1. Introduction

The sugar industry is one of the most important branches of the Polish farm and food industry with decades of tradition – in 1801-1802 the world’s first sugar factory processing sugar beets was built in Konary in Lower Silesia (Głębocki, 2007). Since the beginning of systemic transformation, the process of restructuring and privatisation has been taking place. The sugar market in countries of the European Community, and now the European Union, has been regulated since 1968, and first and foremost it intends to protect the internal market. Since 2004, the regulatory system has also applied to the Polish market. Today’s changes are related to the EU sugar market regulation reform in 2006-2010. This reform assumed a concentration of sugar beets production in areas with the best soil and climatic conditions and an increase in productivity in the remaining sugar factories. With the winding-up of sugar factories, a change in the profile of agricultural production in the surrounding area followed, due to close links between the sugar industry and the raw material base.

In addition to growers and producers of sugar beets, restructuring of the sugar industry also had an impact on workers in sugar factories, providers of services using farm machinery, and local authorities. This multi-faceted research problem applies to both geography of agriculture, geography of industry, economics, but also social geography and spatial management.
2. The reform of the sugar market in the European Union

Polish membership in the European Union determines the modernisation of economy in accordance with the Community policies, including the field of the sugar market. Acceptance of regulations of the common agricultural policy in the context of the sugar market is associated with compliance with production quotas. They result from limiting the volume of sugar production in relation to the possessed potential, which causes the closing of less profitable sugar factories.

The European Union countries are among the world leaders in the production of sugar from sugar beets. According to reports of the World Trade Organization (WTO), as a result of internal regulations of this organisation, destabilisation of the global sugar market took place. In order to heal the situation, an attempt was made to reform the sugar market of the European Union and to restructure the sugar industry.

Before the reform, in the EU market there were intervention prices of the produced sugar and minimum (guaranteed) prices for the purchase of sugar beets. The scale of sugar production was limited according to the quota system. Also refunds were given if the produced sugar was earmarked for the chemical industry, with a view to increasing the domestic demand and the purchase of sugar surplus. There were also subsidies to sugar exports within a specified quota and an obligation to export sugar without subsidy if its amount exceeded the designated limit. In addition, the EU market was protected by high customs duty and quotas for importing duty-free or reduced-duty sugar. Limiting the production of sugar substitutes – isoglucose and insulin syrup was also an important tool.

Areas with the best soil and climate conditions for the production of sugar beets in the EU form the so-called „sugar beet belt”. The following countries are included in the area of intensive sugar beets production: Great Britain, France, Belgium, the Netherlands, Germany and Poland. The reform of the European Union sugar market introduced in the 2006/2007 season mainly regarded the listed countries. It was assumed that as a result of the reform the competitiveness of the EU sugar market in the global market will increase, and this effect would be achieved mainly through the concentration of sugar production in larger and more efficient enterprises in areas with the best conditions for cultivation of sugar beets. These changes would increase the length of a sugar campaign, and thus boost the efficiency of sugar production per one hectare of crops and raise the average production value per one sugar factory. It should be noted that, in addition to the countries not involved in the production of sugar (Cyprus, Malta, Estonia) and those which as a result of the reform gave up its production (Bulgaria, Latvia, Ireland, mainland Portugal and Slovenia), among the remaining 18 EU members – in conditions of limitation of the production scale – the concentration process primarily involved countries of the „sugar beets belt” (Dubownik, Rudnicki 2015).

According to reports of the European Commission, in accordance with the premises of the reform, only those growers are to remain on the market who show the highest yield of sugar beets, and those sugar factories which boast the highest productivity. Nevertheless, the situation on the sugar market in various counties of the „sugar beets belt” is different. In all member states, including Poland, the annual quotas of sugar production have dropped. However, the smallest decrease was reported in the Netherlands, the United Kingdom and France. A positive change in the growth of the yields of sugar beets in the studied years was noted, yet the starting level of the yields in Poland was much lower (43 t/ha) than the average yields in the other five countries of the designated region (65 t/h), and in the studied period it increased on average by 10 points in all countries.

Since the 2006/2007 season the first stage of the sugar market reform was introduced in the European Union countries, which was to be implemented over four years. One of the most important instruments of this reform were sugar payments paid to farmers who having previously concluded a contract of supply of sugar beets with a manufacturer then resigned from the granted quotas and ceased cultivation. In Poland the rates of so specified financial compensation ranged from PLN 33.94 (2006) to PLN 50.45 (2010) per tonne of sugar beets (cf. Rudnicki, 2014, p. 102).

Since the beginning of the first reform of the EU sugar market in 2006/2007–2010/2011, the number of sugar beet processing factories in Poland has decreased by half. Initially, in 2006 there were 36 food processing factories, but not all of them used their full capacity. In the 2010/2011 season only 18 sugar factories functioned. Poland takes the third place in the European Union in terms of the number of existing sugar factories, after France and Germany. However, in our country the greatest number of them were closed.

In 2010, most sugar factories in Poland were located in the Greater Poland voivodeship (4) and the Kuyavian-Pomeranian (3) voivodeship. In the Lower Silesian, Lublin, and Subcarpathian Voivodeships there were two sugar factories in each. In the next
five voivodeships there was one sugar factory, and in six there were none.

In the Polish sugar industry already since the mid-1990s, four foreign investors have been operating, three German ones and one British (Niemczak, 2008). Sugar beet factories located in Poland belonged to five companies in 2006 and to 4 in 2010. Still, Krajowa Spółka Cukrowa S.A. was the largest one owning seven sugar factories; next five belonged to Südzucker Polska S.A. company; an enterprise with the German capital Pfeifer&Langen Polska S.A. owned four sugar factories, and two remaining two belonged to Nordzucker Polska S.A. During the studied period the most closed sugar factories belonged to Krajowa Spółka Cukrowa (10) and to Südzucker (6) (fig. 1., fig. 2.).

3. Social consequences of the reform

One of the objectives of the reform of the EU sugar market was to introduce instruments to mitigate the direct and indirect social and economic effects of the reforms for the farming population. The EU documentation concerning the reforms stipulated strict requirements for sugar producers who voluntarily renounced the production quotas and, in consequence, closed their sugar factories. A producer
could receive the so-called „restructuring aid” if he drew up a restructuring plan containing:
- a social plan, specifying actions, in particular with regard to employees’ retraining, job relocation and early retirement;
- an environmental plan specifying the measures to comply with the requirements of environmental protection;
- a business plan setting out the ways, the schedule and the costs of closing a factory or factories and the total or partial dismantling of production facilities.

Therefore, the responsibility for changes in the local labour market caused by the closed sugar factory lay with the producer. Just as well the post-industrial buildings were to be dismantled, or their function was to change, so as a consequence, they should be revitalised.

It is hard to resist an impression that in the Polish conditions these assumptions remained provisions reposed in the archives.

At the moment one cannot unequivocally determine the extent to which the introduced instruments mitigated the direct and indirect social and economic effects for the agricultural population and that involved in the production of sugar in the regions affected by the reform.

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**Fig. 2.** Distribution and the ownership structure of sugar factories in Poland in 2010

Source: own elaboration based on the data of the Association of Sugar Technicians.
The problem of social consequences resulting from closed sugar factories may be viewed at two levels, the social and the spatial-economic one. Firstly, as a result of the closure of sugar factories, there were transformations of the local labour market, on which the factory was often the largest employer. In addition, growers living within the impact of the factory were forced to change their production profile, which could result in a rapid decrease in incomes in the farms. Changes in the labour market can be limited by foreseeing such a situation and introducing instruments allowing the local population to retrain. However, in the economic reality of Poland, the population from the surveyed areas migrated to larger cities or abroad in search of work, causing depopulation of the abandoned areas, while the population at the immobile age may be threatened by social exclusion.

Property and premises remaining after the food processing factory following the collapse of the sugar industry become a very important problem for the municipality. It depends on who they belong to, but also whether they have any historical value. There is a chance to restore their economic activity as part of market processes; however, usually it is necessary to take revitalising actions of the character of local authorities’ and owners’ interventions. A feature of areas for industrial production is their inaccessibility and exclusion from the area of the city inhabitants’ activity, and thus their objective and subjective exclusion from the public space. Hence brownfield redevelopment often has the nature of integrating them with the space of the whole city both in the functional and social terms. The above action can be implemented by applying for investment means from European funds aimed at revitalising post-industrial areas. It is important that revitalising processes take place with the so-called social participation. If the look and functions of the post-industrial area of a city or a village is agreed on by the local community during consultations, chances are that the restored space will be accepted and used by the residents, resulting in „real” urban regeneration, i.e. including this area in the social space.

Today there are still few examples of successfully developed and implemented projects to redevelop post sugar factory premises. One of them is the „Sugar Zone – a social concept of developing the premises after the Pruszcz Sugar Refinery”, prepared by the Association of Friends of Pruszcz Gdański and the Surrounding Communities in cooperation with the Institute for Sustainable Development. The Sugar Zone is a project of participatory planning of the public space – the premises of the closed Sugar Refinery in Pruszcz Gdański (Broks et al., 2013). The aim of the initiative was to create a platform for dialogue and cooperation at the level of residents, the local government and entrepreneurs, which would reach far beyond the statutory public consultation. The end result is a common vision of the sugar factory site published in the form of a land development concept. In addition to the existing roads, the project assumes building new bike paths for new residents of the area. Adaptation of the existing buildings has been planned or constructing new buildings of a service, residential or cultural character, and an area for a town marketplace and green areas available to all city residents have been designated.

4. Summary

The first reform of the sugar market on the Polish market since joining the European Union finished in the 2010/2011 season, but it still is impossible to examine in detail its consequences for the local communities. The research problem seems particularly important because another reform is imminent, which will result in lifting sugar production quotas and minimal prices for sugar beets. It will be possible to make the total EU production available on the internal market. Reference prices of sugar and the price reporting system will remain only serving the observation of the market. Export limits for the world markets will also be lifted, while keeping the previously agreed as part of free trade agreements import of cane sugar on the EU market. A new contracting system will be introduced, with the planter signing a farming contract two years before the sale of sugar. It is uncertain whether the level of duties on sugar imported from the European Union will be maintained and what it will be (The EU Sugar Market Post 2017, ISO, 14).

It is hard to predict how the forthcoming reform will affect the Polish sugar market. It may turn out that while our country lies in the EU „sugar beet belt”, the period of adaptation of sugar factories in Poland to the standards of Western European countries has been too short, which may contribute to losing the competition on the internal market with more efficient growers and sugar factories of other EU countries.

Today, however, the collapse of the sugar industry in small towns resulted in a decrease in own revenue of communes and an increase in unemployment rates, and consequently in social changes leading to social exclusion. A phenomenon of (especially mobile-age) population migration has taken place. The closed processing plants have been and often still are degraded post-industrial areas, situated in
small towns which, as a result of the capital deficit and a lack of social participation, have not been and are not able to revitalised those areas.

References


