Prospects of German Agriculture

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Abstract

This paper examines the recent developments in Germanys agriculture regarding the products and the labor force in this sector. Technological advancements played a key role in shaping the present of German agriculture and led to a higher productivity and less labor input. Today the farm sector is facing many challenges, including climate change, aftereffects of the COVIS pandemic and the small labor supply. German agriculture must not only overcome current challenges but also emerge as a resilient contributor to the nation's and international economic.

Introduction

Germany, the center of Europe, is known for its diverse physical features, which allows the country to have a various agriculture. Due to its warm summers and cold winters, and moderate rainfall all year, the farm sector can produce crops, fruits, and vegetables as well as wine and beer. Germany's largest hop-growing region, the Hallertau, accounts for around a third of global production, which makes Germany is the fourth largest beer producer in the world.¹

But recently farms in Germany have been facing challenges, that farmers all over the world are experiencing right now, triggered by the climate change. To find solutions to keep the farm sector competitive, the farm operators must adapt to the new realities and react properly, as for example increase the employment rate of women, and develop modern technologies for planting and harvesting under difficult conditions.

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¹ Federal Information Center for Agriculture

Literature Review

While one farmer supplied around four people with food in 1900, it was already ten people in 1950 and in 2019 one single farm could provide food supply for 137 people. The trend is still rising. However, the share of total economic value added in this sector fell from 36 percent in 1880 to less than one percent in 2010. At the same period, the proportion of work force in this sector fell from just under half of all employees to two percent. The reason was the transformation from an agrarian society to an industrial society at the end of the 19th century. Today agriculture is practiced on around 16.6 million hectares, which almost half of the total land area in Germany.²
70% of this is arable land and used to grow the most grown crop – wheat – or barley and rye. The rest is used for fruit, wine, and other permanent crops. At the same time livestock numbers in Germany have been declining for years. For example, the number of pigs fell by around 5 percent between 2010 and 2020. Germany's slaughter figures show that the amount of poultry meat

Germany is the largest milk producer in the EU. Nearly all the milk is processed into drinking milk, butter, yogurt, cheese, and other dairy products in domestic dairies.⁴

Most farms are family businesses (see Image 1) with a proportion of 47% family workers and 29% seasonal workers. The majority come from Romania and Poland. However, in the last decades there was declining number of foreign workers because of their own economic development and the labor market competition with other sectors. The share of employees that work full-time is

produced increased significantly between 2010 and 2020.³

² Federal Information Center for Agriculture

³ Federal Ministry of Energy and Agriculture

⁴ Federal Information Center for Agriculture

higher in the eastern federal states, due to the former structures of the agricultural production cooperatives.⁵

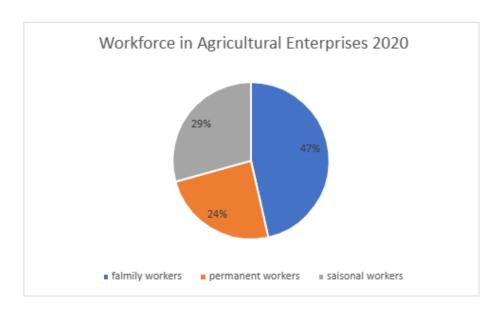


Image 1: own illustration, data from the Federal Statistical Office

The sector has been facing a declining number of farm workers over the past decades. In 2022 employees on farms are 1.25% of all labor force. Overall, the average age is 53, there is just few young people that decide a career in the agricultural sector, and they are most likely men. Around 937,000 people work in agriculture in Germany, but only around 335,000 or 36% of them are women. That means the proportion of women in agriculture is well below the average for all professions - which is around 47% in Germany.⁶

There are many challenges, like the aftereffects of the COVID pandemic (less labor supply, falling prices on agricultural products), and especially climate change. An earlier start of vegetation for many plants: apple trees and rapeseed are now flowering 20 days earlier than 50 years ago. An

⁵ Federal Agency for Civic Education

⁶ Federal Employment Agency Germany

extended vegetation phase can enable vegetable farms in Germany to harvest several times a year. Nevertheless, earlier flowering makes fruit trees more susceptible to late frosts and milder winters lead to a greater spread of plant-damaging fungi, viruses, and insects. The increasing number of hot days means significantly more stress for crops, due to extreme weather phenomena, especially drought and heavy rainfall.⁷

Summary and Conclusion

To conclude, the prospects of German agriculture are deeply intertwined with the sector's ability to navigate a complex web of challenges and opportunities. Past developments allow the industry higher productivity with less labor input. Since the labor supply in this sector is declining, this is an upside to the agricultural industries. Yet, the farms face other challenges, as the aftereffects of the COVID pandemic, the further decline in foreign labor supply, and especially climate change.

The react to those challenges, farmers must adapt new labor-saving technologies, and promote the work in agriculture better, so more women and younger people choose a career there.

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⁷ Trade magazine: "agrarheute"

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