

Smallholder pig farming in Croatia: Destined to become extinct or worth saving?

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Abstract: *In the course of becoming a new EU member state, Croatian pig production systems are being modernised in order to ensure product quality and competitiveness according to European standards. This process involves the modernisation and intensification of larger pig farms and the termination of small pig farms. Small-scale farming, especially for own consumption, is deeply rooted in Croatian rural culture. The aim of this paper is therefore to reflect on the social and cultural impacts of the farm modernisation process on smallholder pig farming in Croatia. Using empirical data of a study on motivations to implement the EU pig welfare directives on Croatian pig farms, examples are taken to discuss future perspectives of smallholder pig farmers, their relationship with public administration officers and their motivation to implement the EU pig welfare directives. It is shown that a lack of communication efforts by public administration officers results in a lack of knowledge amongst small pig farmers concerning EU accession changes and pig production standards. Considering Croatia's aims to create favourable conditions for social-economic development in its most backward regions and to maintain traditional features of Croatian agriculture, the results are meant to elicit a scientific debate as to whether it would be reasonable to support smallholder pig farming in Croatia as a cultural heritage. In conclusion, a number of ways are considered of how to support smallholder pig farmers in Croatia in the future (e.g. organic agriculture, rural tourism, nature and landscape management, local food production schemes).*

Keywords: *Croatia, smallholders, modernisation, tradition, pig farming, EU accession*

Introduction

Croatia is preparing for accession into the European Union (EU). This process involves an alignment of the Croatian legislation with the common European rules and regulations. Croatia has a long tradition in pork production, which amounts up to 14.5 % in total agricultural production and 33% in livestock production (MAFWM, 2005; MAFWM, 2006). In comparison to old European member states, however, pig production in Croatia is mostly organised in comparatively small production units. To illustrate, in old EU member states, 67% of all family farms own between 100 and 200 breeding sows. In Croatia, pork production accounts for 75% of farming activities on mixed family holdings with 1-5 sows and for 85% of production activities on mixed family holdings with up to 10 sows (Antunovic *et al.*, 2004b).

Furthermore, not many Croatian pig farms are specialized production units with up-to-date technologies and the majority of Croatian pig production systems do not comply with EU production standards, they are considered to be economically and ecologically unsustainable (Juric *et al.*, 2000; Misir, 2003; EC, 2006; EC, 2007).

For all of these reasons, the European Commission (EC) recommends modernising existing Croatian pig production systems. In response to this advice, the Croatian Government prepared the "Pig Production Development Programme" (MAFWM, 2005). According to this programme, 250 new pig farms are planned to be built with an average capacity of 150 sows (ranging from 50 to 200 sows), 73 fattening units and 19 nucleus farms (in total 342 new producing units). At the same time, most of the existing 31.845 small producing units will have to choose between modernising the production according to the EU rules and terminating their business (Antunovic *et al.*, 2004a; MAFWM, 2006). To choose whether farms should modernise their production or terminate their production, the

Croatian government distinguishes pig farms into commercial and non-commercial farms. The distinguishing criteria for being considered a commercial or non-commercial farm is the amount of pigs produced. Commercial production units have to be registered and can ask for financial support from modernisation and production funds, capital investments or rural development funds. Non-commercial production units, however, do not have to be registered as producers and can only ask for financial support through rural development funds (O.G., 2002).

While conducting a study on the potential effect of this modernising process on pig welfare in Croatia, Wellbrock et al. (2009a/b) observed that because of limited (or even lacking) involvement of governmental organisations with pig producers owning less than 10 sows, these farmers often lacked knowledge about upcoming changes in production standards and development plans with regard to Croatia's EU accession. Nevertheless, despite governmental plans to terminate pig production on farms with less than 10 sows, these farmers still expressed intentions to continue with their lifestyle in the future and seemed frustrated by the lack of governmental support (Wellbrock et al. 2009b).

Smallholdings are a wide-spread tradition in new South-Eastern and Eastern European member and candidate countries but often neglected in the European alignment process (Abele and Froberg, 2003; Kostov and Lindgard, 2004; Thurston, 2008). They serve, however, a social safety net function for many rural inhabitants in new European and EU candidate countries with socialist and communist histories (Vira and Narnicka, 2003). For example, as unemployment rates in these countries are higher than in old EU member states, rural inhabitants are often depend on semi-subsistent farming practises to supplement their off-farm income and 50-75% of their production is usually sold on the market (Vira and Narnicka, 2003). In addition, semi-subsistent farming is often regarded as a sign of independence from the government and has symbolic value for inhabitants of former socialist and communist countries (Petrick and Tyran, 2003).

According to the strong social significance of smallholdings in South-Eastern and Eastern Europe, it is questionable whether neglecting smallholding pig farmers during the EU accession process in Croatia will drive them towards terminating their farming practises. In fact, one should question whether the neglect of smallholders will lead to social welfare problems in rural areas of Croatia. For example, ignorance towards smallholders as players on the national pork market may have serious implications for the welfare of the effected pigs and humans. On the one hand, preventing smallholders from receiving formal status could increase trading activities on the informal market. It has thus been argued that informal markets are well established within Croatian society (EC, 2007). On the other hand, lacking regulations and education could pose health hazards such as the spread of zoonoses. Murrell and Piozo (2000) thus argue that trichinellosis is still common in Croatia as a result of lacking control during the war which took place from 1991-1995.

Considering the social and cultural significance of smallholder pig farming in Croatia, in the current paper we want to discuss whether smallholder pig farming in Croatia is worth saving or destined to be extinct. To deal with this problem, we will consider two research questions:

1. What motivates pig farmers with less than 10 sows to remain in the farming business?
2. What potential does the conservation of pig farms with less than 10 sows pose for rural development in Croatia?

Method and Materials

To investigate the stated research questions, a two-fold method was used. First, empirical data of a previous study on the effect of modernisation on pig welfare in Croatia (see Wellbrock et al 2009a/b) was used to investigate the motivations of farmers with less than ten sows to remain in the pork producing business and to investigate their opinion on the upcoming EU accession of Croatia. In this study, seventeen farmers were visited in the counties with the largest pig production: Koprivničko-križevačka županija, Međimurska županija, Osječko-baranjska županija, Varaždinska županija, Zagrebačka županija, located in the North and East of Croatia. These farms were distinguished into smallholders, i.e. those farms with less than 10 sows and producing pigs primarily for own consumption (7); family farms, i.e. those farms engaging primarily in commercial pig production (6);

and farm enterprises, i.e. those farms engaged exclusively in commercial pig production (4). Furthermore, six institutional stakeholders (from ministries, the agricultural administrative body, veterinary service and agricultural extension service, universities and non-governmental organisations) were exposed to semi-structured interviews about future perspectives of pig farmers in Croatia and communication on the EU rules and regulations. All interviews were recorded digitally and answers were categorised and interpreted using qualitative discourse analysis methods.

Secondly, policy documents and current scientific literature were reviewed in order to discuss the potential of smallholder pig farmers with less than 10 sows to contribute to rural development in Croatia.

What motivates smallholders to remain pig farmers?

Amongst institutional stakeholders, all interviewees expected that smallholders would disappear or that their number would drastically decline in the coming years. Two interviewees remarked, however, that keeping pigs for own production was a tradition in Croatia and would therefore be likely to persist in the future. They expected that smallholders would quit farming because they were a) not eligible for subsidies as they had too few pigs and b) owned too small pieces of land. It was also stated that smallholders often could not expand their land because adjacent pieces of land were owned by people who did not want to sell their land. Most argued that affected farmers could switch to other farming activities such as ecological production or fruit production.

Listening to the interviewed smallholders in Croatia, however, only three smallholders were discouraged from pig farming in the future. While one farmer stated that smallholder farming was not attractive anymore, two farmers related their uncertainty to lacking regulations and governmental support: *“The government does not care about small farms; it only cares about big farms.”* Accordingly, the smallholder reckoned that *“small farms have no future, perhaps big farms still have”*. Another farmer stated that: *“For 20 years, there has been no support for smallholders anymore. For people who only have 2-3 pigs, there will be no help”* while a further smallholder remarked: *“There is no financial support for smallholders. The big farms, they receive money and only need to pay back part of the money so that they can expand their business and become more competitive”*. A further smallholder argued that he would like to continue farming in the future but expressed uncertainty regarding the laws of the future and whether it would pay off to keep pigs. If the situation changed for the worse, he would give up farming.

Despite the perception amongst smallholders that bigger pig farms are receiving more governmental support, opinions about the future varied considerably amongst bigger pig farmers. Amongst family farmers, only two out of six farmers expected improvement of their situation in the future while one farmer expected a worse situation than today. All farmers expressed uncertainty concerning the fluctuations on the pork market and one farmer even considered diversifying his farming activities in order to continue with farming. The vision of employees at farm enterprises differed between employees at company-owned production sites and contracted family farmers. While one contracted family farmer expressed uncertainty about his future, employees at company-owned production sites had a positive view on their future.

In contrast to the negative perception of smallholders stated earlier, four other smallholders expressed that the current developments in the pork production sector would not affect their farms and that they would continue farming as usual: *“There is no need to go to the EU and nothing will probably change for farmers here, at least not for the small farmers”*. In fact, these smallholders argued that the upcoming changes with regard to the EU accession would affect larger farmers but would leave smallholders unaffected: *“The biggest negative impact will be on the bigger farms because even now it is difficult for them to sell the pig meat”*. Similarly, a smallholder stated: *“We will be obliged to import certain quantities of meat and small producers will be pushed off the market. (...) However, it won't affect the really small ones- like this one- but the bigger ones with 100 or 200 pigs”*.

One argument stated by smallholders to justify their belief that smallholder pig farming will continue in the future is related to the economic situation of smallholders: *“Some people who are employed do not have sufficient income to sustain their livelihoods. These kind of small farms are additional sources of income”*. This statement therefore shows that Vira and Narnicka’s (2003) argument concerning the importance of smallholder farming for the sustainability of livelihoods holds also true for Croatia’s rural inhabitants.

A further argument of smallholders to continue with their lifestyle was based on tradition: *“The government should help small farms (...) It would be a pity to lose this kind of production. This is a symbol of our region, our country. They produce a high quality; you cannot find this in the supermarket.”* A further smallholder argued: *“The government should help small farmers because the advantage of small farms is that they produce healthy food and food of high quality. This is not the case with big producers and big farms. With regard to the whole Croatian economy, for example 10 small farms produce the same amount of pork as one big farm. This should be taken into consideration. In Croatia there are still a lot of people interested in producing pigs on small farms as additional work and it would be a pity to neglect this opportunity”*. By stressing the social and cultural importance of smallholder farming, these answers provide further evidence for Vira and Narnicka’s (2003) statement that smallholder farming in South- Eastern and Eastern European countries serves a different social and cultural role than in North-West European countries.

Returning to the initial question of what motivates smallholding pig farmers in Croatia to continue with their farming practises in the future, the results have thus shown that on the one hand, smallholders do not feel affected by changes regarding Croatia’s accession into the European Union and on the other hand they are dependent on their farming practises to sustain their livelihoods. In addition, smallholder pig farming is regarded as a tradition in Croatia and associated with higher product quality as compared to bigger pig farms. Consequently, smallholder pig farmers in Croatia are frustrated regarding the lack of governmental recognition and support.

What potential do smallholders pose for rural development in Croatia?

The Croatian Plan for Agriculture and Rural Development 2005 – 2006 (SAPARD Plan) was approved by the European Commission on February 8, 2006. According to this plan, the country not only strives for the modernisation of agricultural production but also aims to ensure adequate working and life conditions and the preservation of natural and cultural heritages in its most backward regions (including traditional features of Croatian agriculture). To achieve these goals, Croatia aims to promote a diversification of the rural economy- including rural tourism and rural cultures as economic sources-, aims to ensure nature and landscape protection and the preservation of autochthonous breeds and products.

According to Ploeg et al. (2002), smallholder farming is- against the past belief of being an indication of poverty- becoming a preferred lifestyle in the countryside. The combination of farming activities and an urban job for income security is thus seen as a future development aspect of the rural countryside in Europe (Ploeg et al. 2002). Gasson (1988, as cited in Wilson et al. (2002)) provides a whole range of positive aspects that arise from supporting part-time farmers in rural areas: it keeps people on the land, protects their incomes without relying on tax money, they maintain rural communities, safeguard the environment and constitute to integrate agriculture into the rest of the economy. Also in the Netherlands, it has been shown that non-commercial farms outnumber commercial farms (Zijp et al. 2004). Wilson et al. (2002) thus argue that part-time farming as carried out by smallholder farmers is compatible with Europe’s rural development policy objectives.

Considering the importance of smallholder farming for rural inhabitants in Croatia and the functions associated with part-time farmers for achieving rural development objectives, it is interesting to consider what potential smallholders are posing for the future development of rural Croatia. In the following, four scenarios of engaging smallholders in rural development will be discussed, namely a) organic agriculture, b) rural tourism, c) nature and landscape management and d) local food production schemes.

a) Organic agriculture

The European Union states that Croatia shows good condition for organic agriculture (SAPARD, 2006). On this line, Antunovic et al. (2004b) argue that organic pig production is a good alternative towards conventional pig production because more robust pig breeds with less housing demands can be used. So far, the market for organic products in Croatia is not well-established, but Radam (2005) reports that Croatian consumers have a positive perception of organic products because they regard them as healthy. At the same time, however, Radman (2005) indicates that Croatian consumers are less familiar with ecological products and regard them as expensive. Interestingly, however, there seems to be a change in the willingness of Croatian people to buy organically produced groceries. Lončariš et al. (2009) thus report that 86 % of Croatian 124 responders stated to buy organic food products and expressed a willingness to pay a higher price for them. Kovačič et al (2009) however report that awareness and availability of organic products still needs to be improved. It thus appears that the market of organic products is just emerging in Croatia. Future research should be conducted on identifying the potential of smallholder pig farmers to supply the organic market in Croatia.

b) Agro-tourism

Agro-tourism can be defined as a touristic activity being carried out on a working farm such as accommodation, activity and day care (Pivcevic, 2005). According to Ventura et al. (2002), agro-tourism serves several positive functions for individual and communal development in rural areas. On the one hand, they argue that it contributes to the income of farming families and on the other hand, it contributes to the socio-economic development of the rural community by attracting urban visitors and creating respect, knowledge and communication between rural and urban citizens. For Croatian farms, Pivcevic (2005) argues, agro-tourism could contribute to additional farm income and direct selling of farm products although education of farmers on the potential for business in agro-tourism as well as a lack of experience with rural tourism apart from coastal zones of Croatia still hamper the engagement of farmers in rural tourism activities. Future research should therefore be conducted on how to educate smallholders about opportunities to engage in agro-touristic activities.

c) Nature and Landscape management

In European member states, farmers have the possibility to receive financial benefits through management agreements (Renting and Broekhuizen, 2002). On this line, the authors argue that nature and landscape management schemes offer additional income possibilities for farming households throughout the EU. In the Netherlands, for example, subsidies for agricultural nature and landscape management will be available from January 2010 and from January 2011 onwards, subsidies will also be available for nature and landscape management in natural areas. (IPO, 2009). By implementing the new subsidy regulation, landscape and nature management will become a new economic alternative for farmers. Also in Croatia, the Ministry of Culture has published several policy documents which are aimed at conserving Croatia's nature, landscapes and cultural heritages. Regional and local authorities such as municipalities will be responsible for the execution of the policy objectives (Council of Europe, 2009). So far, it appears that farmers have not been addressed as managers of nature and landscape management processes in Croatia. Future research should therefore investigate how extend nature and landscape management could become a new income source for smallholders in Croatia.

d) Local food production schemes and direct marketing

Consumers in Croatia, as well as in others South and South-Eastern European countries generally appear to prefer meat from small-scale farms (e.g. Roe et al. 2003., Tolušić et al. 2004). In addition, Croatian consumers appear to prefer domestic products over imported food products. In a survey on 100 consumers in Zagreb, Perica and Cerjak (2009) showed that more than half of the respondents preferred domestically produced food products although they considered and bought imported products because of cheaper purchasing prices. Nevertheless, preferences for domestic food products could be used for marketing regional food products. Future research should address ways for smallholder, who often produce tradition sausages and other meat products on their farms, can be organised in local food production schemes, possibly connected to direct marketing activities. One aspect that certainly needs attention in this respect is the lack of information and education amongst

smallholders regarding European production and food safety standards. Again, future research should be directed towards finding ways of educating and engaging smallholders in local food production schemes in Croatia.

Concluding remarks

To circumvent welfare impairments for smallholders in Croatia and other new European member and candidate countries, it appears necessary for the EU to recognise smallholding as a type of farming in legislation. This way, one can argue, smallholders are more likely to be addressed with financial aid and education measures in the future. It is therefore necessary to invest in further research regarding the ways in which smallholders can be supported in the future. Further points of consideration include:

1. Smallholder pig farming is a cultural heritage and an important livelihood strategy in rural parts of Croatia. It also contributes significantly to achieving rural development aims. EU accession money should therefore be directed towards preserving smallholders as a cultural heritage.
2. Expansion is not a solution for all pig production systems in Croatia. Alternative ways to engage smallholder farmers in rural development should be promoted to ensure their existence in the future.

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