providing wood products, healthy, sustainably managed forests are valuable tools for mitigating and combating climate change. They are also locations for important recreational activities, such as appreciation of nature, hiking and mountain biking, and, together with other rural sectors, can produce a variety of local foods. In many EU countries, the local food system is used as part of a regional tourism strategy where specific foods are the focus for visitors who follow a “trail” that leads them from producer to producer. These local foods provide an opportunity to market a region’s food products to a global audience, as well as connecting local farmers to the communities in which they reside. To some, renewable energy is rural energy, because virtually all renewable energy technologies are space- intensive and thus rely upon a rural location. Wind, biodiesel, and photovoltaic technologies now represent the fastest growing energy industries, whereby windfarms require clear sites, biofuels rely on agricultural feed stocks, and solar generation, though somewhat more flexible, is increasingly implemented on open rural land. On the other hand, over the last few years experts on rural development policy have consistently identified out-migration and ageing as key trends affecting investment decisions in rural areas, along with “changes in the rural economic structure” and the “decentralization” process. Thus, rural areas share also common structural vulnerabilities: distance, lack of critical mass and low population density. Furthermore, the recession, the COVID pandemic in combination with the consequences from the ongoing climate change have put an extra burden to rural entrepreneurs, who are facing increasing complexity and deep uncertainty in their business, exacerbating existing vulnerabilities. Maximizing the opportunities depends on a constellation of factors coming together. If one or two of the elements cannot be achieved, there could be continued stagnation or decline instead of transformation. In other words, no matter how much progress is made towards tapping rural opportunities, if rural vulnerabilities are not addressed, they could render any form of progress shallow. These discussions underscore the importance of exploiting future opportunities in a manner that



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addresses rural vulnerabilities and current state of the art calls for new strategies and models of rural development to be found and applied so to turn lagging rural areas into resilient rural communities.

The main objective of the OREN project is to involve agricultural entrepreneurs in an interactive learning programme, specifically designed and addressed to the rural development issues in the COVID era. The partnership will develop an interactive, multi-stakeholder platform that will contain sustainable rural business models, simulation models and mathematical tools, accompanied by managerial courses targeted to agricultural entrepreneurs. The purpose is to train the participants in advanced managerial and business skills. By acquiring such skills, the entrepreneurs will be able to analyze the root causes of successful business scenarios to improve their expertise and skills in understanding and modelling potential good practices.

1.2 Purpose of the Study

The aim of this study is to develop a sound and updated insight of agricultural business models across Europe and their driving and limiting factors among the project partners and stakeholders. Through a deep analysis, based on both theoretical and practical approaches and concepts from several academic and operative actors, the work performed under this first project result intends to deliver explorative and comparative findings by systematizing this knowledge, identifying the skill gaps and rural entrepreneurs' needs in terms of courses and trainings. The skill gaps concern mostly the IT skills (especially for tourism) and needs focus around having access to a potential knowledge database, where aggregated would be best practices and insights from other rural areas – both national and international, and also some more common needs like access to slow capital. The study will also harmonize main findings within a systematic framework that will guide the research, analysis and piloting that is planned for the other project activities.

We will try to enrich our conclusions by: examining different case studies, analyzing relevant support and training programs for rural entrepreneurs, and by retrieving feedbacks to surveys aimed at specific target groups, so to ultimately construct a balanced, comprehensive and up-to-date overview.

In particular, the purpose of this document is to highlight the findings and results of research that has been conducted in Germany.



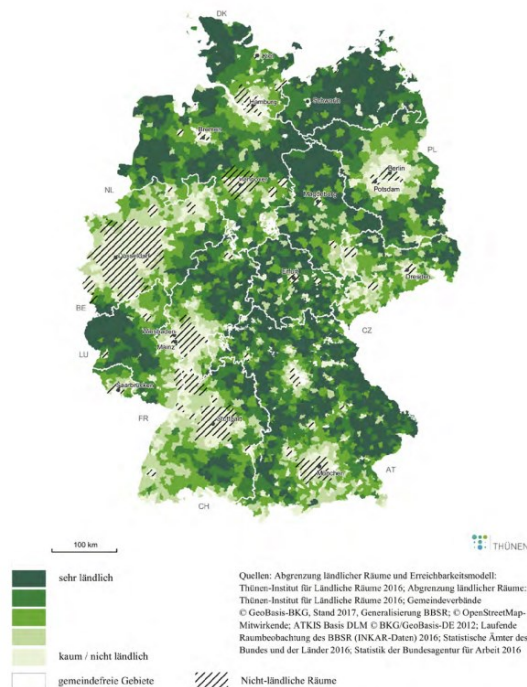
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2. Desk Research in Germany

According to the German agro-social society ASG (*Agrarsoziale Gesellschaft e.V.*), more than half of the national economic output is generated in Germany's rural areas (Schenk & Benke 2018). Thus, rural areas are home to a significant proportion of small and medium-sized enterprises. These mostly small and medium-sized enterprises are not only a central part of the regional economy, but they also play a major role in securing social structures in the villages and small towns. In order to monitor this situation, Thünen Institute for Rural Areas has created a Land Atlas, displaying data about the typology of rural business models and distribution in different types of areas. Results show that 57% of the population in Germany live in rural areas, which account for 91% of Germany's land area. Rural is in this case an adjective indicating low population density per km², high proportion of land and forestry, as well as taking into consideration the number of people living within a certain radius and the proximity or distance to the nearest major centers. Hence, the topic of inclusion and development of enterprises located in rural areas is definitely important for a country like Germany (Land Atlas).

Ländlichkeit auf Gemeindeverbandsebene 2017

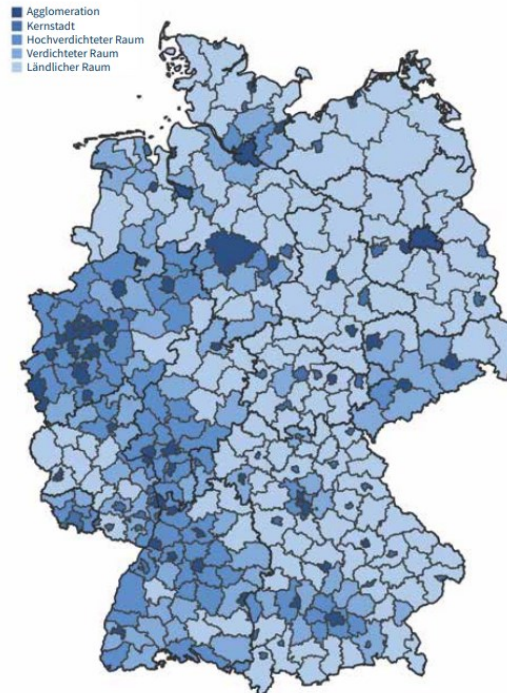


(Land Atlas. *Abbildung 1: Ländlichkeit auf Ebene der Gemeindeverbände.* This picture shows rurality at the level of municipalities in Germany. The greener the areas, the most rural they are. White areas represent urban areas.)



Klassifikation der Stadt- und Landkreise in Deutschland
Räumliche Gliederung¹⁾ im Jahr 2019

Abbildung 1



¹⁾ Die räumliche Differenzierung basiert auf IW-Kriterien und nimmt eine räumliche Einordnung der Regionen nach Einwohnerdichte vor.
Quelle: IW Consult

(Hünemeyer, V. & Kempermann, H. *Abbildung 1: Klassifikation der Stadt- und Landkreise in Deutschland*, p. 67. This image shows the Classification of urban and rural districts in Germany. Cities are displayed as dark blue whereas light blue shows rural areas.)

A paper from 2021 analyzed successful businesses in rural areas in Germany. The research (Rietmann 2021) calls such companies *Hidden Champions*, because of their good performance on the market despite the fact that they are located in rural areas. Findings show that hidden champions often have some form of connection with regional research and educational institutions because they are active in product niches and are highly innovative, implying the need for specialized knowledge. Some important factors for differentiating among hidden champions were the ownership of the company and their size. The larger the company, the least probable it is that the company is family-run and the most probable it is that they prioritize supra-regional linkages on national or state levels over local ones. Contrarily, it is smaller companies that search for partners locally in particular and that exploit their existing social capital and built-up trust among their community. This study confirms that in order to succeed in rural areas, businesses need funds from external sources or / and interconnection with other communities. (Rietmann 2021)



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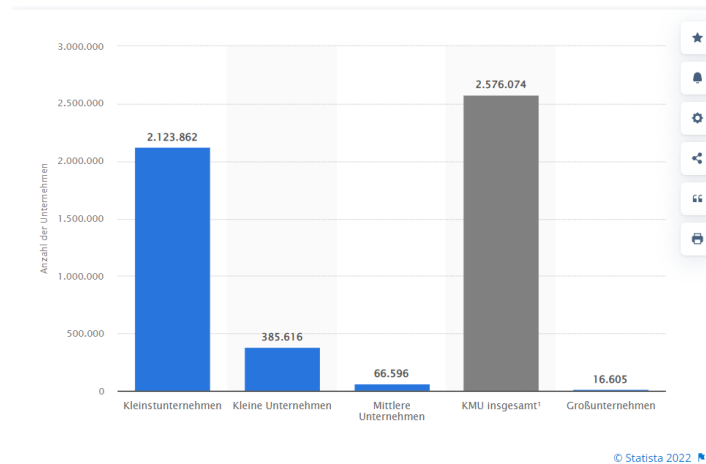


According to the Federal Ministry of Food and Agriculture, BMEL, “one of Germany's traditional strengths is its decentralized settlement and economic structure”. The German government has measures which focus on improving the chances given to people living and working in structurally weak regions. It is trying to ensure “secure viable infrastructures, future-oriented companies and needs-based supply services in attractive town centers, even in rural villages and towns, through good networking”, which can be achieved with the cooperation between federal, state and local governments as well as businesses and volunteers.

In fact, decentralized effort is crucial for the development of rural business and areas. Municipalities play a huge role in managing local communities and services as they can control and monitor the situation directly. However, a main issue for municipalities might be the need for human and financial resources, since more and more people are migrating to bigger cities and municipalities might not have enough funds to reserve to rural companies. According to BMEL, “voluntary commitment of people in the localities and regions should be strengthened through workable legal frameworks and better information, networking and support structures” as well as digitalization opportunities, which also play a big role in the development of companies, administrations and citizens in rural regions.

Therefore, the German government aims at contributing to a competitive rural areas development, guaranteeing good jobs, accessibility to services and customized infrastructures and mobility solutions specifically for rural areas. (BMEL, 2020)

Moreover, BMEL states that small and medium-sized enterprises (large family-owned businesses, craft enterprises, self-employed...) are the most significant driver of innovation but the least able to have access to resources (financial and human) or infrastructures. In fact, research show that SMEs account to the 99.4% of all companies in Germany (Rudnicka, 2022).



(Rudnicka, 2019. This image shows the amount of companies divided per size in Germany. The grey columns show the amount of SMEs –KMU- in comparison to big companies. The blue columns show the division of SMEs in small companies – the tallest-, micro companies –the medium- and medium-sized companies –the shorter column)

In 2019, the Federal Ministry for Economic Affairs and Climate Action launched the nationwide network called "*Mittelstand-Digital*" for the technology transfer to SMEs. *Mittelstand* is the German word that indicates small and medium size companies. The free of charge service offers guidance throughout the process of digital transformation and it informs SMEs about the opportunities and challenges of digitization, providing financial support for digitization projects. "*Mittelstand 4.0-Kompetenzzentrum Handel*" is a network of 26 *Mittelstand 4.0* competence centers with more than 100 contact points is now available for all questions related to digitization.

Germany also has an investment grant program called Digital Now, which offers financial support for investments in digital technology and digital skills among the workforce in companies. In the case of investment in value chains or networks, the fund rises to up to the double amount. The funding rate is established according to company size. This program was launched in 2020 by the German government with the aim of driving forward the networking of established companies, founders and research institutions.

Associating agriculture and farming with digitalization is not a contrast. One important keyword regarding business models in agriculture is Smart Farming as digital technologies in fields such as health control, feeding, milking and manure handling have changed agriculture considerably (BMEL, 2022). However, technology cannot solve the problem of personnel, especially in the sector of agriculture. In Germany, there is a lack of specialized workers and workforce in general. In particular, the problem of the "inheritance" of farms is widely spread in the country: 40.200 farms have taken part to a survey and just



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around 37 % of enterprises had the farm succession secured (DVS, 2021, p. 14). Another issue goes hand in hand with the lack of heirs of farms: the belief that it is the son who is going to inherit and run the farm, is still common and spread in Germany. Daughters, who do not have the option of a family farm succession, mainly have two options for taking over the management of a farm: marrying into a farm or starting a business after taking degrees in agriculture at university.

The interviews show: Many of the farms co-managed by women have innovative farming and marketing concepts. (DVS, 2021, p. 27). The topic of new entrants in the agriculture industry is central in Europe: The project NWEBIE „New Entrant netWork: Business models for Innovation, entrepreneurship and resilience in European agriculture”, for example, fosters the networking of young newcomers in the agricultural sector by providing, developing and disseminating new business models, including new entry models to the market. There are further programs by the EU, which aim at promoting businesses in rural areas, there are several programs such as LEADER or ELR aiming at helping rural communities across the European Union to actively engage and to direct the local development of their area.

Based on these considerations, ITKAM has conducted a survey interviewing 8 rural companies in Germany and asking them their opinion about the state of the art business models, limitations and solutions for rural entrepreneurs.

3. Case Study analysis

This section will briefly examine three business models developed in rural areas and identifies the main factors that led to their success in cooperation with other stakeholders as an association of many local enterprises.

The first association is **Bioland e. V.** (www.bioland.de). More than 8.700 organic farms, beekeepers and winegrowers in Germany and South Tyrol are members of the association and are expected to follow Bioland guidelines. However, each member has decision-making power, in the sense that they can contribute democratically to the decisions in the association. Bioland was founded with the purpose of supporting the independence of the agricultural sector, avoiding chemical and industrial products and aiming at sustainability. According to Bioland, this can be achieved by means of the implementation of a closed production cycle in agriculture. Bioland promotes biodiversity, the responsible use of natural



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resources and local food production, so that farming families and their employees can achieve independence, create more jobs in rural regions and have better development opportunities.

In 2015, Bioland became the first agricultural association to produce a common good balance sheet. This evaluation is based on the Economy for the Common Good (ECG), a modern economic model that evaluates and supports ecologically and socially sustainable entrepreneurship. The non-financial balance sheet shows what contribution companies make to the common good, i.e. to society, employees and the environment. Bioland achieved good results in the areas of products and services, financing, and customer relations.

Marktgesellschaft der Naturland Bauern (marktgesellschaft.de) is Germany's largest organic producers' association and trade the products of over 2.000 organic farmers from all federal states of Germany. The association operates as market partner to farmers and claims to be “committed to local producers”, by fostering the development of the organic market for their farmers. Grain, legumes, animal products and seeds producers market their goods through the association, which also provides them with support in marketing, quality assurance, storage and logistics. In this way, even small producers have the possibility to be granted a base salary for their goods and to benefit from the value chain, which is created through the sale process of their products on the market by the association.

The third firm which can be considered as a successful business model is **Innovative Landwirtschaft Reber** (innovativelandwirtschaft.de), a family-run farm. In order to face some economic issues, in 2009 Mr. Reber decided to completely renew his farm and started to operate carbon farming, implementing a biogas plant, and turned his farm into one of the first examples of regenerative agriculture in Germany. Regenerative agriculture and carbon farming are a new approach to agriculture, which avoid mineral fertilization and chemical use, and aim at improving the soil. This model was first developed in the USA and Australia in the 1970s and started slowly to spread in Europe. This innovative approach can also allow for the building up of humus, which is able to store big amounts of CO₂, thus making it possible for farmers to sell CO₂ certificates to companies. In Germany, regenerative approaches are only at their beginning and can mostly be found in small areas and Reber was a pioneer in sharing his knowledge and skills through seminars and workshops. However, a wide application of this innovative agriculture method can only be possible by means of economic incentives and government's funds, which should tackle the



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financial risk of farmers during the conversion period. According to Benedikt Bösel, an organic farm owner, also technology and digitalization can be helpful, by devising machines that are able to work on larger areas.

The listed examples signal the need for agriculture firms operating at local level, to collaborate with one another, and to come together in bigger associations in order to create more value for customers.

4. Analysis of existing relevant programs

In Germany, half of the population lives in rural areas. For this reason, with the aim of improving living and working conditions in these areas, the German Federal Ministry of Food and Agriculture (**BMEL-Bundesministeriums für Ernährung und Landwirtschaft**) has implemented the Federal Program for rural development, BULE (i.e. *Bundesprogramm Ländliche Entwicklung*). The program aims at strengthening rural areas and contributing to creating equal living conditions to urban areas. The program wants to find new ideas to implement in rural areas thanks to the valuable contribution of local players. This should ideally lead to effective projects for rural realities, which becomes now an experimental field for the living, learning and working of the future. The program is a sort of ideas collector for rural development, involving competitions, promotion of model regions, knowledge transfer and the fostering of research. Results and achievement can be replicated at national level or by other regions because the program provides the necessary knowledge about their implementation.

BMEL also supports model regions when certain ideas are to be tested in different areas - for example that of digital applications. More than 2.000 projects have been supported and implemented nationwide up to date within the program.

The digital sector is also the main topic in several development programs, signaling the need for rural villages to adapt to new technologies. The Fraunhofer Institute for Experimental Software Engineering (IESE) coordinated **Digital Villages**, *Digitale Dörfer*, a program aiming at the digitalization of rural services in some German villages by means of common digital platforms for the supply of local goods, for communication and mobility. The project, initiated by the Ministry of Internal Affairs and Sports Rhineland-Palatinate and funded by the EU, lasted from 2015 to 2021, and led to the devising of smart services intended to improve the provision of public services in rural areas, thus enabling a better coordination of community-based activities and benefiting stakeholders local residents. The development



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of the app *Bestellbar* for example enhanced local commerce: it is a local online marketplace where local vendors, such as local farms and vegetable farmers, but also stores, pharmacies, can sell their product online. Together with *Bestellbar*, also *Lieferbar* was released, allowing people to voluntarily deliver the purchased products to destination.

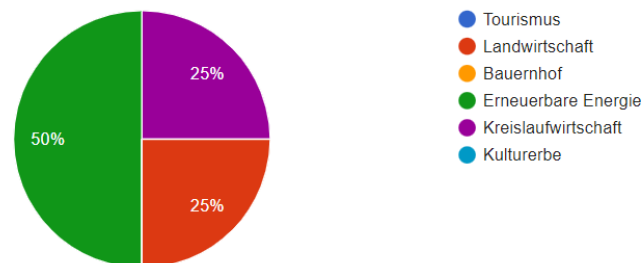
Another interesting project that has been conducted in Germany from 2019 to 2021 is Self-made Women - business start-ups by women in rural areas, *Selbst ist die Frau - Existenzgründung von Frauen im ländlichen Raum*. The project was funded by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (*Bundesministerium für Familie, Senioren, Frauen und Jugend* - BMFSFJ) and operated by the German Association of Rural Women (*Deutscher Landfrauenverband*- DLV). The aim of the program was fostering female entrepreneurship in rural areas and raising the awareness of women about starting a business. As the study conducted by the DLV shows, women in rural areas are often well educated, but they cannot find an appropriate job close to where they live that matches their qualifications. Moreover, results have shown a lack of female role models in rural areas who have founded their own business. This inevitably leads many women to leave their village and to seek jobs in urban areas, whereas the project's goal was to incentivize the female presence in rural areas. Rural women with start-up experience were trained as start-up coaches and they held workshops on self-employment for other women interested in starting their own business.

In conclusion, all the existing programs aiming at improving the business development of rural areas see the collaboration with local players as fundamental for the success of the projects. People living in rural villages should be involved and directly take part in the implementation of new programs. The digitalization of these areas is a crucial aspect for the enhancement of their business opportunities. At the same time, it is also evident that the female participation in the business activities should be fostered, creating the premises for young and educated women to develop their business in rural areas.

5. Analysis of Questionnaires Results

ITKAM has conducted a survey among its network of rural enterprises. The results of the survey show the answers of 8 people in total. Information on the degree of education of the participants was requested and resulted in 2 participants 4 with master's, 2 with bachelor's, 1 with PhD, 1 with high school diploma.

Just one of the respondents was active as rural entrepreneur for less than one year; half of them have been active for over 10 years and 3 of them for 5 to 10 years. 5 of which are active in the sector of agriculture, 1 in the tourism sector, 2 in the field of renewable energy. It has been asked to the respondents, what are the most important emerging and promising sectors of rural entrepreneurship. As the graphic shows, the 50% of respondents said that the most promising sector for rural economy is renewable energy whereas for the rest of the answers it is equally circular economy and agriculture. No one among the respondents seems to consider either livestock farming, tourism, or cultural heritage as promising industries for the future.

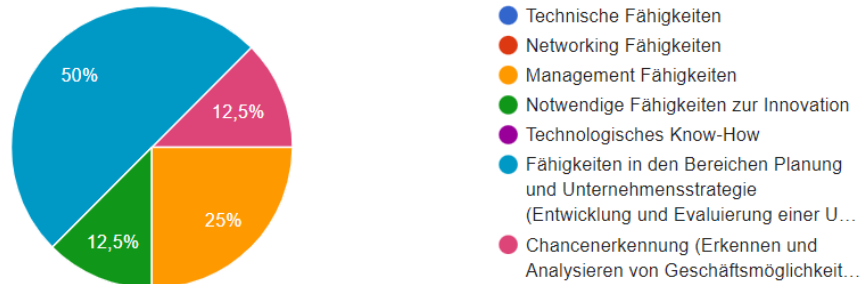


According to 50% of the interviewees, the challenges and barriers of potential entrepreneurs when it comes to entrepreneurial skills are their socio-economic background, the lack of knowledge and human capital expertise as well as the little cooperation between small companies. Cooperation and connection with a diverse network of stakeholders was in fact highlighted by 37,5% of the respondents as the key factor for success. However, the same percentage of interviewees also considers having appropriate entrepreneurial skills as main driver to success. The access to innovation and financial resources have been the answers of 12,5% of the respondents respectively, whereas factors such as the knowledge of legislation seems to have no influence on success.

The survey also investigated which skills are crucial for potential rural entrepreneurs and which training courses might be useful for acquiring them. According to 50% of respondents, the ability of planning, developing and evaluating a business strategy are the most important skills that rural entrepreneurs should have, followed by managerial skills (25% of answers). The reasons for these answers are that only with knowledge about data and financial figures, enterprises can develop strategies and only with leadership skills they can build up a network and be able to manage employees. According to respondents, rural entrepreneurs do have a high technical know-how but they also have to be capable to adapt and



innovate according to business areas, markets, and natural conditions because these are subject to permanent change.



In fact, interviewees express a need for education in subjects such as accounting and finance, strategic planning, tax knowledge as well as of human resources and general management skills. Mainly, answers regarding how to deal with employees, financial and strategic skills were collected among companies operating in agriculture, probably because nowadays companies are no more family-run (internally) but also need to hire external workers.

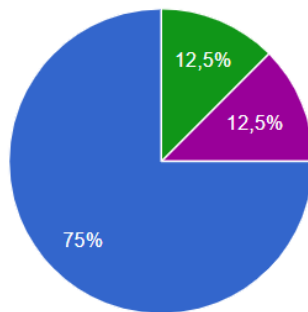
Openness and creation of innovation, technical skills and know-how as well as opportunity recognition (in the sense of networking and cooperation capabilities) seem to be among 50% of respondents the drivers for successful business models.

The survey also tackled the topic of factors that contribute most to a successful community-based rural enterprise. Results show that having a good network made of reliable people or neighbors is a driving factor for success. One of the participants states that cooperation is a driving force especially when the terms of cooperation are defined and agreed on in a contract or any kind of official agreement in which he responsibilities are precisely defined. In the responses of agricultural companies, once again, it is clear how much human resources, opportunity recognition, also in the sense of creativity and adaptability to the market, and awareness about how to handle resources play an important role.

However, apart from education and skills, what is really limiting the development of successful business models is the economic situation, according to 75% of respondents. Opportunities are not the same for everyone, as finances are the limiting factor: to start a business or to become more efficient, companies need substantial investments and are dependent on attractive subsidies, which also will help them to find and retain sufficient and motivated work force as well as survive on the market.



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- Politischer Hintergrund
- all the 3 options
- sozialer Hintergrund ebenfalls wichtig, Schaffung von Arbeitsplätzen im ländl. Bereich

Access to financial programs, political help, flexible legislation, offering consulting service as well as having a competent and skilled management with trained employees are ways to overcome such limitations, according to respondents.

These data were collected by ITKAM by means of a survey that was distributed among companies and professionals operating in different areas in Germany as well as different sectors.

Answers might be biased because the sample is too small, 8 respondents, and the fields of activity of interviewee are mainly the sector of agriculture and renewable energy. Only one respondent operates in the field of tourism.

6. Concluding Remarks & Recommendations

The results of the survey conducted by ITKAM go hand in hand with the findings about studies and literature presented in the desk research. Education, network with external environment and hubs as well as digitalization and access to resources are considered to be the drivers for rural development.

The food industry, bio economy, green economy and circular economy are particularly important industries in rural areas: it is essential to keep the specific requirements of such companies in mind, meaning that the mere replication of successful models from urban areas most probably will not be effective in rural areas. Hence, over the past few years, intelligent approaches to business development have been developed to enable companies to better adapt to new developments and changes in the market. Innovation can be pursued through a good network with the surrounding economic environment that is made possible in rural areas through co-working places and research centers such as university. In Germany, fund programs exist to face the challenges of rurality with the aim of innovating existing business models. The collaboration with local players is essential for the success of the projects: people living in rural villages should be involved and directly take part in the implementation of new programs.



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Moreover, the digitalization of these areas is a crucial aspect for the enhancement of their business opportunities. At the same time, it is also evident that the female participation in the business activities should be fostered, creating the premises for young and educated women to develop their business in rural areas.

As final observation, the case studies analyzed so far show that the association of many people active in agriculture operating at local levels can be considered as a successful business model, which allows enterprises in rural areas to thrive. Furthermore, for those farms that keep operating outside of an association, their adaptation to innovative approaches to agriculture, such as regenerative agriculture, becomes a crucial factor for them to succeed. In the latter case, the transfer of technical skills and knowledge, together with economic incentives are needed for conversion projects to be effective.

An analysis of the Bioland's model shows that one of the main driving factors in the success of this business model is the cooperation and the lively professional exchange among farmers. Other important factors are a strong internal organization, and the active participation of each member in the decisional processes. Another major factor that plays a role in the achievements of the association is its connection to the political world and its collaboration with experts and scientists, whose studies and observations are at the basis of Bioland's goals and decisions.

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Annexes

Annex 1: Excel file with responses extracted from online questionnaire