

FARMERS' OPINION ABOUT THE POTENTIAL TO PURSUE NON-FARMING OCCUPATION OPPORTUNITIES

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Abstract

Agriculture in Poland and the Polish farmers are confronted with numerous problems, mainly of the financial nature. Not surprisingly, they seek to change this difficult position and improve their economic situation by looking for alternative sources of income. As consequence, the existing model of countryside is evaluating to encompass new functions. The aim of this research was to examine several options available to farmers, who can either expand their existing activity, or venture into the new territory and start non-farming occupation. The diagnostic poll method combined with the questionnaire technique was chosen in order to gather the empirical data for the study. The research was conducted between 2014 and 2017 on the group of 155 respondents. The study proved that they were aware of the possibility to undertake non-farming occupation. The farmers who took part in the poll realized the potential to expand their activities in order to encompass new forms of generating additional income. They pointed at numerous advantages and factors, which inclined them to undertake such a challenge, however they were also well aware of numerous disadvantages and obstacles the new undertaking might involve.

Keywords: *agriculture, rural areas, multifunctional development, sustainable development, non-agricultural entrepreneurship*

JEL classification: Q10, Q16

1 Introduction

Agriculture in Poland and the Polish farmers are confronted with numerous problems, mainly of the financial nature. This is a consequence of insignificant size and considerable spread of farms in Poland (Mickiewicz & Mickiewicz, 2014; Pawlak, 2001), which translates into low volume of production making it either unfeasible or not viable at all. Without a doubt, the problem is complex and solving it requires time. The situation becomes even more complicated when one takes into account the strong bonds that farmers have with their land. It is because of these bonds that they are reluctant to sell the land or its parts. For the reasons mentioned above, searching for alternative sources of income may improve the meagre economic situation of some farms. Naturally, such development will result in multi-functional development of farms, and skilful incorporation of the new, previously unknown functions by the countryside (Runowski & Zięta, 2011; Kalinowski, 2013; Prus, 2010, p. 15-16; Roman, 2014; van der Ploeg & Roep, 2003). However, this task will not be possible without the change in farmers' attitudes. They must realize that by undertaking other, non-farming occupations (Carter, 1998) they may be able to improve their standard of living. They need to become aware that apart from the income generated by their existing farming job, they have a potential to include the profits generated by hired, seasonal or part-time workers (Blinova & Vyalshina, 2017; Kalinowski, 2015; North & Smallbone, 1996). Having an extra source of income usually results significant benefits such as the improvement of farmers' standard of life, and expanding of the scope and the type of their production. In certain cases the additional non-farming occupation may become predominant, and replace previous farming operations, especially when the two are not related (Wojewodzic, 2017).

Undoubtedly, alternative non-farming types of occupation have numerous advantages. Firstly, they help to alleviate social tensions in rural communities (Kowalska & Niedziółka, 2016) and, in the long run, help to revive the economy of rural areas by boosting the development of local businesses (Marcysiak & Prus, 2017; Reardon et al., 2007). Secondly, labour migrating from farming to non-farming jobs is beneficial for the economy of the whole country as it absorbs the surplus of employees who, due to unfavourable conditions, cannot be employed in other jobs (Roman & Roszkowska-Mądra, 2015). The aim of the research was to determine if farmers have the potential to pursue non-farming employment or if they can expand the scope of the existing production. To sum up, the author wanted to determine if the farmers were aware of this potential, if they wanted to pursue it, and finally which types of occupation they were particularly interested in.

2 Data and Methods

Rather than using a random group, the author pre-selected the respondents. In order to gather the empirical data, there was conducted a poll between 2014 and 2017 among 155 students of Master Agriculture studies, who were either land owners or lived on farms managed by their parents, and were going to succeed them in the near future. Different studies usually adopt the level of formal education as the universal measure of one's skills and professional knowledge (van den Ban & Hawkins, 1996; Zawisza & Pilarska, 2005; Kalinowski, 2011). This and other important criteria, such as having access to different sources of information or relying on professional advisory centres (Prus & Drzazdzynska, 2017) help farmers, who often encounter obstacles while organizing and managing their farms, overcome these barriers. They also increase entrepreneurship among farmers and other countryside dwellers, which has beneficial impact on the development of rural areas as a whole (Kielbasa, 2016). It can be safely assumed that the participants of the study will soon exert considerable impact on the shape of agriculture locally. Therefore, according to the Diffusion of Innovations Theory (Rogers, 1995; van den Ban & Hawkins, 1996; Zawisza & Pilarska, 2005), they are bound to become the potential future innovators and opinion leaders, who will be watched and followed by other countryside dwellers.

The empirical data obtained in the course of the study was analysed using the statistical hypothesis testing methods. The aim was to reveal if there is any relationship between the answers provided by the respondents and their farm size. The latter is an important variable, which represents the production potential of a particular farm (Ryś-Jurek 2008; Ryś-Jurek 2009; Satola et al., 2014). The majority of the respondents came from the Kujawsko-pomorskie province, so the author adopted the figure of 15 ha, which is the average farm size in the province, as the bordering value separating one group from the other. During the period in which the study was conducted, the average farm size in the province was 15.30 ha (2014), 15.40 ha (2015), 15.51 ha (2016) and 15.77 ha (2017). The figures for the whole country were respectively 10.48 ha, 10.49 ha, 10.56 ha and 10.65 ha (Agency for Restructuring and Modernisation of Agriculture, 2014; Agency for Restructuring and Modernisation of Agriculture, 2015; Agency for Restructuring and Modernisation of Agriculture, 2016; Agency for Restructuring and Modernisation of Agriculture, 2017). The Chi-Square Test of Independence was used to test the relationship between the variables, and the level of statistical significance was established as $\alpha = 0,01$. After the presence of the relationship has been confirmed, the author proceeded to define its character (direction) and strength. In order to that, there was established the Pearson contingency coefficient [C] and

the convergence coefficient [g]. Because the convergence coefficient can assume different values depending on which variables are treated as dependent or independent, it was always calculated twice for both events: g_{rc} (convergence: row to column) and g_{cr} (convergence: column to row) (Babbie, 2003; Dziekanski, 2016; Dziekanski, 2017; Gruszczyński, 1986; Sobczyk, 2004). The conducted statistical analysis proved that the differences between both groups were statistically relevant in two cases. The farmers' had different opinions regarding their readiness to undertake non-farming occupation, and they also presented different ideas as far as obtaining extra income was concerned (Table 1). The collected data was complemented by using additional tools such as unstructured and structured interviews. By means of asking supplementary questions, the author was able to obtain additional information, which allowed for more comprehensive approach to the discussed problem.

Table 1 Respondents' opinions versus farm area – discrepancy significance (the χ^2 test results, the Pearson contingency coefficient and the convergence coefficient)

Respondents' opinions with regards to:	χ^2 $\alpha_{=0,01}$	χ^2	C	g_{rc}	g_{cr}
the possibility to introduce new, or expanding the existing production	13.227	6.102	–	–	–
their willingness to start occupation bringing alternative income	13.227	32.367*	0.416	0.085	0.281
plans to pursue occupations bringing alternative income	16.812	49.591*	0.440	0.034	0.444
incentives in pursuing occupations bringing alternative income	18.475	16.089	–	–	–
barriers in pursuing occupations bringing alternative income	18.475	7.307	–	–	–

*Figure is significant for $\alpha=0.01$

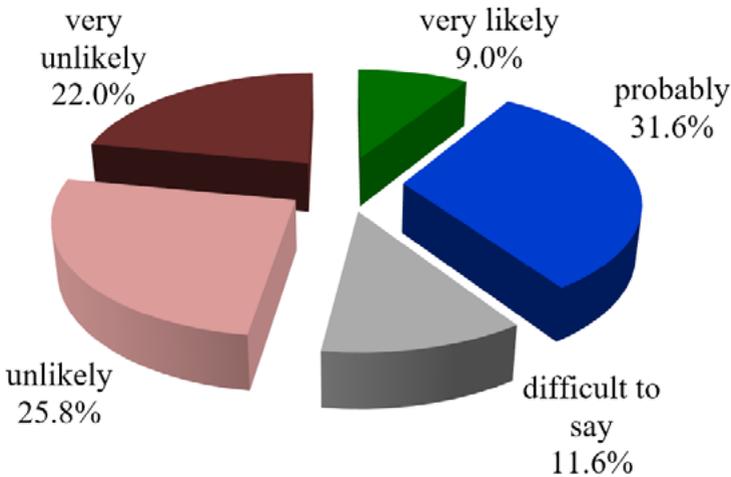
Source: Own research.

3 Results and Discussion

The research results present as follows: 40.6% of the respondents declared that they perceived the potential to engage in non-farming occupation or expand the existing production, 47.8% opined in the negative, while 11.6% of the polled did not provide a satisfactory answer (Figure 1). The statistical analysis (Table 1) confirmed that there was no relationship between the answers provided by

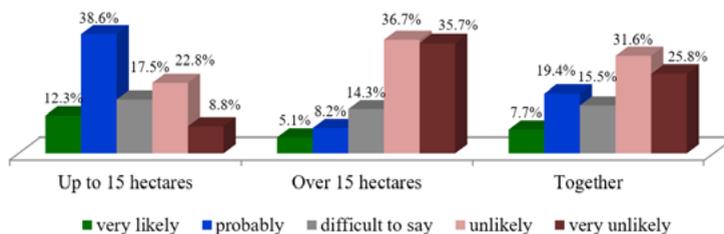
the respondents and the variable (farm size) distinguishing both groups. What regards questions about farmers' willingness to undertake occupation supplying them with an additional source of income, there were observed statistically relevant differences between the respondents from the two groups (Table 1). It was evident that although the farmers acknowledged the opportunity to start a non-farming occupation, the vast majority did not want to undertake it. Only 27.1% of the respondents admitted that they were ready to pursue such an opportunity (Figure 2). Interestingly, this opinion prevailed among the farmers from smaller farms (50.9%) rather than their colleagues managing larger areas (13.3%). It may mean that farmers managing smaller areas, especially if their production generates insufficient income, seek alternative income more urgently than farmers having bigger farms. In other words, larger farm owners have higher production potential and generate more income. What is more, they may be too busy to have time to pursue additional activities.

Figure 1 **Farmers opinions about the likelihood of introducing non-farming ventures**



Source: Own research.

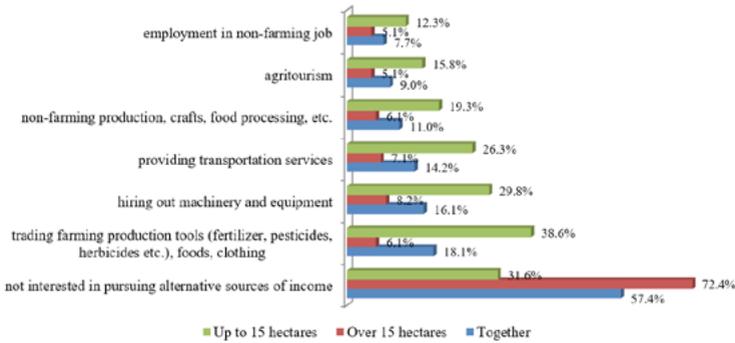
Figure 2 **Farmers opinions on pursuing non-farming occupation in the near future**



Source: Own research.

The following forms of non-farming occupations were the most popular among the respondents (Figure 3): the trading of farming production tools (fertilizers, herbicides, pesticides, etc.), food and/or clothing (18.1%), hiring out farming tools and equipment (16.1%), providing transportation services (14.2%), running non-farming production, producing crafts, processing food (11.0%) and agritourism (9.0%). What is more, 7.7% of the respondents considered non-farming employment. Again, significant statistical discrepancies were observed between the two groups (Table 1). Firstly, the respondents from smaller farms were more often willing to consider additional occupation. Secondly, the groups also exhibited significant differences as far as the type of the preferred additional activity. Respondents from bigger farms usually opted for hiring out tools and equipment and providing transportation services, which may be the consequence of their farms being better equipped with tools and machines. The respondents from smaller farms favoured different forms of trading, and non-farming occupation – unlike their colleagues from bigger farms, who ranked it third (together with “non-farming production”). These results correspond with the findings of the consumer behaviour study, which confirm that there are numerous consumers who prefer buying foods directly from farmers (Koreleska, 2017; Koreleska, Ziája 2016). They approve of farmers’ dual activity, and expect them to produce and sell food.

Figure 3 Farmers' ideas regarding starting new ventures, which may become an alternative source of income

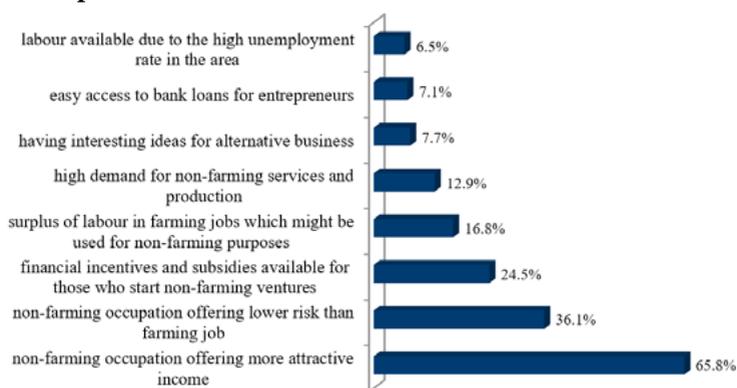


Source: Own research.

Naturally, farmers must consider all advantages and disadvantages of the new enterprise before they make a decision whether to pursue any alternative occupation or not. There is a number of factors which can help farmers to make the correct decision (Begley et al., 2005; Bienkowska-Golasa, 2015; Dobeš et al., 2017; Sikora & Bielski, 2017). Many respondents stressed that, unlike non-farming occupations, managing and maintaining farm production is a considerably more risky business (36.1%). They pointed at the changeable and unforeseen weather conditions (which are unlikely to affect non-farming occupations), unstable food markets and fluctuating food prices, the lack of delivery contracts, which means problems when selling foods, delayed payments, etc. as the main factors contributing to the high risk of running a farm. When compared to farm production, non-farming occupations can offer numerous benefits for entrepreneurs. Not surprisingly the major advantage for most respondents was more attractive income (65.8%). They also mentioned (Figure 4): financial incentives and subsidies available for those who start non-farming ventures (24.5%), surplus of labour in farming jobs which might be used for non-farming purposes (16.8%), high demand for non-farming services and production (12.9%), having interesting ideas for alternative business (7.7%), easy access to bank loans for entrepreneurs (7.1%), and availability of labour due to the high unemployment rate in the area (6.5%). There is a strong correlation between the author's research results and the findings provided by Wojewodzic et al. (2013) who studied the transformation of agriculture in south-eastern Poland. He pointed to different criteria, which may help more experienced farmers to gain advantage over beginners: the experience in running a farm, having assets (such as tractors, property, tools and machinery)

which might be used for other production purposes such as providing various other services, or as a collateral for bank loans. He argues that the existing scope and function of these assets may become limited (e.g. by selling it) or adapted to perform new functions. Other factors giving farmers the market advantage may include (Wojewodzic et al., 2013) the eligibility to apply for a cheaper farming insurance category in the initial stage of the business development, taking advantage of certain financial schemes such as the Public Fund for the Modernization of Agriculture and Rural Areas (development of micro-businesses, changing production profile to non-farming production types).

Figure 4 Farmers' opinions regarding incentives when pursuing non-farming occupations



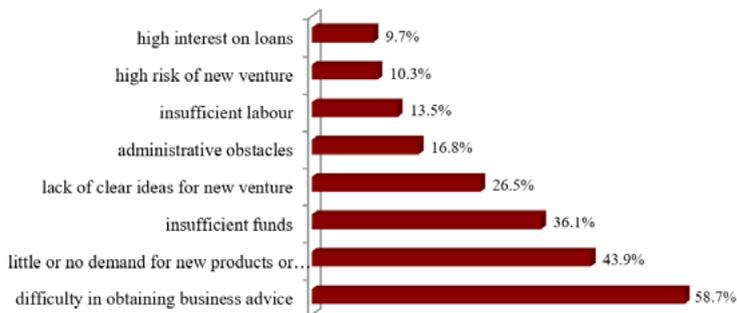
*Total exceeds 100% due to multiple correct answers

Source: Own research.

Unfortunately, there are also numerous obstacles which are likely to discourage farmers from starting new ventures (Meyer et al., 2016; Muhammad et al., 2017). The majority of the respondents pointed at (Figure 5) the lack of economic consulting (58.7%), little or no demand for the new services or products (43.9%), having insufficient financial means to start additional business (36.1%), not having a clear or interesting idea for the new occupation (26.5%), administrative hurdles and difficulty in overcoming them (16.8%), insufficient amounts of labour (13.5%), the fear that the venture will not be successful and will make a loss (10.3%), difficulties in obtaining cheap bank loans, which would guarantee sufficient funds for the new venture (9.7%). The lack of financial means needed for launching a non-farming business venture could be remedied by using the EU structural funds available within the framework of different operational

programmes (Satoła, 2009). However, in order to benefit from the funds, one must go through a lengthy and comprehensive application process.

Figure 5 Farmers' opinions regarding barriers when pursuing non-farming occupations



*Total exceeds 100% due to multiple correct answers

Source: Own research.

4 Conclusions

The study results proved that the majority of farmers were familiar with the issue of non-agricultural occupation. Although many of them saw the potential to expand their existing agricultural production to encompass new functions, few were ready to follow this path in the near future. Not surprisingly, the latter group predominantly included students living or managing smaller farms, which have smaller potential of agricultural production. Not surprisingly, these farmers seek additional sources of income, and the solution seems to be in the increasing of operational diversity. The most popular types of additional, non-farming occupations in the studied group were: different forms of trading, hiring out machinery and tools, and providing transportation services. The respondents knew of numerous incentives allowing them to pursue activities other than farming. They emphasized the prospect of increasing their income, while running a lower risk than in the case of farming production. They also mentioned the potential to obtain financial support from the funds reserved for the entrepreneurs who start new business ventures. At the same time, the respondents were aware of several serious barriers, which rendered any alternative business initiative unprofitable. They stressed the difficulty in obtaining professional business advice, little or no demand for the new products or services, having insufficient financial means to

start additional business and, finally, lacking in interesting ideas for new business ventures.

It must be stressed that the study focuses on a relatively small group of Master's students of Agriculture, a mere fragment of the whole farmer population in Poland, who have already run their own farm or were about to acquire it from their parents in the near future. Therefore, one should not generalize and apply the study findings to all Polish farmers. Having said that, the studied group may be regarded as innovators who will exert influence on the shape and development of the countryside. They are likely to introduce changes to their farming activities, and they are likely to be treated as innovators by the farming community. Therefore it is imperative to make them aware about the need to make these changes, becoming entrepreneurs and diversifying their income.

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