

POLICY BRIEF

November 2018

The future of sugar beet cultivation in Belgium – Sustainability challenges

Katharina Biely, Sarah Creemers, Steven Van Passel

Belgium is the fifth largest sugar beet producer in the EU with a total harvested sugar beet area of about 60,000 hectares in the 2014/2015-crop season. This represents about 4.5% of the total agricultural area in Belgium. In Belgium, the total sugar production from sugar beet is about 646,000 tons. There are about 7,500 sugar beet farmers in Belgium, whereat the number of sugar beet farmers has been declining steadily over the last decade with a sharp decline occurring between 2007 and 2008. The number of sugar beet refineries decreased as well from 174 in 1872 to currently 3. These remaining refineries belong to two companies *Iscal Sugar* and *La Raffinerie Tirlemontoise / De Tiense Suikerraffinaderij*. Despite the concentration on refinery level, Belgian farmers did not have to struggle with market power issues until 2017. This was due to a quota regulation that guaranteed farmers above average prices and determined the amount of sugar beet sown each season. Innovation has been an important aspect for sugar beet production to increase sugar output per hectare. The sugar content rose from initially 12% to 20%. Without innovations profitable production of sugar from sugar beet would not have been possible. Apart from improved seeds, pesticide usage is a critical issue. The abolition of the usage of certain plant protection agents awakens the fear that current yields cannot be met in the future. The future of Belgian sugar beet farmers is threatened by economic as well as social and environmental challenges. All three need to be addressed in tandem to support the Belgian sugar beet farmers. Further, buffer mechanisms need to be fostered in order to allow Belgian sugar beet farmers to deal with external shocks.

In this policy brief the main findings from the sugar beet case study in Belgium that are related to sustainability issues are outlined.

This summary represents the extract of the commodity report on sugar beet production in Belgium. The purpose of the report, which can be accessed via the project webpage, is to investigate the nature of policy requirements and market imperfections, and their implications for the resilience of sugar beet cultivation in Belgium, as part of the EU-funded Horizon 2020 project, SUFISA (Sustainable finance for sustainable agriculture and fisheries).

Key messages

- Intensification is one main strategy of sugar beet farmers to maintain their income. The abolition of commonly used plant protection agents needs to be



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accompanied by higher farm gate prices to counterbalance reduced productivity. More sustainable cultivation practices may lead to a reduced yield. Sustainability comprises of at least three pillars, of which economics is one. Following a strong sustainability approach, environmental sustainability must not be traded off with economic or social sustainability. Thus, farmers economic and social situation may not be threatened by the implementation of environmental sustainability measures.

- According to our findings, innovation and intensification seem to be the most favored strategies for farmers to maintain their income. However, sustainability aspects need to be taken into consideration. Intensification may not be the most sustainable solution. In order to promote sustainability, more future strategies need to be promoted.
- In this regard farmers wish for more support from the political side. Farmers expressed their concern that, compared to environmental, economic aspects of agriculture are less considered in policies. Further the role of consumers should be recognized. Farmers stated that their standing within society is deteriorating as they are often pictured as polluters. Hence, it is key to foster people's understanding of agriculture and the role of farmers. This may in turn also increase consumers' willingness to pay a higher price.
- Pertaining sustainability, bio-fuel and bio-plastics may be a viable option to reduce the usage of non-renewable sources. Sugar beet can be used as feedstock for these products. However, market dynamics do not promote the usage of sugar beet due to its competition with fossil fuel. Therefore, political action is needed if a transition to a circular economy is aspired.
- The sugar beet farmers' union (CBB) has proven to be an effective institution. Although, farmers stated that the CBB does not guarantee a level playing field in this highly concentrated market. Nevertheless, CBB can be viewed as a resilience enhancing mechanism. A key role is the installation of a compensation fund for farmers delivering their crop in an unfavorable period. However, it has to be emphasized that this mechanism is under threat due to the price reductions in the post quota period. The fund is financed by premiums farmers have received in the past. With the reduction of prices and premiums the fund is in risk of running dry. The fund makes up an example for why a holistic problem analysis is necessary to fully grasp direct as well as indirect effects of policy interventions. The abolition of the quota may undermine the resilience of the farm system if adverse side effects remain unchecked.



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In this policy brief the main findings pertaining market and structural challenges for the Belgian sugar beet case study are outlined.

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Key messages

- Up until now, the quota termination had a negative impact on farmers. This may change in the future, when the market settles at a new balancing point. The substantial price reduction, that occurred after the quota termination, was anticipated by farmers. Nevertheless, market dynamics did not allow



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them to counteract this development. Accordingly, policy interventions have to screen for all potential negative impacts. Further action plans have to be developed to counterbalance negative effects in order to allow stakeholders to slowly adapt to the new situation. Pertaining the sugar beet case, although measures have been taken to prepare farmers for the new situation, these steps did not suffice. A systems thinking approach could help in identifying critical issues as well as in the development of a comprehensive strategy to facilitate a smooth transition.

- If sugar beet cultivation becomes unprofitable, farmers would mostly shift to other crops. However, they face several obstacles: the lack of an alternative, the lack of a market for the alternative, the uncertainty of these alternative markets, the lack of affordable land. Alternative crops listed by farmers were mainly potatoes and vegetables. In case that most farms change to similar crops, one has to bear in mind that the respective market will be adversely affected (oversupply).
- Farmers emphasized that cultivation practices should be harmonized within Europe. Certain practices are allowed in some countries creating disadvantages for Belgian farmers. Farmers do not only have to compete within Europe but globally. On the global level Belgian farmers suffer from disadvantages. While farmers in Europe have to comply to certain environmental as well as social standards this is not the case all over the world. This results in unequal competition, that would call for policy intervention.
- The sugar beet market within Europe is generally concentrated. Belgium is no exception to that. The termination of the quota system may lead to market power problems. Close attention needs to be paid to the developments in the coming years. The planned cooperative refinery may change the market dynamics reducing concentration. Nevertheless, it needs to be kept in mind that due to the product characteristics, the sugar beet market might always be prone to concentration.
- Population ageing is another challenge within the Belgian agricultural sector. This was also reflected in the most represented age group of survey participants, being older than 50 years. During the interviews it was stated that farming is no longer an attractive activity as there are too many challenges (not enough land, increasing costs, need to get a big loan, reducing farm gate prices). Additionally, as the occupation as farmer is perceived as unattractive this has also the effect that young farmers have a hard time finding a partner. Thus, apart from the economic, social challenges need to be addressed as well.
- The farming sector is continuing to go through a structural change with less, but larger farms. The reduction of farms is often the only possibility for remaining farms to expand their business. Other land for expansion is either not available or too expensive. As farmers have less options to expand, intensification and innovation are the main remaining strategies for farmers to maintain their income. However, the benefits of these options may also reach a maximum soon. Farmers indicated that the sugar beet crop reached a maximum sugar content already. Further improvements may only be marginal. Intensification may oppose sustainability goals and may thus also be limited. Thus, as farmers' strategies are more and more exploited, new ones need to be offered.



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