Abstract. This paper analyzes the issues of social responsibility of businesses in the agri-food sector, with the applicable requirements being considered in the context of the initial links of the pork supply chain. It describes the production conditions in farms and agricultural holdings with reference to organizational and environmental requirements. Also, it shows the role of cooperation between pork producers and processors which assumes the ability to put in practice the principles of social responsibility in agribusiness. Particular attention was paid to the role of humans as a key entity enabling the implementation of CSR requirements. These issues were presented in the context of Polish experience in dealing with the African swine fever (ASF).

Keywords: corporate social responsibility (CSR), agribusiness, pork supply chain, African swine fever (ASF)

INTRODUCTION
Formulated in the 1950s, corporate social responsibility is not a new concept. For centuries, the awareness of being responsible for ourselves and other people has been a part of human activities. It was reflected by the observance of fair practices in supplier and customer relationships, and by the respect shown to the customer (Bartkowiak, 2011, p. 15). Profoundly disapproved, any failures in this area were considered to be a breach of principles of the honorable merchant. However, it is something of a paradox in the history of human civilization that the socio-economic development was accompanied by a stronger focus on profit maximization; and as a consequence, the concept of a socially and environmentally sustainable business was pushed away and consigned to oblivion. Today, attempts are made to stop that trend by restoring the socio-economic participation in the company’s profit and in the development vision implemented by the companies. An inherent part of this vision is the concern for preserving the natural environment for future generations. The purpose of the activities involved is to build proper socio-economic relationships (Witkowska, 2016, p. 95).

Social responsibility is particularly noticeable in the activities of agribusiness operators as they are indelibly linked with the natural environment. It is driven by the respect and devotion to land, a feeling deeply rooted in the minds of people to whom land means something much more than just a workshop. Animal production is a sector where the need for implementing CSR principles is particularly visible, especially when it comes to granivores. These include pigs, usually living in large herds prone to various biological threats (often caused by the herd itself). Concentrated production means the accumulation of pollutants, environmental destruction and a greater vulnerability to phyto-sanitary and zoosanitary factors. In these areas, potential human negligence may result in breaching the principles of food safety, in addition to degrading the quality of life (in a broad sense) of the local community.

This paper attempts to depict the conditions for the implementation of CSR requirements in the case of...
a threat with complex economic, social and environmental implications.

MATERIAL AND METHOD

The subject matter of analyses is the pig production in Poland together with its organizational and environmental determinants. The relationship between neighboring links of the pork distribution chain (i.e., farms, slaughterhouses and processing plants) is a topic of particular interest. Any dysfunctions that emerge at this stage are reflected as important factors in the assessment of the CSR requirements implementation throughout the distribution chain.

This paper is based on information from the National Veterinary Research Institute in Puławy, and from the Institute of Agricultural and Food Economics – the National Research Institute in Warsaw, and on data from the Central Statistical Office. Information from the authors’ own studies and data obtained in the course of a desk research of relevant literature was also used. Once gathered, the materials were subject to factual analysis. Findings of contributive nature are presented in this paper.

SOCIAL RESPONSIBILITY IN AGRIBUSINESS

The relevant literature provides two baseline descriptions of how the social responsibility concept was developed. The first one has accompanied humankind from the dawn of human activity, and results from respect to the surrounding world. According to the second description, social responsibility, in its historical dimension, was underpinned by charitable activities undertaken by capitalists (entrepreneurs) or by a commitment to strengthen the employees’ relationships with their enterprise (so as to prevent their potential discontent) (Rybak, 2007, p. 13–27). As emphasized in today’s definitions, social responsibility means the enterprise voluntarily takes responsibility for its environmental impact. The related activities fall into four categories: the economic, legal, ethical and philanthropic areas (Rudnicka, 2012, p. 16).

CSR is believed to be fully effective if the businesses voluntarily engage in socially responsible activities. Note also that CSR is a concept which consistently orchestrates the relationships between the business and the society. This becomes increasingly important in view of the activities aimed at implementing the sustainable economic governance principles.

In the changing agribusiness sector, the leading driver of the CSR concept are the relationships within the product supply chain. The degree of involvement in CSR implementation depends on the form of cooperation and, primarily, on the persistence and quality of interactions in place. The involvement in social processes becomes stronger along with the development of communications between operators (Brzustewicz, 2013, p. 8–13). In this approach, the starting point is to present the expectations that initiate the establishment of partnerships and support for the interaction (Fig. 1).

Informally, the initiation of the social responsibility processes is the task of the business players. As regards the pork supply chain, these are animal slaughtering and processing companies, and operators active in distribution and direct sales. The underlying reasons for this opinion is that single pig breeders are traditionally seen as having no market power. However, this statement does not take account of dynamic changes taking place in the agricultural structure and production patterns of the Polish farming sector. Integration relationships are also underestimated. The communication of CSR needs is both a top-down process (initiated by the businesses) and a bottom-up process (initiated by the farmers). It becomes increasingly common to define the parties’ (suppliers’ and customers’) expectations by including them in the provisions of trade agreements and contracts. As a consequence, the parties give their consent to inspections which may be performed internally (self-check) or externally (by third parties interested in the enforcement of the agreement). Although costly, monitoring and audit may imply certain consequences or, in extreme cases, may even result in terminating the agreements or significantly reducing the prices compared to the levels stipulated in the agreement. In the event of minor discrepancies, remediation activities are recommended and implemented with the support of coaching or training processes which are also used to develop a trusted partnership framework for the collaborators. Smooth, sustainable and consistent cooperation becomes the starting point for a partnership established in order to provide mutual support for discovering the root causes of poor performance in the implementation of social responsibility and sustainable development requirements (Sroka, 2012).

For the agribusiness, environmental responsibility is of particular importance among the three responsibility areas (environment-society-economy) within the supply
chain. The issues covered are the place and method of raw material production; energy efficiency of the related processes; material consumption; environmental burden; eco-efficiency; emission of pollutants; transport modes; packaging methods; reusability of technologies, production methods and green innovations (Rudnicka, 2011, p. 165). The list of topics that require responsible human intervention is definitely longer (Table 1).

Table 1. Topics of social concern

<table>
<thead>
<tr>
<th>Environmental component and way of impact</th>
<th>Pork chain supply link</th>
<th>Result of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil – Gleba</td>
<td>Pig feed production</td>
<td>Soil erosion</td>
</tr>
<tr>
<td>Water – Woda</td>
<td></td>
<td>Erosja gleby</td>
</tr>
<tr>
<td>Energy – Energia</td>
<td></td>
<td>Water pollution</td>
</tr>
<tr>
<td>Fertilizers – Nawozy</td>
<td>Produkcja pasz gospodarskich dla świń</td>
<td>Zanieczyszczenie wody</td>
</tr>
<tr>
<td>Pesticides – Pestycydy</td>
<td></td>
<td>Biodiversity</td>
</tr>
<tr>
<td>Antibiotics etc.</td>
<td></td>
<td>Biologiczna różnorodność</td>
</tr>
<tr>
<td>Antybiotyki itp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water – Woda</td>
<td>Pig production</td>
<td>Water pollution</td>
</tr>
<tr>
<td>Energy – Energia</td>
<td></td>
<td>Zanieczyszczenie wody</td>
</tr>
<tr>
<td>Feed – Pasza</td>
<td>Produkcja świń</td>
<td>Air pollution</td>
</tr>
<tr>
<td>Medicines – Leki</td>
<td></td>
<td>Zanieczyszczenie powietrza</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refuse and solid pollutants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Odpady i zanieczyszczenia</td>
</tr>
</tbody>
</table>

Fig. 1. Level of social involvement as a communication function for the partners
Source: own research based on: Brzustewicz, 2013.

Rys. 1. Poziom zaangażowania społecznego jako funkcja komunikacji stron
**Table 1 cont. – Tabela 1 cd.**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water – Woda</td>
<td>Butchery and processing</td>
<td>Water emission</td>
</tr>
<tr>
<td>Energy – Energia</td>
<td>Ubój i przetwórstwo</td>
<td>Emisja wody</td>
</tr>
<tr>
<td>Cleaning and sanitary means</td>
<td>Środki sanitarne i czystości</td>
<td>Emisja powietrza</td>
</tr>
<tr>
<td>Energy – Energia</td>
<td>Packing</td>
<td>Refuse and solid pollutants</td>
</tr>
<tr>
<td>Glass, metal, plastic, paper</td>
<td>Pakowanie</td>
<td>Odpady organiczne</td>
</tr>
<tr>
<td>Szkło, metal, plastik, papier</td>
<td>Refuse and solid pollutants</td>
<td>Odpady i zanieczyszczenia</td>
</tr>
<tr>
<td>Energy and transportation</td>
<td>Distribution and marketing</td>
<td>Air pollution</td>
</tr>
<tr>
<td>Energia i transport</td>
<td>Dystrybucja i marketing</td>
<td>Zanieczyszczenie powietrza</td>
</tr>
<tr>
<td>Energy (thermal treatment)</td>
<td>Consumption</td>
<td>Chemical refuse</td>
</tr>
<tr>
<td>Energia (obróbka termiczna)</td>
<td>Konsumpcja</td>
<td>Odpady chemiczne</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Air pollution</td>
</tr>
</tbody>
</table>

Source: own research based on: Gołaś and Kozera, 2008.

**Fig. 2.** Pig production’s environmental impact

Source: Gołaś and Kozera, 2008.

**Rys. 2.** Wpływ produkcji świń na środowisko

Źródło: Golaś i Kozera, 2008.
The complexity of the pig production’s environmental impact also reflects the power behind it (Fig. 2). Because this relationship is so complex, the environmental conditions cannot be neglected by assuming a zero impact of the production activities.

The increasingly better ways of identifying contaminations and pollutants, disease transmission paths and patterns clearly show the role of humans in the process of preventing environmental degradation and its economic implications. By leveraging their knowledge and technology, humans are able to remedy many of the adverse environmental impacts. Such activities are compliant with the general concept of a socially responsible, sustainable pork supply chain.

AFRICAN SWINE FEVER: A TEST FOR THE SOCIAL RESPONSIBILITY IN AGRI-BUSINESS

The social responsibility concept is very often verified in practice. In many cases, the relationship between the three interdependent areas (economy, society, environment) is not strong enough to keep that system balanced. Usually, economy becomes the area with the most destabilizing effect (Cyran and Dybka, 2015, p. 7–18). After an individual assessment of low-cost sources of income, companies tend to move away from the ideals that require specific restrictions, including social and environmental responsibility. This results in the creation of barriers to CSR implementation throughout the economy, including in the agribusiness. The most important of them include: organizational barriers (ways of setting business goals); lack of understanding of common goals and interests shared with other actors of the supply chain or even shared within the same link of the supply chain (as shown by the example of some producer groups). Also, there are problems with the proper definition of social responsibility areas because of limited expertise and imperfect understanding of the functioning conditions of operators within specific links of the supply chain. An important mental barrier are the emerging discrepancies between the stakeholders’ expectations as to profit distribution, competitiveness and efficiency (Cyran and Dybka, 2015, p. 7–18). All of these elements may be identified by analyzing the implementation progress of the CSR concept in the pork distribution chain during the epidemic outbreak of African swine fever (ASF).

ASF, a viral disease of domestic pigs and wild boars, has been included for many years in the list of diseases established by the World Organization for Animal Health (OIE). It is subject to compulsory notification and official control. A serious incurable disease, ASF is highly contagious and infectious. There are no vaccines, and a ban is imposed on treating sick animals. The fight against ASF is based on administrative measures, i.e. consists in killing the animals from infected herds and protection zones (Markowska-Daniel and Pejsak, 2014, p. 191–195). This is what makes ASF a disease with major economic losses resulting from mass death of animals, disposal of animal bodies, costs of compensations disbursed, and eradication costs. The economic implications go beyond the local scale. Once diagnosed, ASF halts external trade of pigs, pig meat and foodstuffs containing it. While causing multiple economic repercussions throughout the country, this situation illustrates in a unique way the strength of partner relationships and of social responsibility in agribusiness, in a broad sense.

In Poland, as announced in March 2017 by the Chief Veterinary Officer, nearly 270 wild boars infected with the virus and 20 ASF outbreaks with 81 disease cases were detected.

Unfortunately, despite the preventive measures and strict monitoring, the disease continues to develop. Further information from the Chief Veterinary Officer is available at wetgiw.gov.pl.

The increased social awareness, partially supported by the individuals’ fear of sustaining losses, resulted in a greater effectiveness of information measures put in place to make people aware of the need to protect their farms against ASF and to deploy biosafety measures. In light of the seriousness of the situation, especially

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1 Eradication means total suppression of a contagious disease throughout the world and the absence of the pathogen causing the disease in human and animal organisms and other environmental spheres.

as the virus spreads across the country, all regulations implementing the restrictions and recommendations for pig production, transport, processing etc. are applicable on a countrywide basis. Special emphasis is placed on compliance in Greater Poland, Kuyavian-Pomeranian and Opole provinces, Poland’s traditional pig breeding hubs (Bartz, 2017).

As it turns out, humans and their irresponsibility in all aspects, often to an incredible extent, are the spreading vector of ASF into the domestic pig population. Cases described include illegally selling and concealing the origin of live pigs from protection zones on local markets (in Poland), as well as purposeful infection of herds due to the expected compensation for depopulation and suspension of pig breeding activities (in Russia and Lithuania). The analysis of information on disease spread clearly shows that rather than by wild boards themselves, the virus is primarily caused by human activity, including virus transmission through means of transport and through infected wild boar meat, illegally hunted and transported (according to the Supreme Audit Office, www.nik.gov.pl). In this case, human activity becomes bioterrorism (Pejsak, 2016). In Poland, some cases were identified where herd owners had failed to comply with biosafety recommendations. Note however that this has not happened much. The cases mainly included selling pigs without required health certificates and failing to comply with the obligation to report increased pig deaths to the Veterinary Inspection Authority.

Because of the involvement of the stakeholders themselves and of specialized services, it is possible to effectively slow down the circulation of ASF across the country. Measures put in place include systemic changes and protective solutions deployed in veterinary supervision (including identification and registration of animals; inspection of premises; concentration of slaughtering; welfare supervision; raising the awareness and discipline among farmers; intensive monitoring); involvement of veterinary services, central and local government authorities, hunters, foresters and farmers; and the effective deployment of epizootic protection measures on the eastern border.

Note that although wild boars from Belarus were found to be the source of infection, no ASF outbreak and not even a single case of domestic pigs infected with ASF was reported by Belarus. For obvious reasons, this is impossible. In Poland, in addition to the National Veterinary Inspection Authority and the Chief Veterinary Officer, services involved in eradicating and preventing the spread of ASF include: the Polish Hunting Association and State Forests (finding the bodies of dead wild boars; implementing the hunt management policy in the area of wild boar hunting; education on ASF and its eradication methods); police (inspections of vehicles, especially if used for animal transport; inspection of market places; coordination of investigations aimed at identifying the reasons for the occurrence of the disease); Road Transport Inspection Authority; Fire Service; Border Guards; and even the Polish Armed Forces.

Note that penalties for failing to comply with ASF-related restrictions can be amply justified by the experiences of the European agriculture sector. This may be illustrated by the example of Spain who has fought the ASF virus for more than 25 years. During that period, over 2 million pigs were killed. Also, a ban was imposed on pig breeding to be applicable in the years to come. For the Polish pig sector, this would mean a complete collapse for many years. This is definitely one of the worst scenarios for Polish producers, especially because no alternative scenarios were developed for epidemic emergencies despite many years of discussions on rescuing the pig sector. And it should be noted that such emergencies were absolutely foreseeable. Since 2008, professor Markowska-Daniel and her team have been describing ASF in the context of its symptoms and consequences, and beyond. They have also tackled the reasons for the emergence of ASF and, above all, the growing threats coming from the east. As emphasized by Markowska-Daniel, ASF is approaching the Polish border at a pace of 350 km per year, and has been moving from Russia to Europe for a long time now (cf. Markowska-Daniel, 2008, p. 982–990; Markowska-Daniel, 2009, p. 571–573; Markowska-Daniel, 2010, p. 736–742; Markowska-Daniel et al., 2011, p. 427–431; Markowska-Daniel and Pejsak, 2014, p. 191–195).

SUMMARY

Corporate social responsibility is a concept which builds upon the tradition of being responsible for one’s acts. It emphasizes the role of deliberate human impact on the social and natural environment. That aspect of CSR is present in a unique way in the agribusiness, a sector indelibly linked with nature. This paper focused on pig
production in Poland by analyzing those links of the pork distribution chain where a responsible approach is particularly required. These are pig breeding, slaughtering and processing. In these links, the role of humans has become increasingly important especially in the era of knowledge-based economy which allowed not only to improve the production and processing technologies but crucially also to identify the patterns of creation and propagation of zoo-sanitary threats. The scale of responsibility is reflected by measures deployed in extreme situations, i.e. during the African swine fever (ASF) epidemic. On one hand, humans prove to be the organizers of radical countermeasures against epidemic spread who control the outbreak of the disease. On the other hand, however, they contribute to spreading the disease. This is undeniably linked with some kind of a mental barrier which makes individuals focus on maximizing the economic benefits by any means.

REFERENCES


SPOŁECZNA ODPOWIEDZIALNOŚĆ BIZNESU W AGROBIZNESIE
– PRZYPADEK ASF

Streszczenie. W artykule analizowano kwestie społecznej odpowiedzialności biznesu sektora rolno-żywnościowego. Jej postułaty odniesiono do realiów początkowych ogniw łańcucha dostaw wieprzowiny. Opisano uwarunkowania produkcji w gospodarstwach i przedsiębiorstwach rolnych w aspekcie wymagań organizacyjnych i środowiskowych. Przedstawiono rolę współpracy między producentami mięsa wieprzowego a jego przetwórcami, zakładającą możliwość praktycznego wdrażania zasad społecznej odpowiedzialności agrobiznesu. Szczególną uwagę skoncentrowano na roli człowieka jako kluczowej jednostki realizacji postulatów CSR. Kwestie te przedstawiono na tle dotychczasowych doświadczeń z afrykańskim pomorem świń (ASF) w Polsce.

Słowa kluczowe: społeczna odpowiedzialność biznesu (CSR), agrobiznes, łańcuch dostaw wieprzowiny, afrykański pomór świń (ASF)

Accepted for print – Zaakceptowano do druku: 20.08.2017