Institute of Rural and Agricultural Development

Polish Academy of Sciences

Tasks and functions of agricultural schools in Poland

From the perspective of key competences of students in terms of entrepreneurship and the sense of initiative

Scientific editor

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Introduction

Agricultural schools in Poland (both technical schools and basic vocational schools) have always held a peculiar status among vocational schools of the second level of the education system. In comparison with other technical schools or basic vocational schools, they were distinguished by less favourable social, environmental and educational characteristics of students [see Kwieciński 1995]. In a sense, we can risk the thesis that until the change of the system agricultural schools functioned in a manner similar to pre-war primary schools in rural areas within the social system. Being a place of education of young people for whom a number of unfavourable social and educational factors (determined by their place of residence, cultural capital of families of origin and school skills) have cumulated, they have become a tool of social reproduction of the most marginalised social category that farmers were for ideological reasons in the cultural, material and educational sphere. In this sense, "repressive tolerance" [Gorlach 1989] towards the only holders of private property in the People's Republic of Poland developed not only in an economic, but also educational aspect. Thus, agricultural school could not "overcome" the structural circumstances of its functioning in the same way that pre-war primary school in the countryside could not withstand the adverse impact of the environment in which it functioned. From this perspective, after the lapse of time its functions seem to be a specific continuation of functions that were fulfilled by rural pre-war primary school.

In spite of the changes that have occurred in Poland since 1989, tasks and functions of agricultural school do not seem to undergo significant transformations in the course of time, even though the above hypothesis is difficult to verify in the absence of research on the subject area under analysis. However, there are at least two facts that allow us to regard the above hypothesis as probable. Firstly, as a consequence of transformations occurring in Poland since the beginning of the 1990s, rural areas and agriculture were becoming marginalised even further in social and primarily economic terms, as they had to bear a significant burden of these transformations. Secondly, changes within the postprimary education system (i.e. an increase of the number of secondary schools of general education accompanied by a drastic reduction of basic vocational schools) resulting from a radical

increase of educational aspirations of the young generation gradually weakened the position of basic vocational schools within the structure of the second education level.

Only external factors that were related mainly to the approaching perspective of the integration of Poland with the European Union highlighted the problem of rural (and presumably agricultural) education, which was reflected by one of the aims of the reform introduced in 1999, which concerned the equalisation of educational opportunities of young people, with particular regard to young people from rural areas. Until the time of the reform, the authority in charge of agricultural schools was the Minister of Agriculture. In 1999 the management of agricultural schools, just like other secondary and vocational schools, was entrusted to county self-government authorities. Apart from administrative changes that occurred with regard to agricultural schools, it is necessary to point out a remarkable change of the context in which they have functioned since the middle of the 2000s and, consequently, the role fulfilled by them. In spite of many concerns expressed by various circles, the outcome of the inclusion of Polish agriculture in the structures of the Common Agricultural Policy seems to be definitely positive. Direct subsidies, funds for the modernisation of farms, bonuses for young farmers and a number of other activities addressed to rural areas and agriculture seem to support the theory that this occupation may be perceived by young people differently from what existed in the past.

The change of the context of functioning of agricultural schools resulted also in the change of their functions. Since 2004, this segment of secondary education has become a supplier of professional qualifications that are necessary in order to obtain subsidies from EU funds. At the same time, however, we have to keep in mind that, in spite of a series of favourable changes that have occurred in rural areas over the last two decades, the negative selection for living in the country (excluding, of course, suburban areas adjacent to large agglomerations) still remains a fact. Taking into account the specific nature of agricultural schools, we can suspect that social and educational characteristics of students from this segment of the secondary education system are not the most favourable. However, the essential problem arises not only from the potentially low cultural and educational capital of students of agricultural schools, but from current and future challenges posed for this segment of the secondary education system by changes occurring in rural areas.

In spite of the favourable changes in the structure of education of rural inhabitants after 1989, rural areas still have to make up for the long-year civilisation gap. The increase of the level of education of rural inhabitants over the last two decades can undoubtedly be called revolutionary, but the percentage share of people with higher education is still much lower in rural areas than in cities, even though in 2002 the percentage share of rural inhabitants having a higher education diploma was 2.5 times higher than shortly before systemic changes – 4.2% (the percentage share of people with higher education in cities was 13.2%) [NSP 2002]. At the end of the last decade, the percentage share of rural inhabitants with higher education was 7.5%, whereas among urban inhabitants it was 23.2%. At that time, 38.3% of urban inhabitants and 25.3% of rural inhabitants were persons with secondary and postsecondary education, whereas 20.2% and 28.5%, respectively, had basic vocational education. Persons with the lowest (primary, incomplete primary or middle) education accounted for 18.3% of urban inhabitants and 33.6% of rural inhabitants [Frenkel 2010].

Apart from transformations of the structure of education, the second challenge faced by rural areas is the diversification of professional activity of rural inhabitants and, primarily, the development of the great potential of the young generation. In 2008 people employed in the agricultural sector accounted for 14.2% of all employees in Poland [Poczta 2010] and 34% of all rural employees [Frenkel 2010]. As can be seen, the population working in the agricultural sector constitutes a large part of the entire professionally active population. However, the population of individual farmers is older than the population of non-agricultural employees [ibid.], which may slow down to a certain extent the processes of modernisation of farms and diversification of their activity.

Most of the unemployed people in rural areas (as in the case of cities) are persons aged up to 34 years – in 2009 young people accounted for 63.7% of all unemployed people. With the unemployment rate on the level of 22% in the age group of 18-24 in Poland, this rate was 17.2% among people connected with the agricultural sector and 25.3% among people in non-agricultural sectors [Frenkel 2010]. In this respect, we slightly exceed the EU average. As regards self-employed people, their percentage share in the total number of employees from non-agricultural sectors was 11.5% in the countryside and 12.9% in cities [Frenkel 2010: 57].

The situation of young rural inhabitants in undoubtedly difficult. The rural labour market is not capable of making use of the potential of the well-educated young generation. In 2009, unemployed people with minimum secondary education accounted for 51.4% of all unemployed people in Poland, 55.8% in cities and 37.9% in rural areas among people representing non-agricultural sectors and as many as 61.3% of people connected with the agricultural sector [Frenkel 2010]. Taking into account high educational aspirations of the young generation (including young people attending agricultural schools), education in agricultural schools may turn out to be a straight road to unemployment. However, cultural and educational capital of this group of young people constitutes a potential that may strengthen, if not activate change processes in rural areas. The way to change the situation of young rural inhabitants in the rural market may be the development of the sense of initiative and entrepreneurial attitudes. These are resources of a purely psychological nature existing within people, the activation of which may release mechanisms of change with a social reach.

The challenges that the agricultural education system in Poland has to face are addressed by the project *Reinforcement of key competences in terms of the sense of initiative and entrepreneurship among students of agricultural schools in Poland – CEKIN*, which is implemented under the Human Capital Operational Programme. Its essential aim is to develop key competences of students of agricultural schools in terms of entrepreneurship and the sense of initiative. Key competences are the response of the European Commission to changes occurring in modern societies, particularly those rooted in globalisation processes. The dynamically changing social reality generates new challenges for education systems of member states of the EU. For this reason, in the *Recommendation of the European Parliament and of the Council of the European Union of 18 December 2006* the European Commission indicated the need to develop key competences among citizens of member states; those key competences were defined as a combination of knowledge, skills and attitudes that are necessary for personal fulfilment and development, active citizenship, social inclusion and employment. The following eight key competences were set out:

- Communication in the mother tongue;
- Communication in foreign languages;
- Mathematical competence and basic competences in science and technology;

- Digital competence;
- Learning to learn;
- Social and civic competences;
- Sense of initiative and entrepreneurship;
- Cultural awareness and expression.

The aim of the research carried out under the HCOP project *Reinforcement of key competences in terms of the sense of initiative and entrepreneurship among students of agricultural schools in Poland – CEKIN* was to diagnose one of the eight key competences. This report constitutes a diagnosis of the sense of initiative and entrepreneurship of young people learning agricultural specialisations. Apart from the diagnosis of key competences of young people in agricultural schools in terms of entrepreneurship and the sense of initiative, the aim of the project was also to identify directions of development of agricultural education in Poland.

With the aims of the project in mind, two empirical surveys were carried out. The first survey *Key competences of students of agricultural schools in Poland* was carried out in 48 schools participating in the project. The survey was carried out using the diagnostic poll method, and the applied technique was the auditorium questionnaire. The survey was conducted among students of second classes of secondary technical schools providing education in occupations relevant to the agricultural & food sector. The decision that the survey would cover students of second classes resulted from the aim of the survey, i.e. the diagnosis of key competences with regard to entrepreneurship and the sense of initiative of students of agricultural schools. Considering the short presence of students of first classes in school (three months), carrying out such survey among them virtually excludes any possibility of identification of diagnosed key competences of students with their place for learning. In total, the survey covered 1,101 students attending technical schools with agricultural specialisations.

The second survey *Directions of development of agricultural education in Poland* was carried out at the same time at which the auditorium survey was carried out among agricultural school students. This survey was preceded by the preparation of the database of vocational schools providing education in occupations from the agricultural and food sector.

This database was created on the basis of data from existing Internet databases, websites of schools and information obtained from Agricultural Consultancy Centres. On the basis of the created database, CATI interviews were conducted. The aim of the survey was to diagnose the state of education in agricultural schools in Poland. In total, 342 interviews were carried out.

This report consists of six chapters. The first chapter contains an attempt to characterise the rural labour market, with particular regard to the situation of young people. The resulting characteristics of the rural labour market was aimed at showing the perspectives and limitations that are faced by the young rural generation at the time of reaching adulthood. The second chapter is aimed at presenting the changes that occurred in the Polish education system after 1989 and the position that the agricultural education system occupies in the system of education both on the secondary and higher level. The third chapter presents a comparative characteristics of students attending technical schools that provide education in the field of occupations relevant to the agricultural and food sector and their peers attending other schools of the same type that provide education in the field of non-agricultural occupations. The aim of this part of the report was to answer the question about the reasonability of the theory of the specific nature of agricultural schools in Poland, which suggested their difference in terms of social and educational characteristics of young people. The fourth chapter contains a diagnosis of key competences of agricultural school students in terms of entrepreneurship and the sense of initiative. The recognition of key competences of young people in agricultural schools constitutes a basis for analyses that are the subject-matter of the fifth chapter. In this part of the report, an attempt was made to determine characteristics of young rural inhabitants declaring different educational aspirations and professional plans with regard to their competences in terms of entrepreneurship and the sense of initiative. The final part of the report is devoted to social capital of students of agricultural schools. This subject area was included in the report because of the significant role that this kind of capital possessed by rural inhabitants plays in rural development. The potential of the young generation, which is reflected by its competences in terms of entrepreneurship and the sense of initiative, can be utilised to a larger extent in combination with social capital, which forms a sort of catalyst of individual resources.

Monika Stanny

Chapter 1

The rural labour market and the professional activity of rural inhabitants

Introduction

The rural labour market is a highly varied segment of the Polish labour market, which is largely different from the urban market in many respects. The heterogeneousness of the situation is determined, among others, by the place of residence. It must be remembered that rural areas (93.3% of the area of Poland) are inhabited by 38.2% of the Polish population (of which 57% is of the working age). These differences are caused by a series of factors, mainly those of demographic, social, economic, but also geographic nature.

The aim of this part of the report is the comparative analysis of the supply part of the labour market in rural areas and in cities, with particular regard to the situation of young people. The characteristics presented below are aimed at showing the context in which young rural inhabitants function, including agricultural school students who constitute a part of that community. Professional plans and aspirations of young people learning agricultural specialisations, which are analysed in the further part of the report and confronted with characteristics of the rural labour market presented in this chapter, will help to evaluate to what extent young people's ideas of their professional future reflect the surrounding reality. The chapter consists of four parts. In the first part the level of professional activity of the rural population is analysed, with generally applied methods of statistical description taken into account. The analysis begins with an overview of definitions, which is followed by a hierarchisation of concepts and a description of their primary statistics. An important part of this fragment is the analysis of the population structure according to professional activity, where the rural population is divided into two groups: the population in households having a farm and the other population (which can be called the farmless population). The analysis was made on the basis of data from several sources of information; namely, data obtained from the Regular Survey of Economically Active Population (RSEAP) as a primary and current

source[1], and results of the Polish Census 2002 and data of the Local Data Bank as supplementary sources.

The next subchapter covers characteristics of the rural subpopulation aged 15-24 years (which is also called young people) in terms of education and professional activity. The detailed analysis of the situation of rural young people on the labour market is covered by the subsequent subchapter. Conclusions were based on the RSEAP survey, which was enlarged with a questionnaire with the ZD-I symbol addressed only to persons born in years 1974-1994, the results of which are published by GUS in: *Wejście ludzi młodych na rynek pracy (The entry of young people into the labour market)*[2]. The analysis is static, refers to the year 2009 and covers the population aged 15-34 years.

The last part of the study presents the spatial differentiation of rural areas according to the employment rate and the unemployment rate, with special regard to the share of employed individual farmers. The fragment describing regional aspects of economic activity of the rural population has a supplementary function, and its task is to indicate the areas where problems of the rural labour market are the most difficult.

1.1 **Professional activity of the rural population**

The analysis of the level of professional activity of the population refers essentially to the group of persons aged 15 years and above and requires the entire population to be divided into two groups: the professionally active population and the professionally passive population. In the case of the rural population, it is important to distinguish between the population connected with the agricultural sector and the other population. What are the rates of professional activity in rural areas in the light of these categories?

[1] RSEAP (Regular Survey of Economically Active Population) determines the number of professionally active and passive people. The study covers a sample of persons aged 15 years and above. The use of the representative method makes it possible to generalise obtained results for the entire population of persons aged 15 years and above. The methodology of the survey is based on definitions recommended by the International Labour Organisation and Eurostat. Results of RSEAP are comparable on an international scale. In Poland, RSEAP has been conducted on a quarterly basis since May 1992 by the Central Statistical Office (GUS).

[2] *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku* (directed by A. Zgierska), Statistical information and studies, GUS, Warszawa 2010, p. 25.

In the beginning, let us clarify the definitions[3]. The professionally active population covers all persons regarded as employed[4] or unemployed. Among professionally active persons, the largest group consists of the employed for whom work is a source of income[5]. The category of professionally active persons includes also persons who have an additional source of unearned income while working, or, vice versa, they have mainly sources of unearned income, but also a supplementary source of earned income. The professionally active population at the working age is often defined as labour resources. This term is connected with the supply side of the labour market. Actual labour resources are represented by the employed, whereas potential labour resources are represented by the unemployed.

The professionally passive population (i.e. which remains outside the labour force) consists of persons who are not classified as the employed or unemployed, i.e. persons who during the analysed week did not work, did not have and did not look for any job and did not work, or did not work and looked for a job, but were not able (ready) to undertake it in the analysed week and the subsequent week[6].

The absolute number of professionally active persons is influenced significantly by specified limits of the working age. They determine mutual proportions between groups of the working age and the non-working age. A special role is played by the upper limit of general education, after which the wave of professionally active persons becomes intense, and the limit of the pension age, after which withdrawals from the labour market become

[3] The mentioned categories can be separated after 1989, whereas in years before the political transformation of Poland, including the year covered by the previous census (1988), only two groups of the population were distinguished: the professionally active and the professionally passive. This was due to the fact that the phenomenon of unemployment was not recorded in Poland at that time.

[4] The category of the employed included all persons aged 15 years and above, who during the week under analysis: performed for at least 1 hour any work generating earnings or income, i.e. were employed as a wage-earner, worked in their own (or rented) farm or carried on their own business activity outside the agricultural sector, helped (without remuneration) their families to run their farm or business activity outside the agricultural sector, were formally employed as wage-earners or self-employed persons even though they did not work (e.g. due to illness, leave, interruption in the activity of the plant, difficult weather conditions, strike). In accordance with international standards, the category of the employed included also school students with whom working places or natural persons concluded a contract for apprenticeship or training for a specific kind of work, if they received remuneration.

[5] Among professionally active (employed) persons, we can also distinguish: 1. the group of the unemployed for whom unregistered work ("grey market") is a source of income, 2. the group of self-employed persons, 3. owners of individual farms.

[6] According to the Polish Census, the category of professionally passive persons included persons having only their own source of unearned income and all dependent persons.

more frequent. Generally speaking, professional activity is influenced by a number of factors, including in particular[7]:

- demographic factors – structure according to age and sex, migrations, education;
- geographic factors – place of residence, location rent, transport accessibility;
- economic factors – effective demand for the labour force, real level of wages, labour costs, flexible forms of employment;
- welfare factors – as sources of non-earned income of households (benefits, allowances);
- social factors – preferred family model, consumption patterns, limitation of ability to work, attitudes to work.

Evaluating the level of professional activity, we use measures with a simple structure, such as:

- professional activity indexes –i.e. the share of professionally active persons in the population aged 15 years and above and the given group (distinguished, e.g., because of sex, place of residence, age or level of education);
- employment rate – i.e. the share of employed persons in the population aged 15 years and above and the given group;
- unemployment rate – i.e. the share of unemployed persons in the total population of professionally active persons and the given group;
- professional inactivity index –i.e. the share of professionally passive persons in the population of 15 years and above and the given group (distinguished, e.g., because of sex, place of residence, age or level of education).

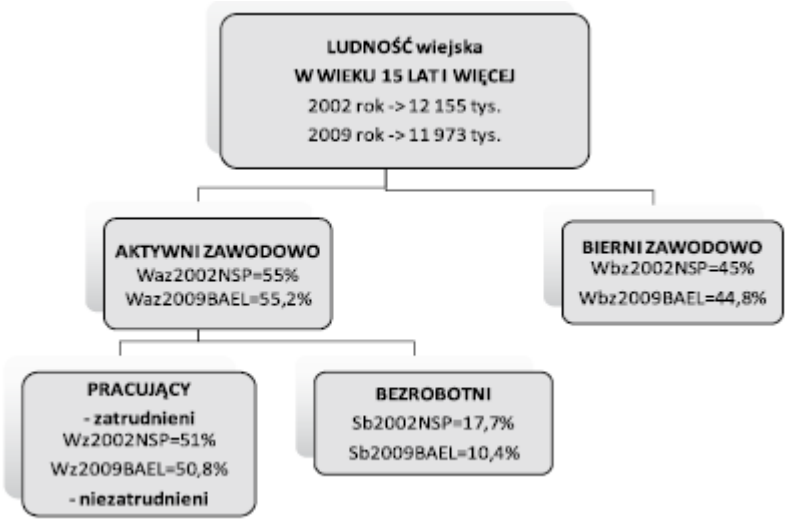
[7] M. Stanny, 2010, Ludność i jej aktywność zawodowa – tendencje zmian na obszarach wiejskich (Population and its professional activity – tendencies of changes in rural areas) [in:] Przestrzenne, społeczno-ekonomiczne zróżnicowanie obszarów wiejskich w Polsce (Spatial and social & economic differentiation of rural areas in Poland), ed. M. Stanny and M. Drygas, IRWIR PAN, Warszawa, p. 48.

The structure of professional activity of the rural population, which is presented schematically on Figure 1.1, shows hierarchical relations running from the top to the bottom in the professional structure of the rural population and the level of indexes calculated for each subpopulation acc. to the Polish Census 2002 and RSEAP 2009. This level indicates that the resource of persons aged 15 years and above is slightly diminishing, which is reflected by the trend of decrease of the number of persons of the working age. Employment and professional activity indexes of the rural population in Poland indicate the permanently low level (Figure 1.2), although in the middle of the 2000s, after the accession of Poland into the EU and with favourable economic conditions (both in Poland and worldwide), the unemployment rate index decreased along with the rise of the employment rate both in Poland and in the countryside (Figure 1.3). Strategic aims contained in EU documents, which specified, e.g., an increase in the employment level in Poland by 70% in the nearest years, seem to be very remote[8]. Changes in the unemployment level in Poland (Figure 1.4) indicate the decreasing difference in the value of the rate in relation to the place of residence – from 2002, when there was a distinct difference of around 4 pts between the urban rate and the rural rate, till 2008, when the value of the unemployment rate decreased to the level of almost 8% and there are no longer any significant differences in relation to the place of residence. In 2009 this trend turned around. Currently the unemployment rate in the countryside is similar to the urban rate, being higher according to unemployment registration data in County Employment Agencies and lower according to the RSEAP survey. The difference lies in the information collection method and in the definition of the unemployed person.

[8] In 2010, the European Council determined the Europe 2020 strategy for the next decade (Strategy for intelligent and sustainable growth favouring social inclusion, European Commission, Brussels, 3 March 2010), which assumed that in 2020 75% of persons aged 20-64 years should be in employment. However, translating the EU target into the domestic target, Poland adopted the employment rate on the level of 71%.

Figure 1.1

Division of the rural population according to professional activity (Polish Census 2002 and RSEAP 2009)[9]



Ludność wiejska w wieku 15 lat i więcej	Rural population aged 15+
2002 rok → 12 155 tys.	2002 → 12,155,000
2009 rok → 11 973 tys.	2009 → 11,973,000
AKTYWNI ZAWODOWO	PROFESSIONALLY ACTIVE PERSONS
Waz2002NSP = 55%	Waz2002NSP = 55%
Waz2009BAEL = 50,8%	Waz2009BAEL = 50.8%
BIERNI ZAWODOWO	PROFESSIONALLY PASSIVE PERSONS

[9] The basis of the RSEAP methodology are definitions concerning the professionally active population, the employed and the unemployed. The subject-matter of the survey is the situation regarding the economic activity of the population, i.e. the fact of performing work, remaining unemployed or professionally passive in the analysed week; thus, it refers to the current economic activity. Definitions used in the Polish Census 2002 were also related to current economic activity, but the scope of definition was different.

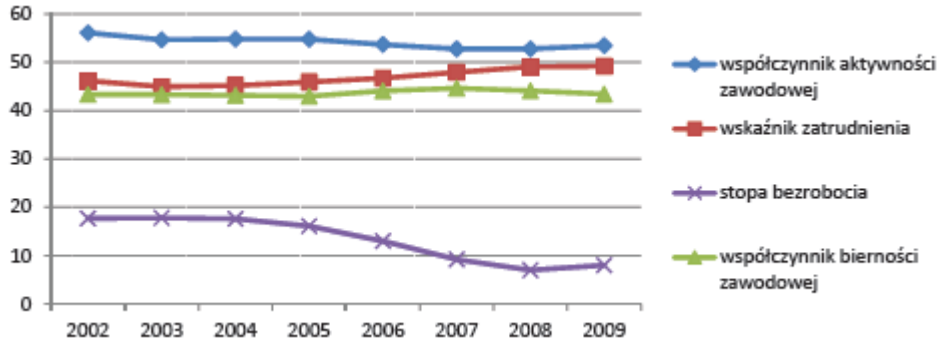
Wbz2002NSP = 45%	Wbz2002NSP = 45%
Wbz2009BAEL = 44,8%	Wbz2009BAEL = 44.8%
PRACUJĄCY	WORKING PERSONS
- zatrudnieni	- employed
Wz2002NSP = 51%	Wz2002NSP = 51%
Wz2009BAEL = 50,8%	Wz2009BAEL = 50.8%
- niezatrudnieni	- not employed
BEZROBOTNI	UNEMPLOYED PERSONS
Sb2002NSP = 17,7%	Sb2002NSP = 17.7%
Sb2009BAEL = 10,4%	Sb2009BAEL = 10.4%

Explanations: Waz – professional activity index; Wbz – professional inactivity index; Wz – employment rate; Sb – unemployment rate; 2002NSP – results of the Polish Census 2002; 2009BAEL – results of the Regular Survey of Economically Active Population from 2009

Source: own calculations on the basis of the Polish Census 2002, Warsaw, GUS, www.stat.gov.pl; Labour Force Survey in Poland in the Years 2003-2007, Warsaw, GUS, 2009, Tab. 1.7; Registered Unemployment in 2009, Warsaw, GUS, 2010, Tab. 15

Figure 1.2

Primary characteristics of professional activity in rural areas in the years 2002-2009



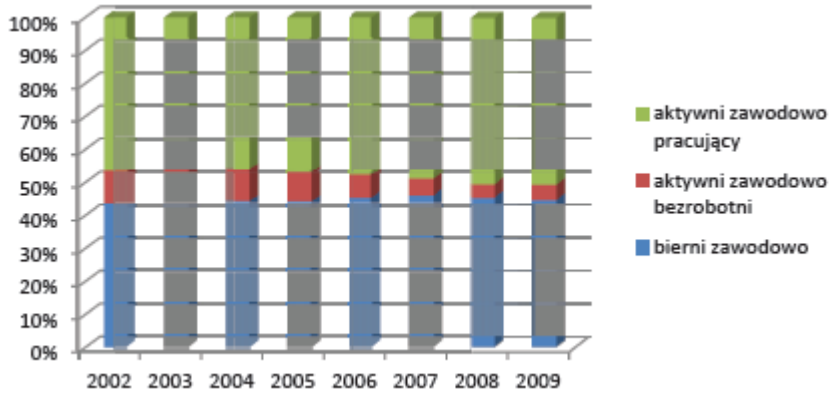
współczynnik aktywności zawodowej	professional activity rate
wskaźnik zatrudnienia	employment rate
stopa bezrobocia	unemployment rate
współczynnik bierności zawodowej	professional passivity rate

Source: own study on the basis of data from the Local Data Bank 1995-2010, date of download: 03.03.2011.

We must stress that such calculation of the index for rural areas takes account of the entire population living within rural areas (including the farmland population and the farmless population). The total labour market in Poland is less accessible to the rural population than to the urban population. The demand for labour in the countryside is low, and the level of employment of rural inhabitants is not equal to the number of workplaces existing there. The promoter of the local labour market is the city – often a small town being the centre of social & economic life of the commune. As a result of withdrawal from the labour market, which is often caused by exclusion from the transport system, the rural population enters the sphere of professional inactivity.

Figure 1.3

Population according to type of professional activity (cumulative value) in the years 2002-2009



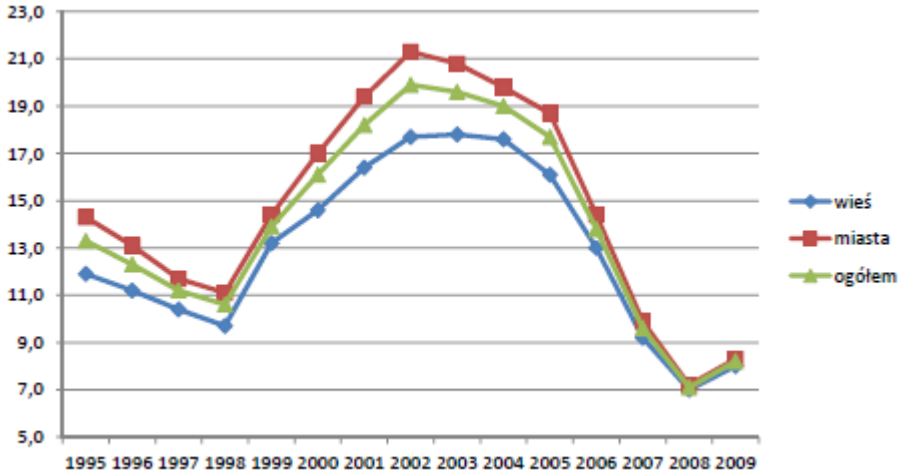
aktywni zawodowo pracujący	professionally active working persons
aktywni zawodowo bezrobotni	professionally active unemployed persons
bierni zawodowo	professionally passive persons

Source: own study on the basis of data from the Local Data Bank 1995-2010, date of download: 03.03.2011

The analysis of the population structure according to professional activity does not take account of the essential characteristics of the rural population, i.e. its division into two groups: the population in households having a farm and the other population (which can also be called the farmless population). The first of these groups covers approx. 60% of the rural population, whereas the second one covers approx. 40%. These groups should not be mistaken for persons working in and outside the agricultural sector, because a part of people in farming families works outside the farm and a part of the farmless population works in the agricultural sector (however, it is work for hire).

Figure 1.4

Unemployment rate according to the place of residence in the years 1995-2009



wieś	countryside
miasta	cities
ogółem	total

Source: own study on the basis of data from the Local Data Bank 1995-2010, date of download: 03.03.2011

Of course, there are also unemployed and professionally passive persons. The vast majority of "registered" unemployed persons consists of persons in farmless households; in the case of persons in farmers' households, the overwhelming majority of excess labour resources is not registered and assumes the form of hidden employment. This is determined by the legal system limiting the possibility of registration of unemployed persons staying in farms and the "family character of farms". Because of this family character of farms, each family member who does not have any other job will find a job in the farm (whether economically justified or not) and, on the basis of income from the farm, will satisfy his/her needs to the same extent that any other family members will do. The overall aim of management is the economic safety of the family rather than the maximisation of profit or efficiency. In this way, the farm can "manage" and utilise spare labour resources of the family, even though this may be economically unjustified[10].

[10] A. Rosner, M. Stanny, 2008, Wykorzystanie zasobów pracy na wsi – uwarunkowania, bariery, nowe rozwiązania instytucjonalne (The use of labour resources in the countryside – conditions, barriers, new

Table 1.1

Professional activity in the countryside acc. to connection with the farm (age of 15 years and above)

POPULATION IN HOUSEHOLDS WITH A FARM	FARMLESS POPULATION
Share in the rural population: approx. 60%	Share in the rural population: approx. 40%
acc. to the Polish Census 2002	
Employment rate **W_z = 52.8%**	Employment rate **W_z = 34.3%**
Unemployment rate **Sb = 13.4%**	Unemployment rate **Sb = 31%**
according to RSEAP 2003	
Employment rate **W_z = 57.6%**	Employment rate **W_z = 33.4%**
Unemployment rate **Sb = 11%**	Unemployment rate **Sb = 28%**
according to RSEAP 2007	
Employment rate **W_z = 60.5%**	Employment rate **W_z = 39.4%**
Unemployment rate **Sb = 5%**	Unemployment rate **Sb = 14%**

Source: own calculations on the basis of the Polish Census 2002, Warsaw, GUS; *Labour Force Survey in Poland in the Years 2003-2007*, Warsaw, GUS, 2009, Tab. 1.7

The survey of professional activity in the countryside acc. to connection with the farm (Table 1.1) informs us about the higher employment rate and the lower unemployment rate among the population connected with the agricultural sector and, *vice versa*, about the low employment rate and the high unemployment rate among the farmless population[11].

institutional solutions) [in:] Wyzwania przed obszarami wiejskimi i rolnictwem w perspektywie lat 2014-2020 (Challenges for rural areas and agriculture in the perspective of the years 2014-2020), ed. Marek Kłodziński, IRWIR PAN, Warszawa, p. 48.

[11] The outright statement that the employment rate reflects persons "employed in the farm" cannot be treated literally. These are the persons who perform various – not always necessary – activities in the farm and, according to the subjective declaration during the Agricultural Census (here from 2002), are employed in the farm.

1.2 General social & professional characteristics of the rural subpopulation aged 15-24 years

The subpopulation of young persons covering cohorts between 15 and 24 years of age accounted for nearly 1/5 of labour resources in Polish rural areas in 2009. For comparison, this share was 4 pps lower in cities, amounting to 15%. It is worth pointing out that in the decade 2000-2010 the labour market was entered by the generation of the second post-World War II baby boom of the 1980s.

This community is diversified in terms of the level of completed education, which is related to individual cohorts in the given age going through selected types of education, which are closely correlated with one another and arranged in the appropriate order. In the aspect of higher education, it is difficult to analyse the group concerned, because it is the time when education is continued at this level. However, in accordance with national trends, a higher share of women than men is noted here. As regards men, they have more often secondary vocational education or basic vocational education. In general, every second woman and every third man of this age (Figure 1.5) has minimum secondary education.

Urban young people are better educated than rural young people. Thus, the share of employed persons with minimum secondary education is higher in cities than in the countryside. In cumulative values, over 40% of employed rural young people have maximum vocational education, whereas among their urban peers this share is twice as low (Figure 1.6). In spite of larger access to the labour market in cities, over 70% of unemployed urban young people have secondary or higher education, whereas in the countryside this share is 10 pps smaller (Figure 1.7). It is difficult to put a clear interpretation on these values. Without profound quality surveys we can only presume that requirements of urban young people as to the labour market are higher, and this is why the percentage share of the unemployed in this group is so high.

Figure 1.5

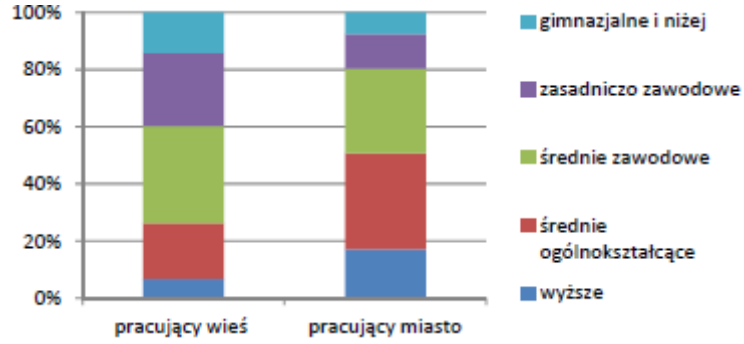
Young people aged 15-24 years according to the level of education and sex in rural areas in Poland

gimnazjalne i niżej	middle-school and lower education
zasadnicze zawodowe	basic vocational education
średnie zawodowe	secondary vocational education
średnie ogólnokształcące	secondary general education
wyższe	higher education
mężczyźni	men
kobiety	women

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 45

Figure 1.6

Employed persons aged 15-24 years according to the level of education in rural areas in Poland

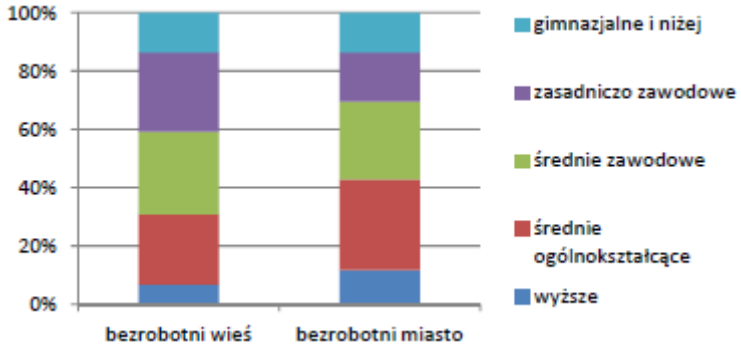


gimnazjalne i niżej	middle-school and lower education
zasadnicze zawodowe	basic vocational education
średnie zawodowe	secondary vocational education
średnie ogólnokształcące	secondary general education
wyższe	higher education
pracujący wieś	working persons (countryside)
pracujący miasto	working persons (city)

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 46

Figure 1.7

Unemployed persons aged 15-24 years according to the level of education in rural areas in Poland



gimnazjalne i niżej	middle-school and lower education
zasadnicze zawodowe	basic vocational education
średnie zawodowe	secondary vocational education
średnie ogólnokształcące	secondary general education
wyższe	higher education
bezrobotni wieś	unemployed persons (countryside)
bezrobotni miasto	unemployed persons (city)

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 48

The subpopulation under analysis is characterised by high professional inactivity resulting from mainstream middle and secondary education (even though it is no longer compulsory on that successive level) and the high gross enrolment index regarding higher education (19-24 years), which reached nearly 40% in 2002 (acc. to the Polish Census). These specific features are essentially dependent not on the place of residence, but on the educational model, the social environment and the national education system.

The RSEAP survey[12] showed that every third young person in the countryside is already employed, whereas every fifth professionally active person is registered as an unemployed person. Parameters for urban young people are less favourable. Consequently, over 70% of persons aged 15-24 years in cities are professionally passive, whereas in the countryside this index is slightly lower – 64% (Figure 1.8). The employment rate and the unemployment rate calculated for all rural inhabitants, without inclusion of specific features of professional activity of the population connected with the agricultural sector and the farmless population, distort statistically the actual problems of the rural labour market. Actually, as has already been mentioned in the preceding subchapter, the population in individual farms is characterised by the higher employment rate and the lower unemployment rate than for farmless rural inhabitants.

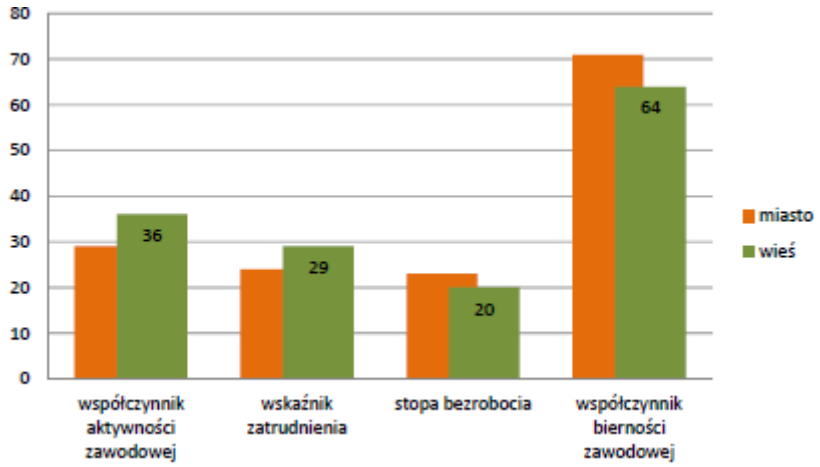
Statistics are also diversified with respect to sex. In this age group, men are characterised by the higher employment rate, whereas women hold more often the status of an unemployed person. Women are prevalent in the group of professionally passive persons, which means that a generally higher level of professional activity is among men (Figure 1.9). Factors of such distribution of values include guardianship functions that are fulfilled more frequently by women, particularly at the stage of family development, and their higher gross enrolment ratio.

The Regular Survey of the Economically Active Population helps to separate a population of persons employed according to their employment status in the main working place (Figure 1.10). 95% of urban young people constitute a hired labour force, i.e. are employed under employment relationship in a public enterprise or with a private employer. More diverse forms of employment occur among rural young people, because 8% of them conduct business activity, more than 13% of them help their families to conduct family business activity without contractual remuneration, whereas 78% of them are hired workers.

[12] Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009) (directed by A. Zgierska), Statistical information and studies, GUS, Warszawa 2010, p. 25.

Figure 1.8

Primary characteristics of professional activity of young people aged up to 25 years according to the place of residence

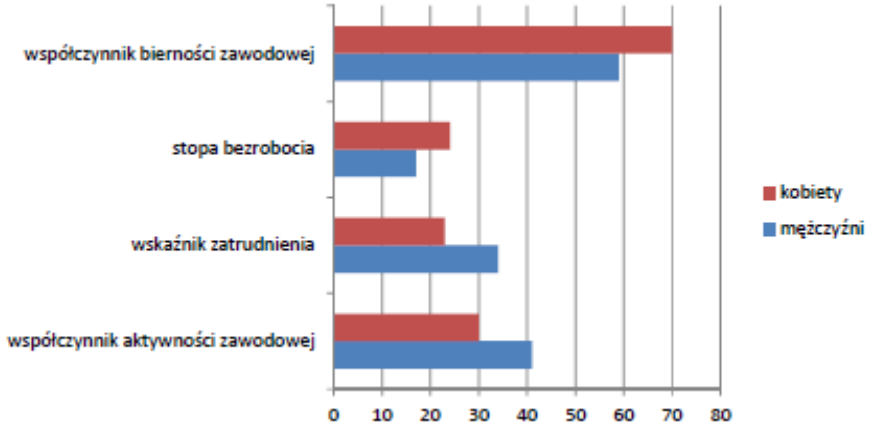


miasto	city
wieś	countryside
współczynnik aktywności zawodowej	professional activity rate
wskaźnik zatrudnienia	employment rate
stopa bezrobocia	unemployment rate
współczynnik bierności zawodowej	professional passivity rate

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 42-43

Figure 1.9

Primary characteristics of professional activity of rural young people aged up to 25 years according to sex



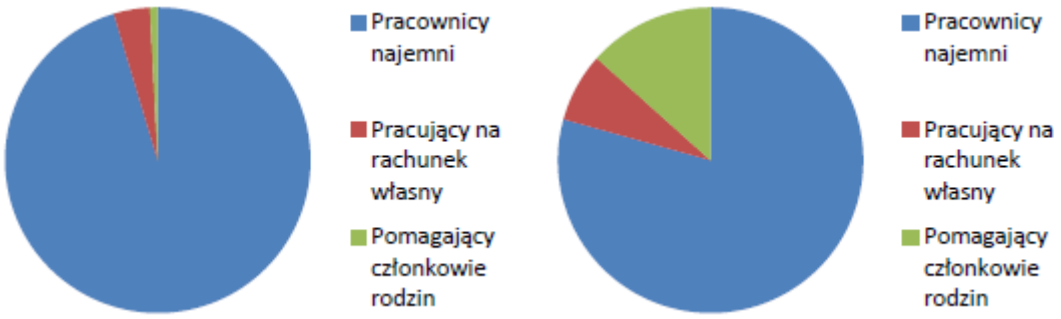
kobiety	women

mężczyźni	men
współczynnik bierności zawodowej	professional passivity rate
stopa bezrobocia	unemployment rate
wskaźnik zatrudnienia	employment rate
współczynnik aktywności zawodowej	professional activity rate

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 43

Figure 1.10

Employed persons within the age group of 15-24 according to the employment status in the main working place



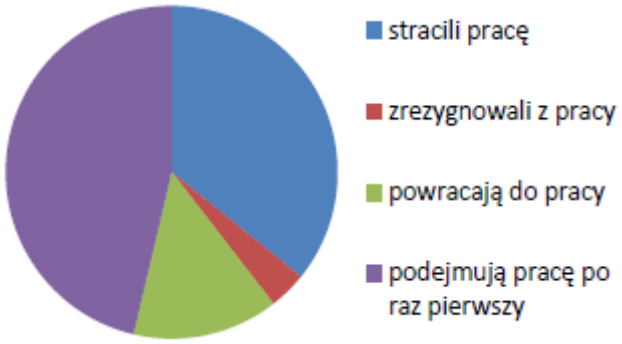
city **countryside**

Pracownicy najemni	Hired employees
Pracujący na rachunek własny	Self-employed persons
Pomagający członkowie rodzin	Helping family members

Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 47

Figure 1.11

Unemployed persons in rural areas in the age group of 15-24 acc. to categories



stracili pracę	lost their job
zrezygnowali z pracy	gave up work
powracają do pracy	return to work
podejmują pracę po raz pierwszy	take up work for the first time

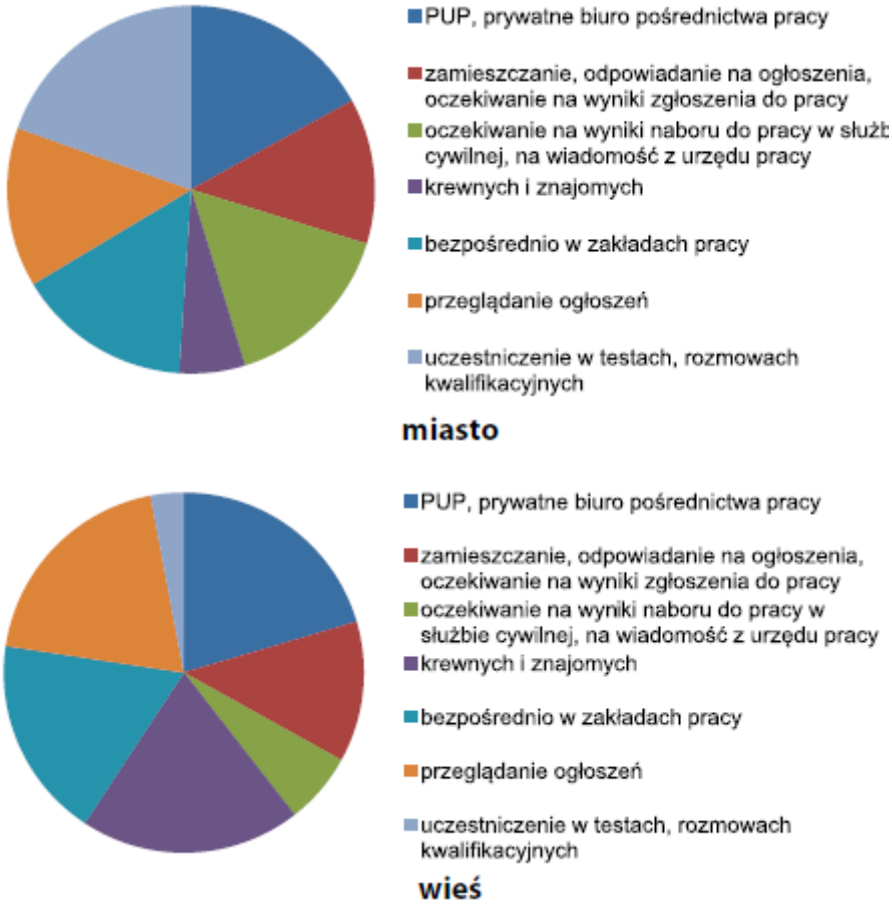
Source: own study based on RSEAP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warszawa 2010, p. 50

Rural young people functioning on the labour market are often affected by the problem of unemployment. In 2009 nearly 46% of unemployed rural inhabitants in the age group of 15-24 years were persons who looked for their first job, i.e. they were entering the labour market, whereas every third person was unemployed because of the loss of their job (Figure 1.11).

The most frequent method of finding a job by rural young people was to search for a job through employment agencies, cousins and friends and to scan advertisements or to contact workplaces personally. A small margin of those young people makes use of recruitment procedures by participating in tests and interviews, or as a result of competition-based recruitment in civil service. Conversely, the last two methods of acquiring a job are practised particularly often by urban young people, whereas offers obtained from cousins and friends are a less popular method (Figure 1.12).

Figure 1.12

Unemployed persons acc. to job search methods



PUP, prywatne biuro pośrednictwa pracy	County Labour Office, private job centre
zamieszczanie, odpowiadanie na ogłoszenia, oczekiwanie na wyniki zgłoszenia do pracy	posting and responding to advertisements, waiting for a decision concerning the job application
oczekiwanie na wyniki naboru do pracy w służbie cywilnej, na wiadomość z urzędu pracy	waiting for results of recruitment for work in civil service, or for a message from the labour office
krewnych i znajomych	cousins and friends
bezpośrednio w zakładach pracy	direct visits to workplaces
przeglądanie ogłoszeń	scanning of advertisements
uczestniczenie w testach, rozmowach kwalifikacyjnych	participation in tests and interviews
miasto	**city**
wieś	**countryside**

Source: own study based on RSAEP, *Wejście ludzi młodych na rynek pracy w Polsce w 2009 roku (The entry of young people into the labour market in Poland in 2009)*, Statistical information and studies, GUS, Warsaw 2010, p. 48-49

1.3 The situation of rural young people aged 15-34 years on the labour market after completion of education[13]

The unbalance occurring on the labour market among young people constitutes a basis for seeking of solutions aimed at improving the adjustment of demand for labour and supply of labour. This problem is difficult to solve, mainly because disproportions between demand for young employees and their qualifications and the quality of the labour force of young people result very often from the lack of correlation between the education system and actual needs of local and regional labour markets. A consequence of these disproportions is structural unemployment, which is very difficult to reduce within a short period of time. Thus, the basic challenge should be to reinforce connections between labour market programmes and educational programmes and to subordinate their implementation to local development strategies[14].

The Regular Survey of Economically Active Population makes it possible to separate the population of learning persons and the people who have recently completed their education and to monitor their situation on the labour market on a running basis. This possibility is offered by the modular survey *The entry of young people into the labour market* carried out by means of an additional questionnaire with the symbol ZD-I, which was addressed mainly to persons born in the years 1974-1994, covering cohorts in the age group of 15-34. On the basis of this material, it was shown that rural young people in Poland combined education with employment more frequently (27% in cities vs. 33% in the countryside). Activities undertaken by rural inhabitants included both works within and outside the scope of the

[13] The detailed analysis of rural young people was based on the RSEAP modular survey extended with a questionnaire with the symbol ZD-I, which is addressed only to persons aged 15-34 years at the time of the survey. Results are contained in GUS' publication *The entry of young people into the labour market*. The analysis is static and refers to the year 2009. The modular survey is an additional survey, which is carried out simultaneously with the primary survey. In the case of SREAP modules, surveys are devoted to certain topics related to the labour market and are carried out once (or periodically) for a sample of flats selected randomly for the performance of SREAP in the given quarter. The main aim of the modular survey *The entry of young people into the labour market* carried out in each member state of the European Union was to *"compile a universal and comparable set of data concerning the entry of young people into the labour market, which will help to monitor the progress in the implementation of common objectives of the European Employment Strategy and the social integration process".* For more information, see: op. cit, p. 13.

[14] E. Kryńska, 2010, Rozwój zasobów i miejsc pracy na Mazowszu. Uwarunkowania społeczno-gospodarcze (Development of labour resources and workplaces in the Mazovian Region. Social and economic circumstances), IPiSS, Warszawa, p. 283.

curriculum in 54% and 38% relation. This is, obviously, connected with the type of schools attended by young people. Young people from rural areas attend more frequently vocational schools where practical work experience is combined with the curriculum.

According to the quoted survey, rural young people looking for a job represent mainly education in fields covering "general" curricula (as many as 42%), then in engineering, production processes and construction (26%) in social & economic sciences (13%). Profiled agricultural or veterinary education was represented only by 5% of young people. These persons usually found their first job only after 12 months from the moment of graduation. This tendency is also typical of other fields of education. It is generally noted that the time of looking for the first job has a polar distribution, because it usually lasts above 12 months or up to 2 months.

Every third person having a diploma in agricultural or veterinary sciences worked in agriculture, horticulture, forestry or fishery, every fifth person worked as a personal service employee or a shop assistant, whereas every tenth person did simple jobs or worked as a fitter or operator of machinery and equipment. As regards the reasons of not working in the acquired profession, as many as 71% of young people from rural areas declared that they had not found any job which would suit their field of specialisation, 15% chose a job offer with better remuneration, whereas 9% did not want to work in their profession.

As regards persons engaged in agriculture-related occupations[15] they usually completed education [16] in engineering, production processes and construction industry (31%), agriculture and veterinary medicine (25%) and general curricula (23%). The first employment of rural young people working as farmers which lasted longer than 3 months was actually self-employment (45%) or employment as a helping family member (49%). This employment was usually found with the help of family and friends (47%) or by establishing one's own business activity (27%). Persons aged 15-34 who took up farming as an occupation usually had vocational education after the completion/suspension of education: basic vocational education (37%) and secondary vocational education (32%), then middle school and lower education (19%), higher education (7%) and secondary general education (5%).

[15] Horticulture, fishery or forestry are also included here.
[16] The analysis does not take education thresholds into account.

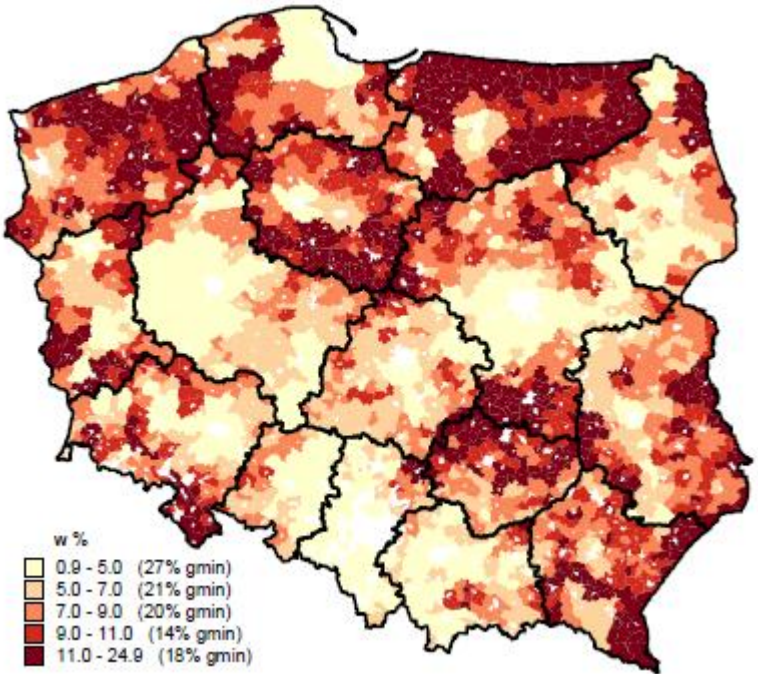
1.4 Spatial aspect of the employment level and the unemployment level

Because of the specific employment relationship in family farms, there are very rare cases of unemployed persons in farmers' families within the meaning of laws and regulations, on the basis of which unemployed persons register their status in the employment agency. Most of the registered unemployed persons among rural inhabitants come from farmless families. Persons coming from farmers' families who do not have any other education become "employed" in farms. This is partly reflected by data of the Polish Census 2002, on the basis of which it can be calculated that the unemployment rate (according to the method assumed in the Census, which is different from registration data and from the definition used in RSEAP) was 13.4% among persons from farmers' families, as compared to 31.0% for persons from farmless families. These differences are confirmed by the employment rate, which amounted to 52.8% for the population aged 15 years or more from farmers' families and 34.3% for the same population from farmless families (for more information, see Table 1.1).

The unemployment that has been registered in the countryside for a number of years is characterised by relatively stable spatial distribution (Figure 1.13). The highest unemployment rate remains in western and northern Poland, in areas of high share of the former state sector in agriculture, in the Kielce Region and in the Cuiavian-Pomeranian Province.

Figure 1.13

Registered unemployment (share of registered unemployed persons in the population of the working age)



w %	in %
0.9 – 5.0 (27% gmin)	0.9 – 5.0 (27% of communes)
5.0 – 7.0 (21% gmin)	5.0 – 7.0 (21% of communes)
7.0 – 9.0 (20% gmin)	7.0 – 9.0 (20% of communes)
9.0 - 11.0 (14% gmin)	9.0 – 11.0 (14% of communes)
11.0 – 24.9 (18% gmin)	11.0 – 24.9 (18% of communes)

Source: own work, BDL 2008, GUS, www.stat.gov.pl, date of download: 03.09.2010

In the countryside, apart from unemployment registered in the office system, there is also hidden unemployment in the form of excess employment in family farming. The estimation of excess employment in agriculture is a complicated procedure and there is no commonly accepted method that could be used for making unquestionable calculations. The last survey of this kind was carried out during the Polish Agricultural Census in 1996[17]. It

[17] In this case, the method elaborated in the interwar period (1918-1939) by the then Institute of Social Economy for the estimation of hidden unemployment (redundancy rate) in the agricultural sector was used. The following question was asked: Who (from among those employed mainly or only in farms) could take up a regular full-time job without detriment to farm production?

turned out that the number of persons working in farms who are "redundant" exceeded 800,000, which meant that the rate of excess employment in the family farming sector was approx. 20%.

In terms of spatial distribution, hidden unemployment in peasant agriculture is concurrent with registered unemployment. Its spatial distribution was influenced mainly by two factors: the loss of jobs by persons who had worked both in and outside farms and difficulties in departure to non-agricultural sectors for adolescents from peasant families[18]. The highest level of hidden unemployment was reached in the former Galicia region and in rural areas surrounding the former Central Industrial Region (COP). In this case, the high level of hidden employment also goes hand in hand with the high level of registered unemployment. Similar dependence can be observed in Middle Pomerania, which consists of former state farm lands. A relatively lower level of unemployment (in both aspects) occurs in the Wielkopolska Province, suburban regions around biggest urban centres and the demographically old eastern part of Poland (in particular the Podlasie region).

The last survey of the scale of hidden unemployment in agriculture using the subjective method was carried out 15 years ago; now we can only rely on conclusions from indirect analyses[19]. A certain idea of the scale of "potential" excess employment in agriculture can be obtained on the basis of spatial differentiation of employment in family farming per 100 ha of arable land. Figure 1.14 presents a spatial differentiation of this rate according to the Polish Census 2002 in groups of 20% of communes. It shows that the largest reserves within the scope of "potential" excess employment in the family farming sector occur in central and south-eastern Poland, and the distribution is strongly correlated with the distribution of the "redundancy" rate in 1996.

The key problem of Polish rural areas is the need to reduce the number of employees in the agricultural sector for the benefit of its development in non-agricultural spheres. The trend towards these changes developed almost continuously, although rather at a slow

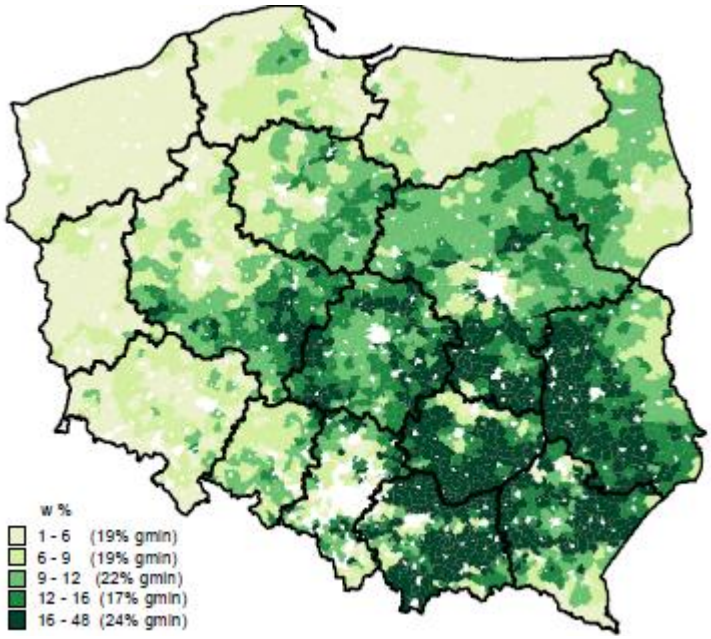
[18] A. Rosner, 2002, Wiejskie obszary kumulacji barier rozwojowych (Rural Areas of Cumulation of Development Barriers), IRWIR PAN, Warszawa, p. 17.

[19] One of such bases for the assessment of changes of the scale of hidden unemployment in agriculture is the analysis of effective working time of persons employed in farms. According to assessments by Prof. Frenkl (2007), persons employed in their farm (or farm lot) worked for 4.7 hours a day on average in 2002, whereas in 2005 the average number was only 4.0 hours. These figures show that persons employed in family farming work for a shorter time than a person employed in a non-agricultural sector does on a "full-time basis".

pace, from the first postwar years till the end of the 1980s. The economy restructuring process which started at the beginning of the 1990s and the accompanying reduction of excess employment in many key branches of economy led to the worsening of the situation on the labour market. Consequently, the share of persons employed in the agricultural sector in the total number of rural employees in the years 1988-1995 rose from 56% to 62%. This rate diminished gradually in further years. According to RSEAP data in the years 2000-2009, the value of the share decreased from 45.5% to 32.1%.

Figure 1.14

Persons employed only or mainly in agriculture (individual farms) per 100 ha of arable land

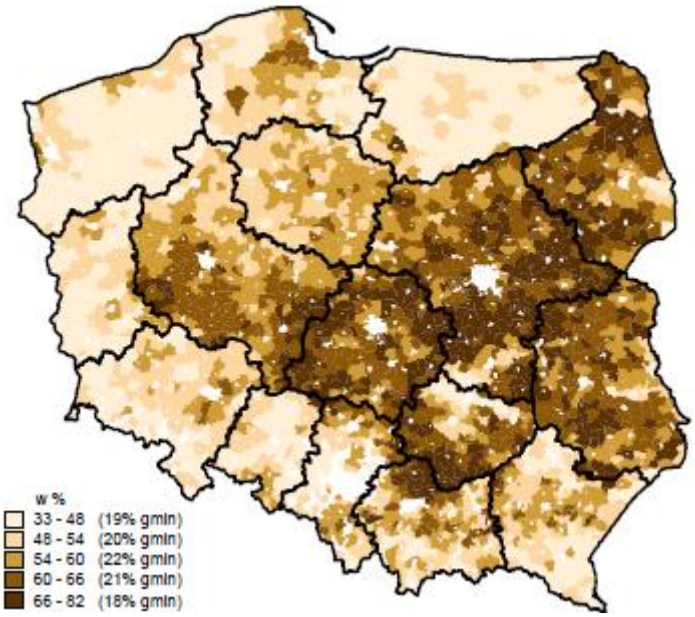


w %	in %
1 - 6 (19% gmin)	1 - 6 (19% of communes)
6 - 9 (19% gmin)	6 - 9 (19% of communes)
9 - 12 (22% gmin)	9 - 12 (22% of communes)
12- 16 (17% gmin)	12- 16 (17% of communes)
16 - 48 (24% gmin)	16 - 48 (24% of communes)

Source: own work, Polish Census 2002, Central Statistical Office (GUS), Information Access Department

Figure 1.15

Employment rate in the working age population



w %	in %
33 - 48 (19% gmin)	33 - 48 (19% of communes)
48 - 54 (20% gmin)	48 - 54 (20% of communes)
54 - 60 (22% gmin)	54 - 60 (22% of communes)
60- 66 (21% gmin)	60- 66 (21% of communes)
66 - 82 (18% gmin)	66 - 82 (18% of communes)

Source: own work, Polish Census 2002, Central Statistical Office (GUS), Information Access Department

The employment rate is a supplementary element of the spatial analysis of the rural labour market. Its spatial distribution in communal aggregation can be presented only with the use of data from the Polish Census 2002. The share of the employed in the total working age population is high in central and eastern Poland (Figure 1.15). In this region, the enclave of low values of the rate is the borderland of Mazovian and Świętokrzyskie provinces, i.e. the rural neighbourhood of cities such as Starachowice, Skarżysko-Kamienna and Ostrowiec Świętokrzyski. These are extremely monofunctional cities, which owe their very fast development to investments carried out in the area of the Central Industrial Region in the 1970s. Generally lower values of the employment rate occurred in Western and Northern Lands in the south-eastern part of the Subcarpathian Province.

Generally speaking, the rate assumes high values in regions of family farming that has not been transformed seriously by the processes of the 1990s and becomes lower in regions of the former state farms, in territories with an increased average farm area and in regions of extremely fragmented family farming, where a high percentage share of non-subsistence farms occurs.

When analysing the professional activity of the rural population, we should be aware of the specific "spatial" nature of rural areas and of the fact that there is actually no common rural employment market, but very many local markets in which rural inhabitants participate in various ways. These markets are often located in cities, especially smaller ones that function as local centres fulfilling various needs of rural inhabitants, including those related to employment or acquisition of means of subsistence.

Summary

Results of performed analyses indicate that the participation of young people (aged 15-24) in rural areas in higher than in cities. Rural young people are characterised by higher professional activity than urban young people. The number of the unemployed is also smaller among young rural inhabitants. However, we must keep in mind that the higher professional activity of rural young people may result from their involvement in the running of family farms. A characteristic feature of the situation of rural young people is larger differentiation with regard to the status of employment. Apart from the prevailing hired work, every twelfth representative of the rural young generation conducts business activity, whereas every eighth person participates in the running of family business.

Krzysztof Wasielewski

Chapter 2

Agricultural education system – state and prospects

Introduction

According to the small number of analyses, the interest of (rural) young people in agricultural jobs is very low [Szafraniec, 2001]. Also, parents do not want their children to learn occupations associated with the countryside. According to the CBOS survey, only 4% of parents want one of their children to learn an occupation connected with agriculture or environment protection. Only professions such as the politician, the scientist or sport-related occupations were ranked lower in that survey [CBOS, 2009: 7]. This situation results in the progressive depreciation of agricultural and related occupations in social awareness and the decreasing demand for education in secondary schools and schools of higher education with agricultural profiles. In turn, the lack of interest of rural young people in education in agricultural specialisations may have a negative impact on the functioning of agriculture and rural areas as the broadly understood social system.

2.1 Agricultural education system in Poland

Agricultural education in Poland is based on a weakly expanded system of secondary and vocational schools. However, it is difficult to access detailed information concerning, e.g., the number of schools providing education in agricultural profiles or the number of agricultural profiles being taught. For this reason, we decided to carry out a survey that would allow us to learn something more about the agricultural education system in Poland. For this purpose, on the basis of data available on the Internet (e.g. websites of schools) or obtained from Agricultural Consultancy Centres, we prepared a database of schools providing education in profiles connected with the agricultural and rural sector, such as agriculture, mechanisation of agriculture, mechanic-operator of farm vehicles and machines

or agrotourism. We made appointments and carried out CATI interviews with representatives of these schools, during which we asked them for primary information about vocational education in agricultural schools (e.g. the number of students, available education profiles) and opinions concerning educational prospects in agricultural occupations in the nearest future. In total, 342 such interviews were conducted, which corresponds to the number of secondary and vocational schools with agricultural profiles in Poland. Our respondents' answers constitute a source of analyses presented in this chapter.

Most of the schools covered by the survey are schools being a part of the vocational school complex (technical vocational school and/or basic vocational school) – as many as 185 schools with agricultural profiles are located in such complexes, which accounts for 53.8% of all schools of this type. Other schools are independent entities: technical agricultural schools – their number amounts to 150 (43.6% of all entities of this kind) and basic vocational schools – there are only 9 of them, which accounts merely for 2.6% of all schools with agricultural profiles.

Schools covered by the survey are attended by a total of almost 78.5 thousand students, of which 41.7 thousand are students of agricultural fields. It is slightly more than one half (53.1%) of all students in those schools. Technical schools are definitely much more common. These schools are attended by 65.9 thousand students, of which 35.3 thousand are students learning in technical schools with agricultural profiles. As regards basic vocational schools with agricultural profiles, they are attended by over 6.3 thousand students, which constitutes slightly more than one half (50.3%) of all students attending basic vocational schools. (see Table 2.1).

In total, young people attend 2,150 school divisions with agricultural profiles, including 1,807 divisions in technical schools and 342 divisions in basic vocational schools. The average number of divisions providing education in agricultural profiles is 19.4. The number of school divisions with agricultural profiles in technical schools (19.6) is slightly larger than in basic vocational schools (18.5 – see Table 2.1).

Table 2.1

Characteristics of agricultural schools covered by the survey

	Basic vocational school		**Technical school**		**Total**	
	Total	Only agricultural profile	Total	Only agricultural profile	Total	Only agricultural profile
Number of students	12565	6323	65930	35347	78495	41670
Number of school divisions	532	342	2899	1807	3431	2150
Average number of divisions per school	23.6	18.5	22.7	19.6	22.9	19.4

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Most basic vocational schools with an agricultural profile are located in rural communes – there are 53 of them. They contain 166 divisions that educate 2,801 students. In municipal-rural communes there are 32 basic vocational schools, which contain 86 school divisions and are attended by 1,654 students. In municipal communes there are also 32 basic vocational schools with 90 school divisions and 1,868 students.

The average number of school divisions is slightly bigger in schools located in rural communes (3.1) than in municipal communes (2.8). In spite of the larger number of divisions in basic vocational agricultural schools located in rural communes, the larger average number of students per school is in schools located in municipal communes. Basic vocational schools located in municipal communes are attended by 58.4 students on average, as compared to 52.8 and 51.7 students in schools located in rural communes and municipal-rural communes, respectively. This difference can be essentially attributed to two sources. The first one is the larger aggregation of students in municipal schools, which may result, among others, from the better school infrastructure. The second one relates to the smaller differentiation of profiles offered in schools located in municipal communes and their larger

diversity in schools in rural communes, which also seems to be indicated by the smaller average number of divisions in those schools (see Table 2.2).

Table 2.2

Spatial location of basic vocational schools with an agricultural profile

Type of commune	Basic vocational school				
	Number of schools with an agricultural profile	Number of divisions	Average number of divisions	Number of students	Average number of students per school
Rural	53	166	3.1	2801	52.8
Municipal-rural	32	86	2.7	1654	51.7
Municipal	32	90	2.8	1868	58.4

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

A slightly different tendency exists in agricultural technical schools. Most schools of this type (as many as 127) are located in rural communes, educating altogether 15,603 students in 846 divisions. In municipal-rural communes there are 57 such schools with 360 divisions, which are attended by 6,952 students. In municipal communes there are 80 agricultural schools with as many as 585 school divisions. They are attended by 12,413 students (see Table 2.3).

Although most agricultural technical schools are located in rural communes and are attended by the largest number of students, the average number of divisions with agricultural profiles per school is the biggest in schools from municipal communes – 7.3 on average, as compared to 6.7 in rural communes and 6.3 in municipal-rural communes. Even bigger differences can be observed when we look at the average number of students in agricultural schools in various types of communes. The biggest average number of students being taught in agricultural profiles is recorded for schools located in rural communes,

amounting to as many as 155.2. In schools of this type located in rural and municipal-rural communes the average number of students in agricultural classes is very similar, amounting to 122.9 and 122.0, respectively (see Table 2.3).

Table 2.3

Spatial location of technical schools with an agricultural profile

Type of commune	**Technical schools**				
	Number of schools with an agricultural profile	Number of divisions	Average number of divisions	Number of students	Average number of students per school
Rural	127	846	6.7	15603	122.9
Municipal-rural	57	360	6.3	6952	122.0
Municipal	80	585	7.3	12413	155.2

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

When comparing statistical data in basic vocational schools and technical schools with agricultural specialisations, we can notice a number of interesting regularities. Firstly, technical schools are remarkably more popular than basic vocational schools. This applies both to the number of schools and to the number of students. It is a characteristic tendency in the entire secondary and vocational education system. Secondly, both basic vocational schools and technical schools with agricultural profiles are visibly located more often in rural communes. Thirdly, school divisions with agricultural profiles (both in basic vocational schools and technical schools) located in schools in rural communes are remarkably smaller than those located in municipal communes; this applies both to the average number of divisions with agricultural profiles and to the average number of students in school divisions.

Let us now have a closer look at the spatial differentiation of the allocation of agricultural schools in division into provinces. The biggest number of agricultural schools (both among basic vocational schools and technical schools) is located in the following

provinces: Mazovian – 50, Lubelskie – 38, Warmian-Masurian – 29, Wielkopolskie – 28, Łódzkie – 26. On the other hand, the smallest number of schools is located in the following provinces: Świętokrzyskie – 4, Małopolskie – 8 and Lubuskie – 13. From among all schools covered by the survey, most are located in rural communes – 153, whereas in municipal-rural communes there are only 72 schools and in municipal communes there are 113 agricultural schools.

Table 2.4

The number of agricultural schools in particular provinces according to types of communes*

Province	**Type of commune**			**Total**
	Rural	Municipal-rural	Municipal	
Lower Silesian	9	5	4	18
Cuiavian-Pomeranian	9	8	7	24
Lubelskie	24	7	7	38
Lubuskie	3	3	7	13
Łódzkie	18	4	4	26
Małopolskie	6	0	2	8
Mazovian	24	10	16	50
Opolskie	5	7	4	16
Podkarpackie	6	5	8	19
Podlaskie	9	1	7	17
Pomeranian	6	4	6	16
Silesian	6	1	6	13
Świętokrzyskie	3	0	1	4
Wielkopolskie	10	8	10	28
Warmian-Masurian	13	5	11	29
West Pomeranian	2	4	13	19
Total	153	72	113	338

*absences of data were omitted

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Agricultural schools situated in rural communes constitute a majority in the following provinces: Świętokrzyskie (75.0% of all agricultural schools located in that province), Małopolskie (75.0%), Łódzkie (69.2%), Lubelskie (63.2%), Podlaskie (52.9%) and Lower Silesian (50.0%). On the other hand, in West Pomeranian (68.4%) and Lubuskie (53.8%) provinces agricultural schools are situated mainly in municipal communes. In Cuiavian-Pomeranian, Podkarpackie, Pomeranian, Silesian, Wielkopolskie and Warmian-Masurian provinces agricultural schools are located relatively proportionally in all types of communes (see Table 2.4).

2.2 Available education profiles in agricultural schools

It turns out that basic vocational schools offer relatively few agricultural profiles to their students. In total, there are only 9 such profiles in basic vocational schools contacted by us. The profiles that occur most frequently include: mechanic-operator of farm vehicles and machines – offered in as many as 57 schools, farmer – available in 31 school divisions, catering services (mainly cook) – 26, gardener – 20, motorcar mechanic – 6. Others, such as beekeeping or agrotourism, occur incidentally. The most popular education profiles, i.e. those that attract the biggest number of candidates, are: mechanic-operator of farm vehicles and machines – this profile is taught in 45 divisions of schools under analysis, catering services (mainly cook) – 38, motorcar mechanic – 26, gardener – 11, shop assistant – 11, farmer – 8 (see Table 2.5).

The juxtaposition of profiles being currently taught in schools and their popularity (which is evaluated by the school management on the basis of the number of applicants for the given specialisation) draws our attention particularly to a significant discrepancy between what schools teach and for which occupations they prepare their students and the occupations that young people would like to learn. There is relatively smaller demand for a majority of profiles offered by basic vocational schools (they are less popular among young people). The profile of mechanic-operator of farm vehicles and machines is taught in 57 schools, but only 45 schools regard it as a popular profile. In the case of the agricultural

profile taught in 31 schools, it was regarded as popular among the school youth only by representatives of 8 schools. The same goes for the horticultural profile, which is taught in schools more often than would be advisable on the basis of the actual level of interest in this profile among students.

The element that binds all education profiles together is their connection with agriculture. Undoubtedly, young people are not interested in education in agricultural profiles, at least in basic vocational schools. This is due to several reasons. Firstly, in present days young people do not esteem and are not interested in agriculture-related occupations. Secondly, young people tend to choose schools with a final graduation examination much more often, which means that basic vocational schools are less popular than only a few years ago. Thirdly, schools of this type offer outdated curricula that are not adapted to modern times and requirements set both by the labour market and the rapidly changing agricultural sector and rural areas. Fourthly, the number of available specialisations is not proportional to young people's expectations, which is reflected by their popularity. The last two observations seem to be a consequence of the conformistic attitude which blocks any changes and educational innovations in part of schools, including the change of the education offer.

Table 2.5
Education profiles available in basic vocational schools with agricultural specialisations vs. the most popular education profiles

Education profiles (taught)	Number	Education profiles (popular)	Number
Mechanic-operator of farm vehicles and machines	57	Mechanic-operator of farm vehicles and machines	45
Farmer	31	Cook	38
Catering services (cook)	26	Motorcar mechanic	26
Gardener	20	Gardener	11
Motorcar mechanic	6	Shop assistant	11
Other	11	Farmer	8
-	-	Other	5

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

In technical schools offering agricultural profiles there are two dominant profiles: the agricultural profile and the agrotourist profile. The first profile is taught in 129 schools, whereas the second profile is taught in 122 schools. The group of profiles that are taught slightly less frequently in schools includes: landscape architecture – 78, food technology – 65, mechanisation of agriculture – 48. The profiles that are taught definitely less frequently in schools include: horse-breeding – in 18 schools, horticulture – in 17, veterinary medicine – in 11, or economics – in 6 (see Table 2.6).

In the opinion of school authorities, the following profiles are the most popular among young people: food technology – in 66 schools, agriculture – in 50, agrotourism – in 44, landscape architecture – in 40, computer science – in 32, mechanisation of agriculture – in 31. Slightly less popular are: the hotel trade – indicated by 17 schools, economics – 12, motorcar repair and maintenance – 10, logistics – 7 and the construction industry – 6 (see Table 2.6).

Table 2.6
Education profiles in technical schools with agricultural specialisations

Education profiles (taught)	Number of profiles in schools	Education profiles (popular)	Number of profiles in schools
Farmer	129	Food technology and housekeeping	66
Agrotourism	122	Farmer	50
Landscape architecture	78	Agrotourism	44
Food technology and housekeeping	65	Landscape architecture	40
Mechanisation of agriculture	48	Computer science	32
Horse breeding	18	Mechanisation of agriculture	31
Gardener	17	Hotel trade	17
Veterinary medicine	11	Economics	12

Economics	6	Motorcar mechanic	10
Other	12	Logistics	7
-	-	Construction industry	6
-	-	Other	15

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

When comparing profiles taught in technical schools with those that are regarded as most popular among young people by school authorities, we can notice that the number of profiles taught in schools does not overlap with the number of profiles indicated by school authorities as the most popular ones. This may mean that there are recruitment problems in a considerable number of technical schools. Let us now check which profiles are affected by these problems. Among them, there are three most frequently taught education profiles: agriculture, which is taught in 129 schools and is regarded as popular among young people only in 50 schools; agrotourism, which is taught in 122 schools, but arouses interest only in 44 schools; landscape architecture, which is taught in 78 schools, but is regarded as popular only in 40 schools. The same goes for mechanisation of agriculture, horse-breeding, horticulture or veterinary medicine. There are two exceptions: food technology, whose popularity among young people is proportional to the number of schools offering this profile, and economics, which appears on the list of popular profiles twice as often in comparison with profiles being taught (see Table 2.6).

It is worth noticing, however, that among popular profiles that young people would like to learn there are also those that are absent or are present only incidentally in schools. In the first place, it is necessary to mention computer science, which is indicated in as many as 32 schools as a highly popular profile among young people. Other profiles for which there is demand and which are not included in the offer of agricultural schools include: hotel trade – popular in 17 schools, motorcar repair and maintenance – in 10, logistics – in 6, construction industry – in 5 (see Table 2.6).

The low popularity of agricultural profiles among young people should be attributed essentially both to their low social prestige and difficulties in finding a job after completion

of such profiles. It is, therefore, not surprising that young people, usually those from rural areas, would like to learn modern and universal occupations that would not unnecessarily reduce their job opportunities after school, or would give them a wider choice of studies. These specialisations include also computer science, which seems to be “en vogue” in the age of general computerization and potential of the Internet, and economics, which provides a certain universal type of cognitive competences giving opportunities for flexible employment and, at the same time, increasing chances of enrolling at a university or any other school of higher education. The presence of logistics and the construction industry among popular profiles can also be treated as a reaction of young people to the labour market demand from numerous companies responsible for modernisation of infrastructure of the country. However, one cannot help but wonder about the lack of schools’ reaction to signals like these.

When comparing basic vocational schools and agricultural technical schools, we can notice a number of similarities, both with regard to dominant education profiles in agricultural occupations and their popularity (or rather lack of it) among young people. It is worth noticing, however, that technical schools have a remarkably wider education offer addressed to rural areas. They also seem to modernise it faster. The serious difficulties of basic vocational schools are reflected particularly by the small number of divisions with agricultural specialisations and the low average of students in those profiles per one school. It is a general tendency, which occurs mainly in the vocational education system (basic vocational schools) and schools located in smaller environments.

What are the main factors that, in the opinion of representatives of schools, make certain occupations popular among students of agricultural schools? In the first place, it is a matter of their interests, which are indicated by 19.3% of surveyed representatives of schools. They think that the choice of a given profile does not depend on external factors, but only reflects the individuality of students. According to representatives of schools, the second most frequent reason is the fact that young people regard their selected specialisation as something attractive and prospective that will give them a secure occupation and allow them to find a good job relatively quickly – 17.4%. The third most frequent reason for the choice of certain occupations by young people is demand for those occupations on the labour market – 14.0%. Young people tend to choose certain profiles

more often than others, because they recognise demand for them, which means an opportunity to find a job quite easily. Further reasons of higher popularity of certain occupations in agricultural schools are related to the specific nature of rural areas as such. The most important of them is the possibility of obtaining such qualifications by graduates of agricultural schools that would allow them to take over farms of their parents and, thereby, apply for EU subsidies – this reason was stated by 11.0% of respondents. A slightly smaller group of respondents (9.5%) highlights the importance of the location of the school in specific areas – rural areas, agricultural and tourist lands, which makes it possible to find a job in occupations related to these lands. The reasons for choosing an occupation that are stated much less frequently include: uniqueness of the school or profile in the nearest environment – 4.9% and fashion for certain specialisations and occupations – 3.4%.

2.3 Suggested fields of education in agricultural basic vocational schools vs. the needs of the regional labour market

According to authorities of agricultural basic vocational schools, schools of this type should provide education mainly in agricultural profiles (37 indications). Profiles of education related to the broadly understood construction industry are also suggested very often. Apart from the construction industry itself, which was indicated by 16 representatives of schools, construction-related services, e.g., plumber, locksmith, electrician etc., are mentioned most frequently (by 20 respondents in total). Other frequently suggested specialisations include: motorcar mechanic – 18 indications, catering services (mainly cook) – 17 indications. Respondents indicated also specialisations such as agrotourism (11) and mechanic-operator of farm vehicles and machines (9) (see Table 2.7).

Table 2.7
Profiles of education taught in basic vocational schools with agricultural specialisations and those that should be taught according to needs of the regional labour market

Education profiles (taught)	Number	Education profiles (suggested)	Number
Mechanic-operator of farm vehicles and machines	57	Farmer	37
Farmer	31	Construction-related services	20

Catering services (cook)	26	Motorcar mechanic	18
Gardener	20	Catering services (cook)	17
Motorcar mechanic	6	Construction industry	16
Other	11	Agrotourism	11
-	-	Mechanic-operator of farm vehicles and machines	9

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

When comparing profiles taught in basic vocational schools with those that should be taught in such schools, we can easily see significant differences. Firstly, the list of profiles that should be taught in basic vocational schools according to representatives of schools overlaps only to a small extent with the list of profiles that are actually taught in them. For instance, the number of suggestions that the farmer profile should be taught is slightly larger than the number of schools in which it is actually taught. The same goes for the motorcar mechanic profile. In the opinion of representatives of schools, this profile should be taught more frequently than it actually is. An opposite situation occurs in the case of mechanic-operator of farm vehicles and machines – this profile is taught in as many as 57 schools, although, according to what representatives of schools suggest, it should be taught only in 9 schools (see Table 2.7).

Our respondents also think that construction-related profiles should be available more frequently in curricula of agricultural basic vocational schools. Such opinion is expressed by as many as 36 representatives of schools surveyed by us. This is particularly important and interesting because those profiles are not taught in their schools at all.

The described discrepancy is even more apparent when we compare the “expectations” of both sides of the education process: students and school authorities/teachers. Table 2.8 contains a list of the most popular education profiles in agricultural schools (distinguished on the basis of the frequency of submitted recruitment applications) and profiles that should be taught in them according to school authorities (suggested profiles). It turns out that expectations of both sides (students and teachers) are completely different. For instance, the most favourite profile of young people is mechanic-operator of farm vehicles and machines, whereas school authorities consider it to be one of the least necessary profiles.

The disproportion between profiles connected with catering services (mainly the occupation of cook) is also significant. According to information reported by as many as 38 schools, this profile is highly popular among young people. On the other hand, representatives of schools think that young people should be taught within these profiles more than twice as rarely (17 indications).

According to representatives of schools, the specialisation that should be taught particularly frequently is agriculture – such is the opinion of 37 respondents whom we interviewed by telephone. This is particularly surprising, because agriculture is one of the least popular profiles among young people. Representatives of schools also think that agricultural schools should provide education in construction-related service profiles – this is the opinion of 20 respondents. However, young people choose these specialisations rather incidentally, which is reflected by their attitudes (see Table 2.8).

Table 2.8
Profiles of education taught in basic vocational schools with agricultural specialisations that are the most popular among young people and those that should be taught according to needs of the regional labour market

Education profiles (popular)	**Number**	**Education profiles (suggested)**	**Number**
Mechanic-operator of farm vehicles and machines	45	Farmer	37
Catering services (cook)	38	Construction-related services	20
Motorcar mechanic	26	Motorcar mechanic	18
Gardener	11	Catering services (cook)	17
Shop assistant	11	Construction industry	16
Farmer	8	Agrotourism	11
Other	5	Mechanic-operator of farm vehicles and machines	9
-	-	Other	7

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

2.4 Suggested fields of education in agricultural technical schools vs. the needs of the regional labour market

Representatives of agricultural technical schools contacted by us think that, taking into consideration the needs of the regional labour market, schools of this type should offer education mainly in agricultural profiles – such is the opinion of representatives of 43 schools of this type. Further education profiles that are desirable from the perspective of the regional labour market are: agrotourism – 30 indications, economics – 23, computer science – 18, catering services – 18, landscape architecture – 15. A slightly smaller number of respondents indicated education profiles such as hotel trade, food technology – 12 in each case, motorcar mechanic – 11, construction services – 10, or construction industry – 8.

Table 2.9
Profiles of education taught in technical schools with agricultural specialisations and those that should be taught according to needs of the regional labour market

Education profiles (taught)	Number of profiles in schools	Education profiles (suggested)	Number of profiles in schools
Farmer	129	Farmer	43
Agrotourism	122	Agrotourism	30
Landscape architecture	78	Economics	23
Food technology and housekeeping	65	Computer science	18
Mechanisation of agriculture	48	Catering services	17
Horse breeding	18	Landscape architecture	15
Gardener	17	Hotel trade	12
Veterinary medicine	11	Food technology and housekeeping	12
Economics	6	Motorcar mechanic	11
Other	12	Construction-related services	10
-	-	Construction industry	8
-	-	Other	11

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

The comparison of profiles taught in agricultural technical schools with those that are particularly desirable from the perspective of the regional labour market reveals a substantial degree of concurrence between those two indications. Among profiles that are the most popular among young people and among those most desirable from the perspective of the regional labour market there are five that occur in both groups, including the two that are indicated most often: agriculture and agrotourism. Most of the profiles taught in technical schools are related more or less closely to agriculture and rural areas. Out of nine profiles taught most often in agricultural technical schools, there are eight profiles of this kind. As regards profiles that, in the opinion of representatives of schools, should be taught in schools due to the needs of the regional labour market, there are only four out of eleven most often indicated profiles.

All of the agricultural or agriculture-related profiles taught in technical schools are indicated less frequently than those that should be taught in schools because of the regional demand. Differences are very significant. Agriculture is taught in 129 agricultural technical schools, but it is regarded as necessary due to the needs of the regional labour market only in 43 of them. Agrotourism is taught in 122 schools, but only representatives of 30 schools think that it should be taught in the context of the regional labour market. A similar situation occurs in the case of profiles such as landscape architecture or food technology, which are indicated less frequently as profiles that should be taught due to the needs of the regional labour market. The same goes for profiles like mechanisation of agriculture, horse-breeding or horticulture, which are not mentioned as necessary in the region or are mentioned only incidentally by representatives of schools (see Table 2.9).

On the other hand, the only profile being taught that is strictly non-agricultural – i.e., economics – is specified four times as frequently as a profile that should be taught in agricultural technical schools in consideration of the needs of the regional labour market. This is particularly significant because as many as seven non-agricultural profiles are mentioned among profiles that are desirable on the regional labour market, including the above mentioned economics, computer science, catering services, hotel trade, motorcar repair and maintenance, or construction and construction-related services.

The described trend indicates most probably that agricultural technical schools teach their students in agricultural and agriculture-related profiles in spite of the fact that there is no demand for such qualifications from the perspective of the regional labour market. According to representatives of schools, in agricultural schools there is an evident lack of more universal profiles, e.g. economics, modern profiles, e.g. computer science, or profiles for which there is regional demand. It is difficult to evaluate the aforementioned tendencies unequivocally. On the one hand, profiles such as economics or computer science offer better job opportunities, but it is worth noticing that these opportunities refer to cities rather than rural areas. On the other hand, education in those profiles may testify to the conformism of schools and their susceptibility to temporary fashions with the particularistic aim of decreasing the risk of liquidation of the school (workplace) in the event of the lack of interest in agricultural profiles among young people.

Below we compared profiles taught in schools with profiles that should be taught in them in consideration of the needs of the regional labour market. In relatively simplistic terms, we can regard this as the "school – labour market" perspective. Now let us have a look at profiles desirable from the perspective of the labour market vs. profiles that are the most popular among young people. Thus, it will be the "young people – labour market via school" perspective.

Table 2.10
Education profiles in technical schools with agricultural specialisations

Education profiles (popular)	**Number of profiles in schools**	**Education profiles (suggested)**	**Number of profiles in schools**
Food technology and housekeeping	66	Farmer	43
Farmer	50	Agrotourism	30
Agrotourism	44	Economics	23
Landscape architecture	40	Computer science	18
Computer science	32	Catering services	17
Mechanisation of agriculture	31	Landscape architecture	15
Hotel trade	17	Hotel trade	12
Economics	12	Food technology and housekeeping	12

Motorcar mechanic	10	Motorcar mechanic	11
Logistics	7	Specialistic services	10
Construction industry	6	Construction industry	8
Other	15	Other	9

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

In contrast with agricultural basic vocational schools, in agricultural technical schools the education profiles that are the most popular among young people overlap to a large extent with those that, in the opinion of representatives of schools, should be taught in consideration of the conditions of the regional labour market. It is worth noticing that this concurrence refers both to education profiles and the number of indications in both groups, with particular regard to profiles such as agriculture, agrotourism, computer science, hotel trade, motorcar repair and maintenance or construction industry. All of those profiles have a similar number of indications, so it can generally be said that the interest of young people in these education profiles is adequate to the needs of the regional labour market (at least with regard to the availability of profiles in schools).

Among profiles with a remarkably lower degree of concurrence, we should mention mainly food technology, landscape architecture and mechanisation of agriculture. The popularity of those profiles among young people is clearly higher than demand for them (according to representatives of schools) on the regional labour market (see Table 2.10).

2.5 Adaptation of agricultural schools to the regional labour market – a self-assessment attempt

The analyses presented below correspond perfectly to the self-assessment of schools as far as the adaptation of the educational offer to the needs of the regional labour market is concerned. Firstly, the self-assessment of schools looks remarkably better in technical schools than in basic vocational schools. Only less than two thirds (64.2%) of all surveyed agricultural basic vocational schools declare that they provide education in specific profiles with a view to fulfilling the needs of the regional labour market. In the case of agricultural

technical schools, this percentage share is 75.3%. In rural and municipal-rural communes, relevant rates are much lower both in the case of basic vocational schools and technical schools. Average differences between those types of communes and municipal communes amount to 10 percentage points. In the case of basic vocational schools located in rural communes, only 60.1% of them provide education aimed at fulfilling the needs of the regional labour market, whereas in municipal communes the analogous percentage share is as high as 71.6%. As regards agricultural technical schools, the percentage share of schools providing education aimed at fulfilling the needs of the regional labour market amounts to 73.2% in rural communes and as much as 81.0% in municipal communes (see Tables 2.11 and 2.12).

Table 2.11

Type of commune vs. assessment of education in basic vocational schools (%)

Type of commune	**Is the educational offer of the school aimed at fulfilling the needs of the regional labour market?**		**Total**
	Yes	No	
Rural	60.1	39.9	100.0
Municipal-rural	61.3	38.7	100.0
Municipal	71.6	28.4	100.0
Total	64.2	35.8	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Table 2.12

Type of commune vs. assessment of education in technical schools (%)

Type of commune	**Is the educational offer of the school aimed at fulfilling the needs of the regional labour market?**		**Total**
	Yes	No	
Rural	73.2	26.8	100.0
Municipal-rural	70.7	29.3	100.0
Municipal	81.0	19.0	100.0
Total	75.3	24.7	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

The most frequently declared reason due to which agricultural schools (both basic vocational schools and technical schools) do not provide education in profiles for which there is demand on the regional labour market is the lack of interest of young people in certain profiles, which results in the lack of recruitment – this reason is declared by representatives of almost every second school (45.3%) which does not offer specialisations relevant to the demand of the regional labour market. Every fourth school (26.4%) which does not take regional factors of the labour market into account teaches those profiles only because their governing authority (the Ministry of Agriculture and Rural Development, or the relevant self-government) has not agreed to the establishment of new education profiles. Other reasons declared by representatives of schools are mainly the lack of the proper base in which new profiles addressing more effectively the needs of the regional labour market could be taught – 18.9% of responses, and the lack of properly qualified teaching staff – 3.8%.

The lack of interest of young people in profiles that take the needs of the regional labour market into account, which results in the lack of recruitment for these profiles in agricultural schools, occurs more frequently in municipal and municipal-rural communes than rural communes. This may mean that the baby bust is more “burdensome” in agricultural schools located in bigger cities. This results most probably from the smaller popularity of agricultural schools among young people and stronger competition from non-agricultural secondary and vocational schools. In bigger cities young people have a much wider choice of types of schools as well as education profiles, especially in non-agricultural occupations. Consequently, young people who would like to specialise in profiles related to computer science or economics tend to choose schools (both vocational and general secondary schools) that offer such specialisations, have a better educational base and, most importantly, are more prestigious than agricultural schools.

In rural communes, the reason being indicated remarkably more often by representatives of schools is the lack of the appropriate base (school workshops, technical facilities) for introduction of new education profiles and the lack of approvals from

supervising authorities to teach certain education profiles, usually non-agricultural ones. The above responses complement those given by representatives of agricultural schools located in municipal communes. Schools located in rural areas have limited resources in terms of premises, which does not allow them to introduce new more attractive education profiles; this is a consequence of the remarkably worse economic situation of rural self-governments financing the rural education system. Self-governments do not have the sufficient funds to expand their teaching base or to transform it in accordance with new social & economic trends, or do not recognize the need to make special investments in education, particularly in the agricultural sector. Finally, it is worth noticing that a large number of agricultural schools located in rural areas is also supervised by the Ministry of Agriculture and Rural Development, which – in the opinion of representatives of schools – often turns out to put a brake on transformations in the agricultural education system and in rural areas.

2.6 Interest in agricultural profiles – in the past and now

The conclusions reached so far are confirmed by data contained in Tables 2.13 and 2.14, which confirm the assessment of the interest of young people in agricultural occupations in the last few years. In the opinion of representatives of agricultural schools, the interest of young people in agricultural specialisations is decreasing, both in basic vocational schools and in agricultural technical schools. There are no significant differences between basic vocational schools and technical schools. Nearly one half of representatives of both types of schools states that the interest of young people in agricultural specialisations in smaller, every third respondent thinks that it remains the same, and only every fifth respondent declares that the said interest has increased. Irrespective of the type of school, the assessment of the interest of young people in agricultural specialisations is clearly better in the schools that are situated in rural communes than in those situated in municipal communes (see Tables 2.13 and 2.14).

In basic vocational schools located in rural communes the interest of young people in agricultural specialisations in the last few years is considered to be smaller by 42.1% of representatives of surveyed schools, 34.6% think that the said interest remains the same, whereas 23.4% think that it has increased. In the case of schools situated in municipal-rural

communes, every second (50.0%) respondent thinks that the interest in agricultural specialisations in those schools is smaller, 40.4% consider it to be the same, whereas every tenth (9.6%) respondent thinks it has increased. As regards representatives of agricultural basic vocational schools from municipal communes, more than half of them (56.3%) think that the interest in agricultural specialisations in those schools has decreased in the last few years, 28.1% say that it has not changed, whereas 15.6% consider it to be larger (see Table 2.13).

Table 2.13
Interest in agricultural specialisations in agricultural basic vocational schools (in %)

Type of commune	Interest in agricultural profiles in the last few years			Total
	Smaller	The same	Larger	
Rural	42.1	34.6	23.4	100.0
Municipal-rural	50.0	40.4	9.6	100.0
Municipal	56.3	28.1	15.6	100.0
Total	48.0	34.1	17.9	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

In the case of agricultural technical schools, we can see analogous tendencies and rates similar to those observed in basic vocational schools. 43.9% of surveyed representatives of schools think that the interest in agricultural profiles in technical schools situated in rural communes is smaller, 33.3% consider it to be the same, whereas 22.7% think it has increased. In municipal-rural communes these rates are less favourable. According to 49.2% of respondents, the interest of young people from technical schools in agricultural profiles has decreased; 32.8% think that it has remained the same, whereas 18.0% consider it to be larger. Even less favourable percentage shares can be observed in agricultural technical schools situated in municipal communes. As many as 55.6% of our respondents think that the interest in agricultural specialisations in technical schools has decreased in the last few years, further 27.2% consider it to be the same, whereas only 17.3% think that it has increased (see Table 2.14).

Table 2.14

Interest in agricultural specialisations in agricultural technical schools (in %)

Type of commune	Interest in agricultural profiles in the last few years			Total
	Smaller	The same	Larger	
Rural	43.9	33.3	22.7	100.0
Municipal-rural	49.2	32.8	18.0	100.0
Municipal	55.6	27.2	17.3	100.0
Total	48.5	31.4	20.1	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Let us now have a closer look at the prospects of the agricultural education system in opinions of representatives of agricultural schools. According to one third of our respondents, who represent both basic vocational schools and technical schools, the interest of young people in agricultural occupations in the next few years will be smaller, one half of respondents think it will be the same, and every seventh person says that it will increase. As in the case of assessment of interest in agricultural specialisations in the last few years (Tables 2.13 and 2.14), assessments of prospects of education in agricultural profiles are very coincident, both with regard to the type of school and its location within the scope of particular types.

Representatives of schools located in rural communes are slightly more optimistic about interest in agricultural profiles among young people than those from municipal communes. In basic vocational schools located in rural communes, 30.6% of surveyed representatives of those schools are of the opinion that interest in agricultural profiles will decrease in the next few years. In municipal communes this opinion is expressed by as many as 38.9% of respondents, which means an increase by 8.3 pps. The opinion that young people in basic vocational schools from rural areas will be more interested in agricultural profiles in the future is expressed by 18.5% of respondents, whereas in municipal commune 16.8% of respondents are of that opinion (see Table 2.15).

Table 2.15

Interest in agricultural specialisations in agricultural basic vocational schools (in %)

Type of commune	Interest in agricultural profiles in the next few years			Total
	Smaller	The same	Larger	
Rural	30.6	50.8	18.5	100.0
Municipal-rural	27.0	65.1	7.9	100.0
Municipal	38.9	44.2	16.8	100.0
Total	32.6	51.8	15.6	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Similar tendencies are also visible in the case of agricultural technical schools. Future interest in agricultural profiles is assessed as smaller by 30.7% of representatives of schools located in rural communes; in municipal communes this percentage share amounts to 36.8%, which means it is higher by 6.1 pps. On the other hand, 19.6% of representatives of schools in rural communes think that interest in agricultural profiles in those schools will increase, whereas in schools from municipal communes this percentage share was 15.8% (see Table 2.16).

Table 2.16

Interest in agricultural specialisations in agricultural technical schools (in %)

Type of commune	Interest in agricultural specialisations in the next few years			Total
	Smaller	The same	Larger	
Rural	30.7	49.7	19.6	100.0
Municipal-rural	24.3	59.5	16.2	100.0
Municipal	36.8	47.4	15.8	100.0
Total	31.4	51.0	17.6	100.0

Source: the survey *Directions of development of agricultural education in Poland* carried out under the POKL project no. UDA-POKL.03.03.04-00-290/09-00

Summary

The agricultural education system seems to undergo a serious crisis. It results from a series of interconnected factors. Firstly, the interest of young people in agriculture-related occupations becomes gradually smaller. This means that the traditionally perceived role of agricultural schools as institutions preparing young people for the farmer's trade (or for agriculture-related occupations) should be remodelled. This need results both from the low social rank of agricultural occupations, which leads to a decrease of their popularity among young people, and from changes of functions of rural areas themselves. The role of agriculture as a determining factor of the modern countryside is gradually decreasing. This means that education in agricultural schools should also be transformed appropriately into a more diverse system which would address changes occurring in regional labour markets. This need is reflected in particular by the disproportion between education profiles taught in schools on the one hand and those in demand on the regional labour market and those preferred by young people as their field of specialisation on the other hand. Because of its outdated educational offer, the education system of agricultural schools seems to be dysfunctional both towards expectations of young people and the needs of rural areas in general. Thus, it needs profound transformation and its functioning must be redefined.

Jarosław Domalewski

Chapter 3

Social, environmental and educational characteristics of students – in search of specific features of agricultural schools in Poland

Introduction

As has already been mentioned in the introduction, the segment of agricultural education in Poland has always been distinguished by specific features reflected in social and educational characteristics of students and their educational and professional aspirations. The lower cultural and educational capital of agricultural school students was a consequence of the education profile of those schools, which predisposes young people to living in the countryside.

The changes that have occurred in the Polish education system during the last twenty years have contributed to the dissemination of education on secondary and higher levels. The previously prevailing vocational schools (mainly basic ones) were replaced by secondary schools of general education. The dissemination of education in this type of school also led to the marginalisation of education in vocational schools (both basic vocational schools and technical schools), which were largely homogeneous in terms of the social composition of students. As a result of recruitment processes in secondary and vocational schools, which were influenced by higher demand for education in secondary schools of general education, social and educational characteristics of students in vocational schools (including technical schools) were relatively unfavourable. However, already in the first half of the last decade we could observe a reversal of earlier trends with regard to changes in the secondary and vocational education system. Young people are not as eager to learn in secondary schools of general education as before, and vocational schools seem to thrive again. We must keep in mind that these tendencies occur in “baby bust” conditions, where the supply of places in schools with graduation examinations (including secondary schools of general education) is higher than demand. In view of the changes that have occurred in the secondary and

vocational education system during the last ten years, a question arises: how valid is the theory about specific features of schools with agricultural specialisations in Poland?

3.1 Methodology of research

An attempt to answer the above question will be made on the basis of results of two empirical surveys. The first survey constitutes a source base of this report and was carried out under the Human Capital Operational Programme: *Reinforcement of key competences with regard to initiative and entrepreneurship among agricultural school students in Poland – CEKIN*. This survey was carried out at the end of 2010 among students of second classes of 48 technical schools with agricultural specialisations in Poland. Schools in which the survey was carried out were located in all provinces. The school governing authority is the Ministry of Agriculture and Rural Development. In total, the survey was carried out among 1,101 students.

The second survey to whose results we refer was carried out in the spring of 2009 among students of secondary and vocational schools in Toruń. This survey is a continuation of "Toruń surveys" which were initiated almost forty years ago by Zbigniew Kwieciński. The Toruń survey was carried out for the whole population for students of first classes of all types of secondary and vocational schools. The surveyed population covered more than 3,000 students, of which 34% were technical school students (for whom analyses in the present study were conducted). In both surveys, the auditorium questionnaire was used.

Obviously, the resulting comparative analysis has certain limitations resulting from specific features of surveyed schools. In the case of "Toruń surveys", these are schools located in cities, and in the case of agricultural technical schools – these are schools located mainly in the countryside or in smaller urban centres. However, our aim is to answer the question: how much is it justified to talk about specific features of agricultural schools in Poland? Taking into account the diversity of environments in which both types of schools function, this type of comparative analysis seems to be justified.

3.2 Social characteristics of students from technical schools

On the basis of information about the level of education of both parents, a *parents' education level* variable assuming three values (low, medium, high) was elaborated in an analogous manner both for students of secondary and vocational schools in Toruń and for students of agricultural schools. The "low" level of parents' education was assigned to families of students in which one of the parents had maximum secondary education and the other parent had a lower than secondary education. The prevailing situation in that category was the one where both parents had basic vocational education. The "secondary" category was reserved for those surveyed students who had at least one parent with secondary education, whereas the other parent had minimum basic vocational education. The situation where both parents had secondary education occurred most frequently in this category. The "high" level of parents' education was assigned to students from families where at least one of the parents had higher education. If the education of only one parent was known, the level of parents' education was determined only on that basis. As regards data from Toruń schools, the categorisation presented above turned out to be successful in 92.4% of cases, whereas in the case of agricultural school students it was successful for 95% of the total population covered by the survey.

Table 3.1
Level of education of parents of students of particular types of secondary and vocational schools in Toruń and agricultural schools in Poland

Level of parents' education	**Secondary and vocational schools in Toruń**			**Agricultural schools**
	Secondary school of general education	**Technical school**	**Basic vocational school**	**Agricultural technical school**
Low	11.2	31.1	45.9	37.4
Medium	48.5	59.2	47.5	54.2
High	40.3	9.7	6.7	8.4
Total	100.0	100.0	100.0	100.0

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The comparison of the social composition of students of technical schools from the Toruń region and agricultural technical schools (please keep in mind that the first category does not include schools with specialisations relevant to the agricultural & food sector) shows) shows extensive similarities. In terms of social characteristics of families of origin (measured here by the level of parents' education), agricultural technical schools do not actually differ from technical schools providing education in other occupations. Although the

percentage share of students from families with a low level of parents' education is slightly higher in agricultural technical schools than in non-agricultural technical schools, that difference is too small to be regarded as significant.

In terms of social characteristics, it was difficult to note any significant differences between non-agricultural technical schools from Toruń and agricultural technical schools, but in terms of the place of residence of students these groups turn out to be clearly different. In technical schools in Toruń one half of the total number of students lives in big cities (with over 100,000 inhabitants), whereas 40% come from rural areas. In surveyed agricultural technical schools, more than 4 out of 5 students come from rural areas. As can be seen, these are schools with clearly "rural" characteristics due to the environment of origin of students attending them. Nevertheless, both agricultural and non-agricultural technical schools were similar in terms of social characteristics of students. The explanation of this surprising regularity is contained in Table 3.3.

Table 3.2
Kind of technical school vs. place of residence

Place of residence	**Technical school**	
	Non-agricultural	**Agricultural**
Countryside	40.4	82.4
Small or medium-sized city	7.3	15.1
Big city	52.3	2.5
Total	100.0	100.0

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Table 3.3
Place of residence vs. social characteristics of technical school students

Level of parents' education	**Kind of technical school**					
	Non-agricultural			**Agricultural**		
	countryside	**small or medium-sized city**	**big city**	**countryside**	**small or medium-sized city**	**big city**
Low	38.3	21.1	27.2	39.0	29.5	29.2
Medium	55.8	59.2	61.4	53.7	58.3	50.0
High	5.8	19.7	11.4	7.3	12.2	20.8
Total	100.0	100.0	100.0	100.0%	100.0%	100.0%

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

What is particularly outstanding, is the unusual similarity of social characteristics of students of both agricultural and non-agricultural technical schools who come from rural areas. In both compared kinds of technical schools, they are basically the same. In the case of students from big cities, some differences can be noticed, although they are not significant. In Toruń technical schools, 27% of students living in a big city comes from families with a low level of parents' education, whereas in agricultural technical schools this group constitutes 29%. However, in the second category a slightly larger part of urban young people comes from families with a high level of parents' education, which compensates the observed differences.

Thus, the compared types of schools turn out to be unusually similar in terms of social characteristics of families of origin, irrespective of the place of residence of students. Consequently, in spite of evident differences in the structure of the place of residence of young people attending agricultural and non-agricultural technical schools, social characteristics of those schools are very similar. This means that technical schools preparing their students for work in agricultural occupations are not much different from technical schools providing education in other occupations as far as their social composition is concerned. In spite of the clearly "rural" character of these schools, they are attended by students from families whose status is similar to those of their peers learning in technical schools that provide education in non-agricultural occupations.

3.3 Educational characteristics of students from technical schools

The above findings indicate that, in spite of the clearly "rural" character of agricultural technical schools, those schools are not much different from schools preparing their students for work in occupations other than those within the agricultural & food sector in terms of social characteristics of students. Do agricultural technical schools lack specific features (analysed in comparison with non-agricultural technical schools) also in the sphere of school skills of their students?

The analysis of educational competences of technical schools requires a certain assumption to be made. Namely, the groups compared by us differ with regard to the age of respondents. Students of technical schools in Toruń are 18 years' old today, whereas students of agricultural technical schools are 17 years' old. The first group took their middle-school examinations in 2008, whereas the second group did the same a year later. This means that the compared groups took different middle-school tests. Thus, it is necessary to assume that those tests are standardised to such extent that the comparison of scores is possible.

Table 3.4
Distributions of scores in middle-school examinations (total score in the humanities part and the mathematics & natural sciences part) of students of non-agricultural and agricultural technical schools

Non-agricultural technical schools		**Agricultural technical schools**	
Interval of scores	%	Interval of scores	%
Low (19-41)	7.2	low (14-35)	7.4
Lower medium (42-53)	22.9	lower medium (36-49)	24.0
Medium (54-68)	41.0	medium (50-64)	37.4
Upper medium (69-81)	22.1	upper medium (65-80)	24.0
High (82-100)	6.8	high (81-100)	7.2
Total	100.0	-	100.0

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

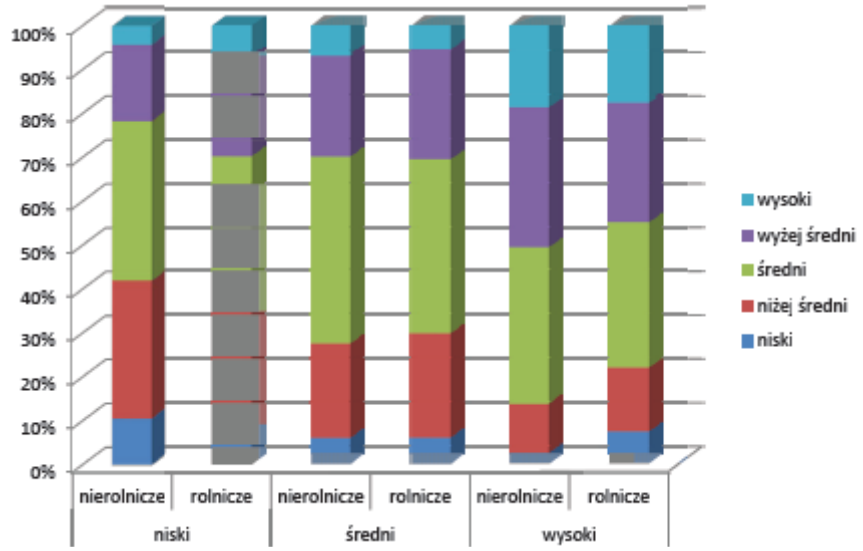
The average score obtained in both parts of the middle-school examination by students of technical schools in Toruń amounts to 60.9 pts and is higher by 3.5 pts than the average score obtained by students of agricultural technical schools (the average score of students of agricultural technical schools is 57.2 pts). Examination scores of students of technical schools in Toruń are also slightly less varied in comparison to scores obtained by students of agricultural technical schools (the standard deviation amounts to 13.2 and 15.5 pts, respectively).

In order to retain the possibility of comparison of scores in middle-school examinations of both surveyed populations that took tests in different years, we will use results grouped into five categories ("the standard 5"), the distribution of which is similar to the normal

distribution, in our further analyses. Table 3.4 presents the distribution of scores with marked score intervals. The comparison of score intervals in middle-school examinations for students of non-agricultural and agricultural technical schools confirms the regularities observed previously on the level of arithmetic averages. Only in the case of "high" scores is the scope of point intervals the same (the lower interval limit is 1 pt lower in the case of scores of schools from agricultural technical schools as compared to the scope of the interval of students from non-agricultural technical schools). All lower limits of point intervals of scores obtained by students from non-agricultural technical schools are higher than those of intervals of scores obtained by students from agricultural technical schools. On the basis of such findings, we can state (with the assumption made in the introduction of this part of the study still being valid) that achievements of students of technical schools providing education in any other than agricultural occupations are slightly higher than those of students of technical schools providing education in agricultural occupations.

Figure 3.1 presents the distribution of scores obtained by students of both kinds of compared technical schools with regard to the social status of the family of origin. The similarity of educational achievements of students from non-agricultural and agricultural technical schools coming from families with the same social status is virtually surprising. For example, among students from families with the medium level of parents' education, lower than average scores were obtained by 27.6% of young people attending non-agricultural technical schools and 30% of young people from agricultural technical schools. Higher than average scores are obtained by 30.1% and 30.7%, respectively.

Figure 3.1
Distribution of scores in middle-school examinations of students of non-agricultural and agricultural technical schools vs. the level of parents' education



wysoki	high
wyżej średni	upper medium
średni	medium
niżej średni	lower medium
niski	low
nierolnicze	non-agricultural
rolnicze	agricultural

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

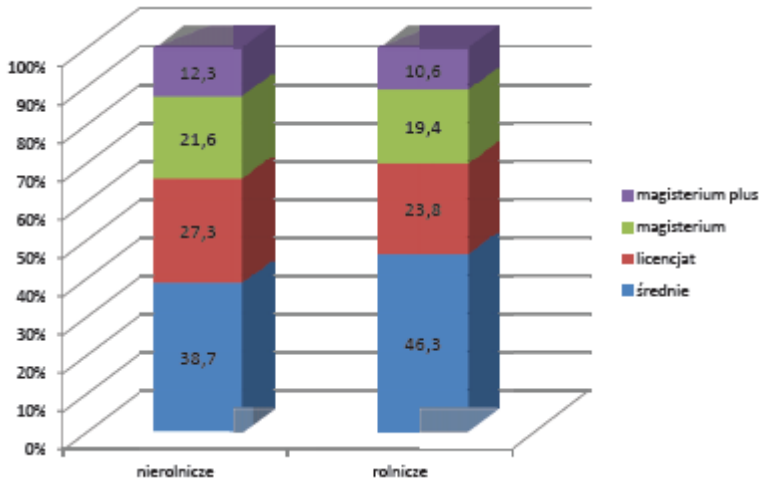
Certain differences in scores of young people attending compared technical schools can be observed in terms of the low and high level of parents' education. Among students coming from families with a low level of parents' education, higher scores in middle-school examinations are obtained by young people attending agricultural technical schools. Lower than medium scores in the analysed category of the level of parents' education were obtained by 35% of students in agricultural technical schools and by 42% of students in non-agricultural technical schools. Higher than medium scores were obtained by 30% of students of agricultural technical schools and 22% of students of non-agricultural technical schools. Thus, educational achievements of students coming from families with a low level of parents' education are slightly higher in agricultural technical schools than in non-

agricultural technical schools. An opposite situation occurs in the case of students coming from families with a high social status. Here, higher scores in middle-school examinations characterise students from non-agricultural technical schools. This difference results most probably from different characteristics of students of compared types of technical schools in terms of their place of residence. In non-agricultural technical schools, among students coming from families with a high level of parents' education, remarkably higher scores were obtained by young people living in big cities, which is virtually absent in agricultural technical schools. In general, however, it is hard to see any distinct differences in educational achievements of students from technical schools being compared. The observed differences are too small to indicate any specific features of agricultural technical schools in this respect.

3.4 Life aspirations

On the basis of findings established so far, it is difficult to indicate any specific features of agricultural schools. If we take the place of residence of students into account, these are undoubtedly rural schools, but as far as the social composition or school skills of young people attending those schools are concerned, they fit in with the prevailing model of technical schools.

Figure 3.2
Distribution of educational aspirations of students of agricultural and non-agricultural technical schools



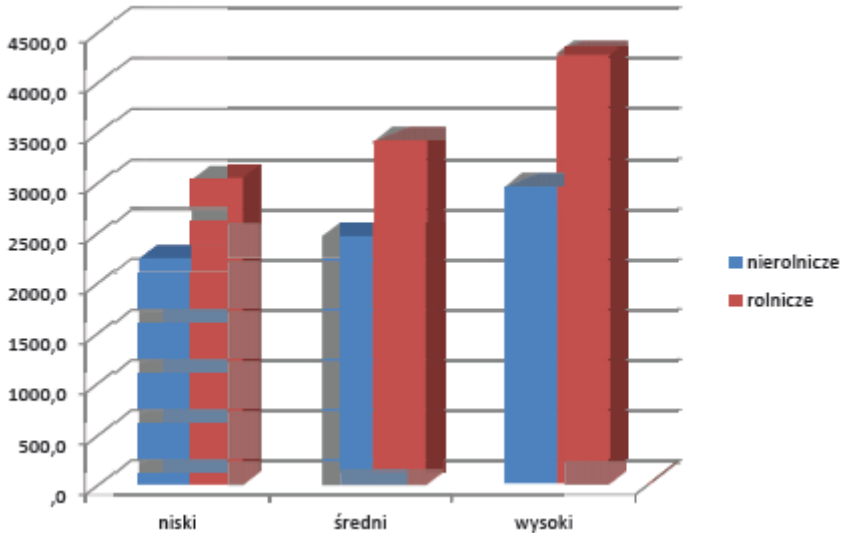
magisterium plus	additional degrees

magisterium	master’s degree
licencjat	bachelor’s degree
średnie	secondary education
nierolnicze	non-agricultural
rolnicze	agricultural

Source: “Toruń surveys”, 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

On the other hand, certain differences can be observed in the sphere of educational aspirations of students of compared schools. In non-agricultural technical schools, finishing of education on the secondary level is planned by 39% of students, whereas in agricultural technical schools this percentage share amounts to 46%. As can be seen, in agricultural technical schools fewer students plan to obtain higher education (bachelor’s degree, master's degree, additional degrees after master’s degree – second field of studies, postgraduate studies or MBA). However, the higher the level of studies, the smaller the difference in the percentage share of students aspiring for such education level among young people from compared types of technical schools. For instance, the bachelor's degree is the target level of education for 27.3% of students of non-agricultural technical schools and 24% of students of agricultural technical schools – the difference amounts to 3.5 percentage points. In the case of master’s studies, this difference amounts to 2.2 pts, and in the case of additional degrees – 1.7 pts. Thus, basic differences in the sphere of educational aspirations refer to the secondary education level and the bachelor's degree.

Figure 3.3
Truncated means of the amount of remuneration expected in the first job vs. the level of parents' education and the type of school



nierolnicze	non-agricultural
rolnicze	agricultural
niski	low
średni	medium
wysoki	high

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In spite of slightly lower educational aspirations, students of agricultural schools have higher expectations as to the amount of remuneration in their first job. In order to reduce the influence of extreme values on the arithmetic average, a 90% truncated mean was used for analyses (5% of low scores and 5% of high scores were omitted in the calculation of its value). The average net income that would satisfy agricultural school students in their first job is PLN 3,353, whereas the average satisfactory remuneration for their peers from non-agricultural schools is PLN 2,448. The difference of PLN 900 certainly cannot be regarded as insignificant. Moreover, these differences occur in each category of the social status of the family of origin; the higher the social status, the larger the difference.

In the case of students coming from families with a low social status, the difference in the average income anticipated in the first job is PLN 800; in the category of students from families with a medium social status, the difference amounts to PLN 948 and for students

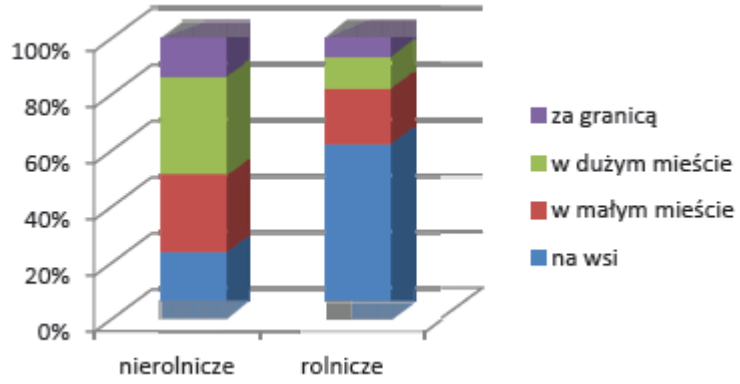
from families with a low social status – PLN 1,329. The differences observed here result most probably from the lack of realistic knowledge of the labour market. Agricultural school students tend to have more unrealistic expectations as to their remuneration than their peers from non-agricultural schools do. This seems to contradict the assumption that, given the objectively lower level of income of rural inhabitants, agricultural school students should have lower aspirations regarding anticipated income in their first job. Most probably, their expectations as to their first remuneration are higher as a result of their experience regarding employment (or rather lack of it) and the potentially available remuneration (for instance, because of the scarcity of the rural labour market).

As regards differences in the anticipated income in the first job observed in the case of students coming from families with a varied level of parents' education, which show particularly high aspirations of agricultural school students in this respect (that clearly contrast with their peers from non-agricultural schools), they seem to be rooted in the local rural context. In spite of extensive changes that have occurred in the structure of education of rural inhabitants over the last two decades, higher education is still the determinant of the exclusive status. The fact of coming from a family with a high social status probably generates higher expectations as to the amount of remuneration in the first job. On the other hand, a question arises why the same factor does not have an impact on educational aspirations. Why are educational aspirations declared by agricultural school students (in fact, rural inhabitants) not higher than in the case of their peers from non-agricultural schools? Maybe in this case we should consider the factor that has been omitted so far: time. We must remember that surveys among agricultural school students were carried out at the end of 2010, whereas those among non-agricultural school students took place in the spring of 2009. In the second half of the present decade, we could see that the educational aspirations of young people were cooling down. It is highly probable that this tendency is still present, which would explain slightly lower educational aspirations of agricultural school students in comparison to their peers from non-agricultural schools. Maybe this tendency is accompanied by a reverse trend relating to expectations as to income in the first job. The lapse of time (one year and a half) may have been the factor that led to an increase in financial aspirations of young people. However, the fact that the actual situation on the

labour market is not taken into account by agricultural school students seems to be a more justified explanation in this case.

Agricultural school students intend to live in the countryside in the future much more often than their peers from non-agricultural schools do. Such plans are declared by one half of agricultural school students and one fourth of non-agricultural school students. These differences can obviously be attributed to the current place of residence of populations being compared. We must remember that as many as 82% of agricultural school students and 40% of non-agricultural school students come from rural areas. Conversely, cities and foreign countries are clearly less popular as a potential place of residence among agricultural school students.

Figure 3.4
Planned place of residence vs. kind of school



za granicą	abroad
w dużym mieście	in a big city
w małym mieście	in a small city
na wsi	in the countryside
nierolnicze	non-agricultural
rolnicze	agricultural

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

According to results of analyses carried out so far, it is difficult to regard agricultural technical schools as schools with any specific features in comparison to other schools of this type. But it may be possible to find such features in the sphere of professional plans of

students attending those schools. In the total population of surveyed agricultural school students, 33% intend to pursue an occupation related to the agricultural & food industry (e.g. farmer, orchardist, mechanic of agricultural machines) in the future. As a matter of fact, this result could be regarded as high, if we take into account the low popularity of the farmer's occupation among young people since the 1990s. However, we must also remember that the subject of this analysis are professional plans of students attending schools that prepare them for work in occupations belonging to the agricultural & food sector. Can the conformity of students' professional plans with their educational specialisation on the level of 33% be regarded as a high or low result?

An attempt to answer the above question will be made on the basis of the analysis of the conformity of professional plans of students of technical schools in Toruń (providing education in occupations outside the agricultural & food sector) with their educational specialisations. The highest level of conformity of professional plans of young people with educational specialisations occurs in technical schools of mechanical engineering, electrical engineering and electronic engineering. In this school, as many as 63% of young people would like to pursue an occupation that would suit their educational specialisation. A slightly lower rate of conformity of professional plans with the educational specialisation characterises students of technical schools preparing for work in the following occupations: IT specialist and mechanic – 60%, the catering & hotel trade and the economic trade – 58% in each case. In technical schools of motor vehicle engineering, the conformity of students' professional plans with their educational specialisations amounts to 57%, whereas in technical schools of environmental engineering it is only 36%. Taking the above rates into account, we can state without doubt that the percentage share of young people attending agricultural schools and intending to pursue an occupation that would be consistent with their educational specialisation is lower in comparison to non-agricultural schools.

Moreover, agricultural school students have no definite professional plans for the future much more frequently than their peers from non-agricultural schools do. Among students of non-agricultural technical schools, young people with no definite professional plans accounted for maximum 18% of the total school population (depending on a given school), whereas in agricultural schools this percentage share amounts to 48%. One of the reasons of this difference are undoubtedly environmental characteristics of agricultural school

students, 3/4 of whom come from rural areas. Young people from rural areas have always been more moderate in setting up their educational, professional or life plans than their peers from urban areas have been... However, this difference seems too big to be attributed only to specific "rural" features of agricultural schools.

Table 3.5
Type of technical school vs. planned professional position

Planned professional position	Type of technical school	
	Non-agricultural	Agricultural
Manager	1.5	0.7
Specialist	28.3	5.6
White-collar employee	14.1	4.8
Uniformed service employee	5.6	3.5
Employee from the highly qualified service sector	2.8	0.4
Employee from the low qualified service sector	15.4	1.7
Worker	9.0	14.7
Farmer	0.5	19.0
Entrepreneur	3.0	0.5
Other	3.2	1.4
No data available	16.5	47.7
Total	100.0	100.0

Source: "Toruń surveys", 2009, the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The lack of definite plans concerning the occupation that agricultural technical school students would like to pursue in the future is not the only determinant of specific features of this part of young people. Young people attending agricultural technical schools are characterised by less ambitious professional plans (in spite of comparable educational aspirations).

Five times as many non-agricultural technical school students as agricultural school students would like to pursue the occupation of a specialist that requires higher education. Students from the first category would like to work as a white-collar employee three times

as frequently. As regards agricultural technical school students, most of them would like to work in agriculture (19%). These kinds of professional plans are virtually absent among young people attending non-agricultural technical schools. Young people preparing for work in agricultural occupations prefer also workers' positions to a slightly larger extent. Non-agricultural technical school students choose more often occupations from the sector of low-qualified services (which probably results from the profile of their school, e.g. technical school of catering and hotel trade).

Thus, while agricultural technical schools do not differ from technical schools providing education in non-agricultural occupations in terms of social characteristics of families of origin, school skills and, to some extent, educational aspirations, they are two different school environments in terms of professional plans. Agricultural technical schools are the segment of secondary and vocational education the primary task of which is to prepare students for work in occupations that are "present" on the rural labour market. This theory is probable because, if we look at professional plans of young people attending agricultural technical schools with the planned place of residence taken into account, it turns out that among students who would like to live in the countryside only 2.2% plan to pursue the specialist's occupation, whereas among students choosing a big city as their future place of residence this percentage share amounts to 18%. In general, young people attending agricultural technical schools and choosing the countryside as their residence have lower aspirations as to their planned social and professional position than young people wishing to live in a big city do.

Summary

The changes that have occurred during the last few years, particularly those connected with the accession of Poland into the European Union, seem to be a significant, if not the most important factor that contributed to the "loss" of specific features that had characterised agricultural technical schools for years. It turns out that in terms of both social and educational characteristics, agricultural technical schools are not remarkably different from other schools of this type that provide education in occupations outside the agricultural & food sector. Agricultural school students come from families with similar social

characteristics to those of their peers from non-agricultural schools. Nevertheless, agricultural technical schools have undoubtedly retained their clearly rural character, which is reflected by the dominance of rural young people among the entire population of their students.

In spite of their social and educational characteristics being very similar to non-agricultural schools, agricultural technical schools have retained their specific features in two spheres: educational aspirations of students (slightly lower than in non-agricultural schools) and, in particular, their professional plans. Agricultural school students declare the will to work in an occupation relevant to their educational specialisation much less frequently than their peers from non-agricultural schools do. The farmer's occupation turns out to be highly popular not only among students of non-agricultural schools, but also those from agricultural schools. It is, however, necessary to point out that every fifth student of agricultural technical schools would like to work in agriculture in the future. Nevertheless, the remaining 4/5 of young people attending agricultural technical schools do not have any definite professional plans or would like to work in occupations not related to the agricultural sector. It is highly probable that agricultural technical schools were chosen by surveyed young people for other reasons, e.g. economic reasons for which it is impossible to learn in schools that provide education in other occupations, but are located at a large distance from the place of residence.

Thus, on the one hand, the theory according to which agricultural technical schools have lost many of their specific features over the last twenty years is justified. It is confirmed by the profound similarity of social and educational characteristics of students of agricultural and non-agricultural schools and, to some extent, their educational aspirations. It seems that, as a result of changes that occurred both in agricultural schools and, even more importantly, in their environment, these schools "blended" with the secondary vocational education system in terms of their characteristics. On the other hand, their functions can be regarded as specific, even though they may be similar to functions fulfilled by other schools of the same type (which is confirmed by educational aspirations of students – a technical school as a stage of education leading to higher studies). Agricultural technical school students are interested mainly in occupations that are present on the rural labour market (mainly in agriculture).

The standardisation of social and educational characteristics of young people attending technical schools that offer specialisations in agricultural and non-agricultural occupations is, on the one hand, a consequence of the increase of educational aspirations of both young people and adults and the resulting educational boom that occurred in 1989 in Poland and, on the other hand, a result of the dissemination of education in secondary schools with graduation examinations. The most extensive changes in the education structure took place in rural areas. Consequently, social characteristics of agricultural school students are similar to social characteristics of their peers from non-agricultural technical schools. As regards the dissemination of education in secondary schools with graduation examinations (mainly in secondary schools of general education), it launched mechanisms generating new divisions within the postprimary education system (after the reform – secondary and vocational schools) that resulted in the heterogeneousness of social and educational characteristics of students of secondary schools of general education and the homogenisation of these characteristics in technical schools and basic vocational schools.

Jarosław Domalewski, Krzysztof Wasielewski

Chapter 4

Key competences of agricultural school students in terms of entrepreneurship and the sense of initiative

Introduction

Key competences established by the EU authorities were a response to the dynamically changing reality, which was subject to globalisation processes. Adaptation to ongoing changes required new competences of citizens of member states to be established. Among the eight defined competences, there were competences regarding entrepreneurship and the sense of initiative.

In general, key competences were defined as a combination of knowledge, skills and attitudes necessary for personal fulfilment and development, active citizenship, social inclusion and employment[20]. The sense of initiative and entrepreneurship are understood here as personal ability to put ideas into practice. Those competences include both knowledge, skills and attitudes. In the survey carried out among agricultural school students, a poll was conducted with the use of various questions (with different formats) on issues such as creativity, innovation, project planning skills, risk readiness, activity, or professional experience (the latter being particularly important from the perspective of analysed competences). The analysis of key competences of agricultural school students will begin with their self-characteristics.

4.1. Strengths and weaknesses – self-characteristics of agricultural school students

As has already been mentioned in the introduction, key competences regarding entrepreneurship and the sense of initiative consist of knowledge, skills and attitudes. The entrepreneurial attitude includes certain personal features, such as the sense of initiative,

[20] Annex to the Recommendation of the European Parliament and the Council of 18 December 2006 on key competences for lifelong learning, published in the Official Journal of the European Union of 30 December 2006/L394.

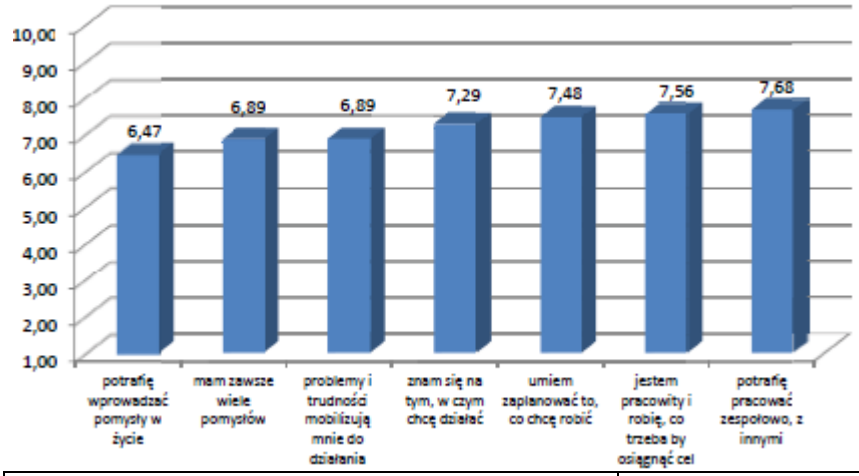
motivation and determination in the fulfilment of both personal and common aims. For this reason, we will begin the analysis of key competences of agricultural school students with the presentation of their self-characteristics. The way in which young people attending agricultural schools perceive themselves is of huge importance for their attitudes regarding entrepreneurship and the sense of initiative.

In one of the questions included in the poll, students were asked to assess to what extent they agree with statements containing certain personality characteristics, such as creativity, ability to put ideas into practice, diligence, coping with difficult situations, planning skills and teamwork. Each of the presented statements was assessed by students in a scale of 1 (disagree) to 10 (definitely agree), depending on how much they relate those statements to themselves.

It turns out that agricultural school students tend to agree with a vast majority of the statements. With regard to all personal qualities covered by the analysis, values of arithmetic averages (in a scale of 1-10) oscillated between 6.5 and 7.7. We can, therefore, state that young people attending agricultural schools tend to attribute the analysed qualities to themselves (although not definitely). However, we can observe certain differences in self-characteristics of young people from agricultural schools. The surveyed students are convinced more often that they can work with others within a team, are diligent and pursue their aims consistently, have planning skills and, to a slightly lesser extent, are convinced that they are competent in what they want to achieve. The qualities that they assess relatively lower is their own creativity and putting their ideas into practice (Figure 4.1). It must be emphasised, however, that the differences observed here are not big. The slightly lower confidence of young people in their own abilities regarding the sense of initiative may result from their young age and, consequently, the lack of significant experience in undertaking initiatives.

Figure 4.1.

To what extent do you agree with the following statements? (1 – definitely no, 10 – definitely yes)



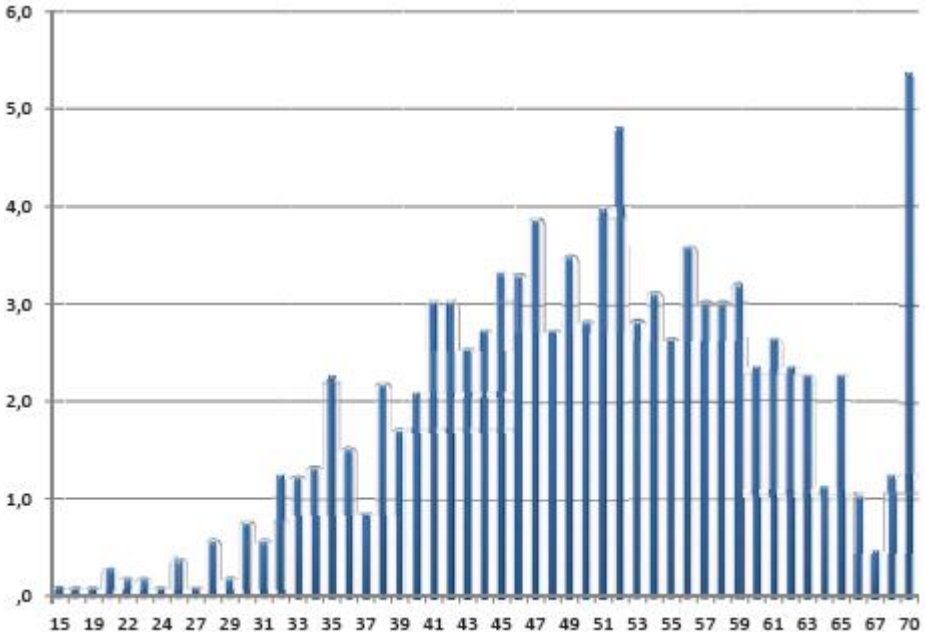
potrafię wprowadzać pomysły w życie	I can put ideas into practice
mam zawsze wiele pomysłów	I always have a lot of ideas
problemy i trudności mobilizują mnie do działania	problems and difficulties mobilise me to act
znam się na tym, w czym chcę działać	I know all about what I want to do
umiem zaplanować to, co chcę robić	I can plan what I want to do
jestem pracowity i robię, co trzeba, by osiągnąć cel	I am diligent and I do the right things to achieve my goal
potrafię pracować zespołowo, z innymi	I have a teamwork skill

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

There is a quite strong relationship between particular variables being indexes of selected personality characteristics of agricultural school students. The average value of correlation indexes is 0.42, and indexes between particular variables assume values from 0.27 to 0.62. For this reason, a decision was made to construct *a scale of entrepreneurial attitudes*. Obviously, this scale does not exhaust in full the complexity of analysed competences of agricultural school students. Nevertheless, it may serve as one of the analytic tools that can be used for analysing attitudes of surveyed young people in terms of entrepreneurship.

The construction of the scale was preceded by a reliability analysis. Cronbach's alpha amounted to 0.834, which should undoubtedly be regarded as a satisfactory result. The lowest value of the index of correlation with the general scale result is 0.418. Incorporation of all variables into the scale is, therefore, justified.

Figure 4.2
Distribution of results of the *scale of entrepreneurial attitudes* (in %)



Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The scale of entrepreneurial and initiative attitudes was constructed by summing up values of particular items. This activity was carried out successfully with regard to 96.4% of the surveyed population, which is undoubtedly a satisfactory result. As has already been mentioned, each variable could assume values from 1 (I definitely disagree) to 10 (I definitely agree with the given statement). Taking into account the number of items contained in the scale, the theoretical minimum score could be 7, and the theoretical maximum score could be 70. In fact, the minimum score was 15, whereas the maximum score achieved the limit value of 70. The arithmetic average was 50.4 pts, which largely exceeds the theoretical scale midpoint (33 pts). However, this is not surprising if we take into consideration the values of arithmetic averages for particular items. The maximum result of 70 pts occurred most often (5.4%), which means that every twentieth student of agricultural schools is fully convinced that he has all of the analysed personality characteristics that make up the entrepreneurial attitude. The distribution of answers is similar to the normal distribution (Figure 4.2) with a

small left-handed asymmetry. The dispersion of scores is small – the standard deviation was only 10.17 pts.

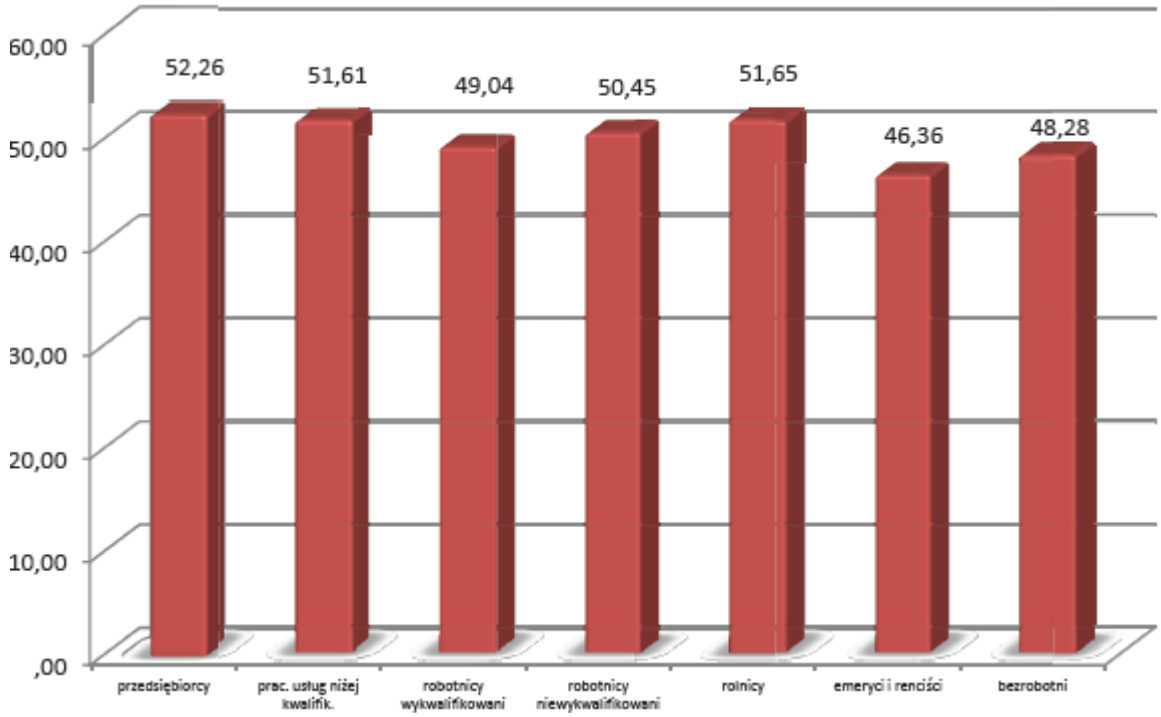
In the further part of this study, an attempt will be made to specify determinants of entrepreneurial attitudes of young people. In the first place, we should try to answer the question whether the gender is the factor that diversifies entrepreneurial attitudes among agricultural school students. The arithmetic average of values of the *scale of entrepreneurial attitudes* reached 48.4 pts in the case of girls and 51.5 pts in the case of boys. The observed difference of 3 pts is certainly not big, although it may testify to the existence of certain differences of personality characteristics determined by the gender. More detailed analyses (of particular items of the scale) indicate that boys are convinced about their knowledge of things they want to engage in to a slightly higher extent that in the case of girls. With regard to these characteristics, the average value of the rate is 7.7 in the case of boys and 6.6 in the case of girls. The gender is also the factor that diversifies respondents' opinions about their own diligence (boys think they are more diligent than girls) and the ability to plan intended aims (in this case, the values of the rate were also 0.5 pts higher in the case of boys in comparison to girls). These are, however, all of the differences determined by the gender. In the case of other items included in the scale, average values for boys and girls are similar.

The differences observed here with regard to selected components of the entrepreneurial attitude may result to some extent from different experiences of boys and girls. We must note that differences in convictions of both of these categories refer to characteristics that may be possessed in connection with work experiences (in the form of paid employment or work in parents' farm). This argument is probable because as many as 83% of boys declare that they were engaged in paid work in the past, whereas among girls this percentage share is 62%. Maybe it is the work experience that increases boys' belief in their own diligence, ability to plan their aims or knowledge of the subject-matter of their activity. On the other hand, gender does not diversify characteristics such as teamwork or creativity.

While gender diversifies attitudes of agricultural school students with regard to entrepreneurship only to a limited extent, the level of parents' education is almost insignificant. Among students coming from families with a high level of education (where at

least one of the parents has a higher education diploma), the average value in the scale of entrepreneurial attitudes amounts to 51.1 pts. In the case of young people coming from families where none of the parents has a higher education diploma – irrespective of whether he/she has secondary, basic vocational or primary education – the average value in the scale of entrepreneurial attitudes is slightly above 50 pts (50.2 pts – the low level of parents' education and 50.8 pts – the medium level of parents' education). This means that the level of education of students' parents is of little significance for their entrepreneurial attitudes.

Figure 4.3
Average values in the scale of entrepreneurial attitudes vs. the father's social & professional position



przedsiębiorcy	entrepreneurs
pracownicy usług niżej kwalifikowanych	employees from the low qualified service sector
robotnicy wykwalifikowani	skilled workers
robotnicy niewykwalifikowani	unskilled workers
rolnicy	farmers
emeryci i renciści	pensioners
bezrobotni	unemployed persons

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Attitudes of agricultural school students with regard to entrepreneurship are diversified to some extent by the father's social & professional position (Figure 4.3). Although the observed differences are not big, the highest scores were achieved by students coming from entrepreneurs' families (52.3 pts on average). A slightly lower score was achieved by young people coming from families of farmers and employees of lower qualified services. Entrepreneurial attitudes (which are, of course, analysed here from the perspective of self-characteristics of students) are relatively the least common among young people coming from professionally passive families – pensioners and the unemployed. We must, however, point out again that these differences are not significant and do not exceed 6 pts.

As a result of detailed analyses, it is possible to indicate the components of the entrepreneurial attitude that characterise students from particular families differing in terms of the father's social & professional position. For instance, entrepreneurs' children are convinced of their own creativity more often than their peers from families where the father's social & professional position was different ("I have many ideas" – the average value of 7.8 pts, "I can put ideas into practice" – the average value of 7.2 pts). At the same time, those components of the entrepreneurial attitude are the least characteristic features of students from pensioners' families in their own opinions. On the other hand, young people from farmers' families are most strongly convinced about their diligence (the average value of 8 pts), which may result from the traditional model of upbringing, where children participate in duties related to the running of the farm.

Apart from the social & professional position of parents, there are two other groups of factors that diversify young people's attitudes relating to entrepreneurship – the financial situation of the family of origin and school skills. The financial situation of students' families was measured using the FAS scale[21]. This scale consists of four questions concerning the number of cars and computers owned by the family, the room for the student's own use and holidays. The obtained results were grouped into three categories reflecting various levels of the family's financial wealth. It turns out that the family's financial situation diversifies young people's attitudes relating to entrepreneurship to a similar extent that the social & professional position of parents does. In the case of students coming from families with a

[21] For a more detailed description of the FAS scale in: J. Mazur, B. Woynarowska, 2004, *Mierniki nierówności społecznych w badaniach ankietowych młodzieży szkolnej (Criteria of Social Inequalities in Surveys of School Youth)*, Przegląd Epidemiologiczny, no. 58, 377-390.

low level of material affluence, the arithmetic average in the scale of entrepreneurial attitudes was 48 pts, as compared to 50.5 pts for students from families with a medium level of affluence and 53.3 pts for students from families with a high level of affluence. Thus, the higher the financial status and affluence of the student's family of origin, the stronger his/her conviction that he/she has characteristic features of the entrepreneurial attitude. More importantly, this relationship refers to each of the items included in the scale that reflect particular components of the entrepreneurial attitude. In other words, the more financially affluent the student's family of origin is, the more often the student is convinced that he/she has qualities such as creativity, knowledge of the areas of operation, diligence and consistency in pursuing his/her aim, planning skills, coping with difficult situations and teamwork skills.

The subjective assessment of the family's financial situation also turns out to be the factor that diversifies young people's attitudes relating to entrepreneurship. The average score of agricultural school students in the scale of entrepreneurial attitudes who assessed the financial situation of their family as "very good" is 58.5 pts, being more than 10 pts higher than the average score of students who consider their family of origin to be "rather or very poor". Thus, for the purpose of identification with certain personality characteristics making up the entrepreneurial attitude, the subjective assessment of the financial situation of the respondent's own family is more important than its objective situation. Young people who perceive their family as rather or very rich identify with the entrepreneurial attitude more strongly than their peers who are convinced of the poverty of their family of origin.

Educational skills reflected by grades in the middle school graduation certificate and scores obtained in middle-school examinations are of little significance for entrepreneurial attitudes of agricultural school students (which is confirmed by values of correlation indexes on the level of 0.13-0.18). Generally speaking, the higher school skills an agricultural school student has, the more strongly he/she identifies with characteristics that are components of the entrepreneurial attitude, even though this correlation may be weak. For example, students with very low grades in their middle-school graduation certificate (the average grade below 2.7) achieved the average value of 47.5 pts in the scale of entrepreneurial attitudes, as compared to 54.2 pts achieved by their peers with highest grades. With regard to categories of students with lowest and highest scores in middle-school examinations, the

average scores in the scale of entrepreneurship amount to 49 and 55 pts, respectively. The differences are not big, but they indicate the occurrence of general regularities observed during the analysis of other factors that diversify entrepreneurial attitudes among young people.

It is worth mentioning that the analysed identifications with characteristics relevant to the entrepreneurial attitude are not diversified in terms of educational aspirations of agricultural school students or (which is particularly surprising) respondents' declarations to run their own business in the future. However, slight differences can be observed with regard to the social & environmental position planned by students. Slightly higher values in the scale of entrepreneurial attitudes are achieved by agricultural school students who want to run their own farm (52.3 pts) or their own company (50.9 pts) in the future. We must keep in mind that, according to the analysis of determinants of entrepreneurial attitudes of surveyed young people, students whose parents are entrepreneurs, farmers or service sector employees showed the highest level of identification with characteristics of the entrepreneurial attitude.

To sum up, it is necessary to point out that agricultural school students generally tend to identify with characteristics relevant to entrepreneurial attitudes. What comes as a greatest surprise, however, is the fact that basic social & economic characteristics diversify young people's entrepreneurial attitudes only to a small extent. What is of certain importance for the self-identification of agricultural school students, is the financial situation of their families – the better it is, the more often young people are convinced that they are creative and diligent, have planning and teamwork skills and can cope with difficult situations. In this case, it does not matter whether the financial situation of a given family is assessed subjectively, or on the basis of objective indexes (FAS scale). Entrepreneurial attitudes are expressed to a slightly larger extent (obviously on the identification level) by students whose parents are entrepreneurs, farmers or service sector employees and by students who want to run their own farm or company in the future. We must note that the last of the observed regularities is most probably a result of the reproduction of parents' social and professional position, which characterises 70% of students coming from entrepreneurs' families and 54% students from farmers' families.

4.2. Work experience and preferences of agricultural school students relating to employment

Work experiences of students of secondary and vocational schools related to the undertaking of paid work are a clear indicator of their social & professional activity, life competences (e.g. entrepreneurship, ingenuity, motivation, commitment etc.) or, indirectly, social capital (e.g. contacts, bonds) or cultural capital possessed by young people. The contemporary labour market requires young people to possess not only education and professional competences acquired through the educational system, but also specific skills going beyond those acquired at school. The experience acquired in the course of professional or social work (e.g. in non-governmental organisations) is of growing importance, too. Thus, the awareness of the importance of being active (both professionally and socially) and possible consequences arising from the absence of any forms of activity is particularly important.

Three fourths (75.9%) of all surveyed students of agricultural schools had already worked professionally and had received payment for their work. Boys (82.7%) undertake work much more frequently than girls (62.2%) do. The professional activity of young people from agricultural schools is not varied in terms of the level of parents' education or the type of their work. The level of professional activity is diversified by students' place of residence only to a small extent – young people from rural areas and small cities are more active in this respect than young people from medium-sized and large cities (the difference of approx. 7 pps). A slightly more conspicuous tendency can be noticed in the case of the analysis of the financial situation of the family. The higher the indicators of affluence, the higher the level of professional activity. However, the difference is also minor, amounting to only little more than 8 pps between extreme items (see Table 4.1).

Table 4.1
Professional activity vs. the level of material assets (in %)

Professional activity	Level of the family's material assets			Total
	Low	Medium	High	
Yes	73.4	74.4	81.6	75.9
No	26.6	25.6	18.4	24.1
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Young people from rural schools undertook their professional activity more frequently (56.8%) in non-agricultural sectors. Most of these jobs were typically manual tasks (39.7%), although there were also some jobs in the service sector (10.1%) or intellectual tasks (7.1%). However, the professional work of agricultural school students was very often connected with agriculture (43.2% in total). Most of the students performed odd manual jobs (30.7% of total work), or, slightly less frequently, odd service jobs (12.5%) (see Table 4.2). The population that is professionally active in agriculture consists mainly of boys - half of them (49.2%) earned pocket money in this trade. This percentage share is twice as large as in the case of girls, among whom only every fourth girl (27.7%) participated in agriculture-related work. Girls from agricultural schools were professionally active mainly in non-agricultural sectors – almost three fourths (72.3%) of them worked in those sectors. It is worth noting that almost every fifth (18.1%) female student of surveyed agricultural schools undertook intellectual work, which constitutes a 7 times larger share than among male students of those schools (2.7%). Work in non-agricultural sectors is undertaken mainly by young people from families with a good economic situation, whose parents possess more than a medium level of education and perform jobs connected with high competence and private initiative (private entrepreneurs).

Table 4.2
Type of paid work being undertaken (in %)

Type of work		Percentage share
Farm work	Odd farm jobs – manual tasks	30.7
	Odd farm jobs – service tasks	12.5
Non-farm work	Manual work	39.7
	Service work	10.1
	Intellectual work	7.1
Total		100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In general, the type of work undertaken by young people depends largely on their place of residence and the type of professional activity of their parents, particularly the father. Work in the agricultural sector is undertaken mainly by young people living in villages – 45.6% of all surveyed students living in those areas, young people from farmers' families (58.1% of the entire category) and pensioners' families (33.3% of the entire category). Agriculture-related work is undertaken equally often by students living in big cities (42.9% of the entire category). This apparently surprising distribution is, however, justified by motives for undertaking work and the purpose for which earned money was spent. It is very highly probable that rural young people work in agriculture out of necessity – they undertake work in the nearest environment (often in their family farm for pocket money) in order to improve the difficult financial situation of their family. As regards urban young people, they undertake paid work in the countryside (most often in the summer) most probably in order to earn the money that they could later spend for their pastimes.

Generally speaking, young people from agricultural schools spend their earned money mainly for their pastimes - this is what 45.1% of all surveyed young people declare. The second most frequent reason for undertaking work was the will to purchase a specific thing (e.g., clothes, electronic equipment etc.) – such was the answer of every fourth respondent (26.6%). In a slightly smaller number of cases, earned money was spent for school-related purposes (13.3%), deposited as savings (9.0%) or given to parents (6.0%) (see Table 4.3). Thus, it turns out that the primary aim of undertaking professional activity by surveyed young people is the will to have their own independent funds that could be spent for any

selected purpose – such is the case of all persons who choose the answer “I spent it for my pastimes” or a large part of those who declare the will to "buy a certain thing".

Table 4.3
Purpose of earned money (in %)

Purpose of earned money	Percentage share (in %)
I spent the money for my pastimes	45.1
Purchase of a certain thing	26.6
School-related expenses	13.3
I deposited the money	9.0
I gave the money to my parents	6.0
Total	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In general, the purpose for which the earned money was spent depends on the financial situation of the family of origin. The higher its level, the more often young people spend their earned money for their pastimes. In the case of students with a low level of material assets of the family of origin, only every third respondent (32.9%) spends his/her earned money for his/her pastimes. In the case of students coming from families with a medium level of affluence, this share rises to 47.9%, and in the case of students with a high level of material assets of the family – as much as 53.9%. A reverse tendency occurs if we look at purposes such as: purchase of a certain thing, school-related expenses or giving of earned money to parents. The lower the level of material assets, the more frequently students state the aforementioned purposes. The above tendency is confirmed by differences in the appropriation of earned money within different social & professional categories of the family of origin. Only every third (33-34%) student whose parents are unemployed or are pensioners spends his/her earned money for his/her pastimes. In the case of students coming from farmers’ families, the analogous percentage share amounts to 42.4%. Most of the respondents who spend their earned money for pastimes are students whose parents are entrepreneurs (59.4% of the entire category) or are full-time employees (50.8%). In the last category, most respondents are students whose parents work as specialists, freelancers or employees of highly qualified services, whereas representatives of typically working-class occupations or low qualified services constitute a much smaller group (below the average).

Those results certainly suggest that the very fact of undertaking work and the specific purpose for which earned money is appropriated is a consequence of the financial situation of the family of origin. Young people from more affluent homes seem to undertake work mainly for the satisfaction of their own wishes and needs - they spend their earned money for their pastimes and the things they particularly want to have. Conversely, poorer young people undertake work and spend their earned money for necessary daily expenses much more frequently than more affluent young people do. They, include, among others, special-purpose expenses (29.8%), school expenses (20.9%) and the money given to parents (7.8%) (see Table 4.4). The tendency described above is related to the aforementioned differentiation of the place and type of work of rural and urban young people. Both of these groups undertake professional activity (and paid work) equally often. However, these groups differ in terms of motives for undertaking work.

Table 4.4
The purpose for which earned money is appropriated vs. the level of the family's material assets (in %)

Purpose of earned money	**Level of the family's material assets**			**Total**
	Low	**Medium**	**High**	
I spent the money for my pastimes	32.9	47.9	53.9	45.1
Purchase of a certain thing	29.8	27.1	22.6	26.6
School-related expenses	20.9	9.9	9.7	13.3
I deposited the money	8.5	9.2	9.3	9.0
I gave the money to my parents	7.8	5.7	4.6	6.0
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

As in the case of other types of secondary and vocational schools, most students of agricultural schools intend to continue their education after graduation. This intention is

strongly reflected by their attitude to employment, necessary professional qualifications, education, occupation and work as such. After the analysis of variables diversifying young people's attitudes, it turned out that their attitude to work, education and qualifications is influenced mainly by the cultural capital of the family of origin, which is defined for the purposes of this report as the indexed level of education of both parents. The analyses presented below take into account mainly the impact of the said variable on attitudes to work, qualifications etc.

The vast majority (70.2%) of the surveyed population of young people attending agricultural schools intends to acquire high professional qualifications before undertaking work. A different strategy is assumed by almost one third (29.8%) of young people who would like to undertake professional work as early as possible. Those results confirm indirectly high educational aspirations of young people and the high value that they attribute to the level of education itself (especially a higher education diploma), which is usually associated with high professional qualifications. Thus, it turns out that young people not only want to complete successive levels of education and obtain professional qualifications, but also put trust in such education as a sort of springboard to further professional career. These types of attitudes are usually expressed more often by girls – 73.7% of them think that it is better to obtain professional qualifications in the first place, as compared to 68.9% of boys. In the case of agricultural school students, it is mainly a consequence of the fact that girls represent a more conformistic attitude to education in comparison to boys (i.e. they have higher educational aspirations and better school grades, which make it easier for them to continue education after the secondary school graduation examination).

The above indications regarding students' attitude to the undertaking of work and/or obtaining of high professional qualifications are visibly correlated with the level of education of the family of origin, which is its most simply defined cultural capital. The lower the level of education of students' parents, the more often young people want to undertake professional work as early as possible, thereby reproducing the educational and professional career of their parents. More than three fourths (79.4%) of students whose parents had a high level of education think that it is necessary to obtain high professional qualifications before undertaking work (20.6%). In the case of students whose parents have a medium level of education, the percentage share of students opting for the obtaining of professional

qualifications is 73%, whereas 27% of them think that it is necessary to undertake professional work as early as possible. In the group of young people whose parents have a low level of education, the opinion that the better solution is to obtain high professional qualifications than to undertake professional work quickly is expressed by 63.8% of respondents, as compared to 36.2% of those who prefer to undertake work as early as possible (see Table 4.5).

Table 4.5
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To undertake work as early as possible	36.2	26.8	20.6	29.8
To acquire high professional qualifications in the first place	63.8	73.2	79.4	70.2
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The adequacy of the aforementioned theory about the social & cultural process of reproduction of behaviour models by young people is also visible in the context of data regarding the social & professional position of parents and their activity. The largest groups of respondents who would like to undertake work as early as possible are students coming from farmers' families (as many as 30.7% of all indications within the said professional category), children of full-time employees (29.3%) and of pensioners (28.8%). Obtaining of high qualifications before undertaking of professional work is a priority mainly for children of private entrepreneurs - 81.1% and for students who have an unemployed person in their family – 80.6%.

The outlined trends seem to confirm the high importance of professional experiences present in families in which young people were brought up. Incomplete education characterises most probably both unemployed parents and entrepreneurs who sacrificed their education for the success of their company. This image affects children in the socialisation process who usually do not want to follow the professional career of their

parents, particularly with regard to the lack of education and relevant professional qualifications.

When planning their future professional career, young people prefer to undertake various jobs and occupations (53.5% of indications) than to stick to one occupation learned in school (46.5% of indications). We can, therefore, say without doubt that the potential professional mobility of young people attending agricultural schools is on a relatively high level. A slightly higher declarative level of potential professional mobility is declared by young people coming from families with a high cultural capital (high level of parents' education) – as many as 60.3% of respondents from this group intend to undertake various jobs and occupations. In the case of students from families with a low level of parents' education, this rate is slightly lower and amounts to 51.4% (see Table 4.6). The opinion that sticking to one learned occupation is better than undertaking various tasks and jobs is expressed more often by students coming from families of pensioners and unemployed persons. On the other hand, undertaking various jobs and occupations is regarded as a better solution much more often by students who were brought up in families of private entrepreneurs (71.4% of the entire category), full-time employees holding high professional positions (called also specialists) or freelancers.

Table 4.6
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To stick to one learned occupation	48.6	45.9	39.7	46.5
To undertake various tasks and occupations	51.4	54.1	60.3	53.5
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In the case of boys, proportions of answers have a similar distribution. In the case of girls, the active attitude is present much more frequently. Most of them (62.0%) think that the better solution in professional life is to undertake various tasks and different professional challenges, whereas 38.0% regard sticking to one learned occupation as the

better solution. These types of differences in answers of boys and girls attending agricultural schools on a higher than middle-school level can be interpreted in terms of cultural models of school and professional choices. Boys are usually prepared from childhood for assuming the social role of the head of household, which involves the need to maintain the family and, consequently, to have a secure job and a concrete occupation. Students (boys) are prepared for that function by the vocational school, which provides them with technical education and specific professional qualifications (irrespective of their real market value). As a result of the social & cultural pressure, boys choose more often various types of vocational schools offering education in traditionally masculine occupations, including those taught in schools with agricultural profiles (in the presented survey, boys constituted almost two thirds of the surveyed population), than girls do. Consequently, they are also more often satisfied with their choices – their approval of the fact of undertaking work in the learned occupation can also be explained in this way.

Table 4.7
Choice of a better alternative vs. gender (in %)

Which alternative is better?	Gender	
	Boys	Girls
To stick to one learned occupation	51.1	38.0
To undertake various tasks and occupations	48.9	62.0
Total	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Conversely, girls think more often than boys than it is better to undertake various jobs and occupations in their life. The difference is significant, amounting to as much as 13.1 pps. Most probably, it is the vocational education effect that works in their case. A large part of girls may be dissatisfied with their education profile and the opportunities that it offers them on the labour market. Also, many of them do not want to finish their education on the secondary or vocational school level. Thus, the opinion that it is better to undertake various jobs and occupations than to stick to one learned occupation is more common among girls (see Table 4.7).

While the attitude of young people to the occupation being practiced suggests a large potential of professional mobility, their attitude to their future workplace is different. It turns out that young people from secondary schools with graduation examinations prefer to work for one employer only – this is what more than three fourths (77.5%) of all respondents declare. Only almost every fourth (22.5%) student thinks that changing the workplace would be a better choice.

Changes of workplaces are perceived as a better solution slightly more frequently by girls – such opinion is expressed by every fourth (26.6%) girl. In the case of boys, an analogous answer is given by every fifth (20.1%) agricultural school student. Rural inhabitants (23.7%) are characterised by higher rates of potential professional mobility as compared to urban inhabitants (15.4%) and students coming from families of service sector employees. The above answers can also be explained by the acquisition of certain models by young people in their family and educational environment and the knowledge and experience that they acquire by observing their environment. Rural inhabitants seem to face the need to change their workplace more often than in the case of urban inhabitants; this is connected directly with the situation of the rural market, where the security of employment in one workplace is low. On the other hand, higher than average rates of service sector employees also reflect specific features of this profession, which requires a sense of professional mobility and readiness to change workplaces frequently.

As far the workplace and occupation is concerned, young people coming from families with a higher level of education show higher mobility rates than young people from families with a low level of parents' education do. Even though the differences are not large, they amount to 9.5 pps. Almost one third (30.6%) of all students whose parents have a high level of education think that the better solution is to change the workplace. In the case of students whose parents have a medium level of education, such declarations are made by almost every fourth (22.2%) student from that group, and in the case of students whose parents have a low level of education – only by every fifth student (21.1%) (see Table 4.8).

Table 4.8
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To change the workplace	21.1	22.2	30.6	22.5
To stick to one employer	78.9	77.8	69.4	77.5
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Almost two thirds (62.6%) of young people think that it is better to be an entrepreneur than an employee. Such declarations are made more often by boys – as many as 65.5% think that it is better to be an entrepreneur than a hired employee, as compared to "only" 57.3% of girls. It seems that the outlined differences between sexes may result from different interests of young people and from certain social & cultural models, which generate different expectations towards boys and girls. The attitudes that are instilled into boys are more often individualistic and non-conformistic, whereas those instilled into girls are rather collectivistic and conformistic.

Being an entrepreneur is perceived as a better solution more often in cities than in the countryside – such statements are made by 68.0% of students living in big cities with more than 100,000 inhabitants. In the case of students living in the countryside, the analogous percentage share is 62.4%. It is particularly clear that the relationship and assessment of the position of an entrepreneur and a hired employee are related very strongly to the type of professional activity/inactivity of parents, particularly the father. Below we will look at this issue more closely. It turns out that young people whose fathers are professionally passive persons (in our survey these are mainly unemployed people or pensioners) think more often than students whose fathers are professionally active that it is better to be an employee than an entrepreneur. More than half (55.3%) of students having an unemployed father or almost half (46.0%) of students whose father is unemployed or is on a pension think that it is better to be a hired employee than an entrepreneur. Opinions of students whose fathers are still professionally active which state that being an employee is a better solution constitute already a small minority. Most students whose fathers are full-time employees (56.5%) are of the opinion that it is better to be an entrepreneur than a hired employee. Even a larger

percentage share of approving attitudes to entrepreneurship occurs among students from families of farmers and private entrepreneurs. In the first case, as many as two thirds of surveyed young people think that it is better to be an entrepreneur than an employee. As regards students from families of private entrepreneurs, a vast majority of them (80.6%) thinks that being an entrepreneur is a better alternative (see Table 4.9). The values of the last two professional categories are worth particular attention. The convergence of attitudes of farmers' children and private entrepreneurs' children is not accidental. Both of these categories have many common features, such as individualism or respect for property. This is because a private farm is a sort of private company, and work in agriculture is a sort of rural equivalent of urban private enterprises. Thus, high rates of entrepreneurial attitudes in both of those professional groups suggest the important role of the socialisation process in a family in the shaping of entrepreneurial and individualistic attitudes and, in particular, the broadly understood cultural capital.

Table 4.9
Choice of a better alternative vs. the kind of the father's professional activity (in %)

Which alternative is better?	Kind of the father's professional activity					Total
	Unemployed person	Pensioner	Employee	Farm owner	Entrepreneur	
To be an employee	55.3	46.0	43.5	33.4	19.4	37.3
To be an entrepreneur	44.7	54.0	56.5	66.6	80.6	62.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Another factor that is clearly visible in the choice of a better alternative from the pair: to be an employee or to be an entrepreneur are differences determined by the level of parents' education. Being an entrepreneur is indicated more often as a better alternative by students coming from families with a high level of education (71.4%). This alternative is indicated as a better one much less frequently (57.6%) by young people with a low education level (see Table 4.10). These differences actually seem to be of primary importance towards the type of the father's professional activity. The cultural capital of the family of origin (treated in slightly simplified terms as the level of parents' education) affects significantly children's

attitudes, which is usually connected with the different hierarchy of values and different goals for life, knowledge and competences.

Table 4.10
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To be an employee	42.4	35.4	28.6	37.4
To be an entrepreneur	57.6	64.6	71.4	62.6
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Individualistic attitudes are visible even more strongly in preferences as to the choice of either of the two options: to hold an executive position or to be a line employee. A vast majority of students of surveyed schools thinks that holding an executive position is a better alternative (80.3%). Being a line employee is indicated as a better alternative only by 19.7% of all surveyed young people from agricultural schools. Boys (82.3% of all indications) regard executive positions as a better alternative slightly more frequently than girls (76.6%) do. However, significant differences can be seen when we look at the impact of the kind of the father's activity on the assessment of both of those alternatives. The father's professional activity has a significant impact on children's opinions regarding the assessment of the executive position or the position of a line employee. The higher the said assessment is, the more frequently young people state that holding an executive position is a better solution. The lower it is (or when there is none), the more frequently being a line employee appears to be more attractive to young people. Consequently, a considerable part of young people (34-37%) whose parents are on a pension or unemployed think that it is better to be a line employee, whereas two thirds (63-67%) are of the opinion that it is better to hold executive positions. A reverse tendency occurs in the case of professionally active parents. Holding of executive positions is regarded as a better solution by as many as 92.1% of students from families of private entrepreneurs and 83.9% of students from farmers' families.

Table 4.11
Choice of a better alternative vs. the kind of the father's professional activity (in %)

Which alternative is better?	Kind of the father's professional activity					Total
	Pensioner	Unemployed person	Employee	Farm owner	Entrepreneur	
To hold executive positions	63.3	65.7	78.2	83.9	92.1	80.3
To be a line employee	36.7	34.4	21.8	16.1	7.9	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In this case, differences between preferences as to the professional function and the level of cultural capital acquired from the respondent's own family are clearly smaller, amounting only to 6.1 pps. However, the general tendency is such that the lower the level of parents' education, the more frequently children choose the option of becoming a line employee – this opinion is expressed by 22.8%. In the case of the medium level of parents' education, this rate decreases to 18.1%, and in the case of the high level of parents' education, it amounts to 16.7% (see Table 4.12). The fact that young people regard holding an executive position as a better alternative than being a line employee results mainly from the general prestige arising from this type of position. In capitalistic societies based on free-market and meritocractic principles, these types of positions are of special value, because in social awareness they reflect both competences and abilities of an individual and, perhaps most importantly, his/her professional success. Being a manager and managing a group of people – these are professional models promoted by modern culture, where the category of professional success plays a special role. Thus, the will to hold executive positions undoubtedly testifies not only to specific psychosocial competences of an individual, but, more importantly, to ambitions and aspirations of a young person, to values pursued by him/her and to social expectations preferring the attainment of high social & professional positions.

Table 4.12
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To hold executive positions	77.2	81.9	83.3	80.3
To be a line employee	22.8	18.1	16.7	19.7
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The aforementioned conclusions seem to be confirmed by further analyses. According to them, young people from agricultural schools have different preferences as to the assessment and importance of the type of their work. The vast majority of surveyed agricultural school students prefers teamwork (70.6%) to individual work (29.4%) (see Table 4.13). It turns out, therefore, that young people from agricultural schools do not find it very difficult to choose between individual work and teamwork. Generally speaking, young people do not want to work individually, as this involves a higher level of responsibility and the risk of making decisions about their own future. Such indications result most probably from the lack of professional experience of young people. Their attitudes and the level of importance attached to individual work and teamwork are adequate to their current life situation and the problems they encounter. The school age is the period where the school and problems of adolescences are central issues of human life. It is easier to cope with both of these issues in a team (e.g. a school class or peer group) than individually.

It is worth noting that young people do not identify the holding of an executive position with individual work. Holding an executive position is perceived clearly better than individual work. Although both categories encompass various dimensions, there is a certain common area determined by concepts such as responsibility, independence, etc. This potential discrepancy seems to result from different ways of defining both scopes. As has already been mentioned, holding of executive positions may be identified with prestige and success, whereas individual work is associated rather with responsibility and risk.

Table 4.13
Choice of a better alternative vs. the level of parents' education (in %)

Which alternative is better?	Level of parents' education			Total
	Low	Medium	High	
To work individually	29.6	29.4	28.1	29.4
To work in a team	70.4	70.6	71.9	70.6
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Such understanding and interpretation of both of these issues obviously does not question the weight and importance of teamwork, but rather signals the need to define the social context of attitudes and opinions of young people, especially those connected with professional work. Teamwork is assessed slightly better (32.2%) by boys than by girls (24.7%). At the same time, there are no major differences in the environmental aspect. Neither the place of residence nor the level of parents' education affects significantly young people's opinions about the assessment of teamwork or individual work. However, we can notice once again the impact of the father's professional activity on young people's assessments. Individual work is chosen most often by students coming from families where the father is a farm owner (32.5%) or a private entrepreneur (31.4%). Conversely, students whose fathers are pensioners (20.4%) or unemployed (22.2%) regard least frequently individual work as better than teamwork (see Table 4.14).

Table 4.14
Choice of a better alternative vs. the kind of the father's professional activity (in %)

Which alternative is better?	Kind of the father's professional activity					Total
	Pensioner	Unemployed person	Employee	Entrepreneur	Farm owner	
To work individually	20.4	22.2	25.8	31.4	32.5	29.4
To work in a team	79.6	77.8	74.2	68.6	67.5	70.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

For young people from agricultural schools the most important element connected with work is its security – this is what 44.7% of all respondents indicate. The second most important factor is the amount of remuneration – such opinion is expressed by every fifth (21.9%) student. Further places are occupied by factors such as: the opportunity of self-fulfilment (13.9%), the working time (10.8%) and the opportunity of promotion (8.8%).

Generally speaking, girls indicate more often than boys the following factors as the most important ones connected with work: the security of employment (47.5% – girls, 42.3% – boys), the opportunity of self-fulfilment (15.5% – girls, 12.7% – boys) and the working time (12.7% – girls, 9.7% – boys). Conversely, boys indicate more often than girls the following factors as the most important ones connected with work: the amount of remuneration (24.0% – boys, 18.3% – girls) and the opportunity of promotion (10.3% – boys, 5.9% – girls). The aforementioned differences between sexes result from different aims and lifetime values that characterise young people at that age. Boys usually strive more strongly for material values that are measurable in terms of status and economy. Those resulting from professional activity include, among others, the amount of remuneration or the opportunity of promotion. Girls more often pay attention to non-material values, which results from psychosocial factors. Factors connected with professional work include, among others, the security of employment or the opportunity of self-fulfilment.

Table 4.15
The most important work-related factor vs. the level of parents' education

The most important factor	Level of parents' education			Total
	Low	Medium	High	
Security of employment	46.4	45.2	34.2	44.7
Amount of remuneration	23.3	20.2	26.6	21.9
Opportunity of self-fulfilment	12.3	14.7	15.2	13.9
Working time	11.4	10.1	12.7	10.8
Opportunity of promotion	6.6	9.7	11.4	8.8
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The definition of the most important work-related factors by young people is also affected to some extent by the level of the family's material assets. The higher the level of material assets of the family of origin, the less frequently young people specify the security of employment as the most important factor related to professional work. In the case of students from families with a low level of material assets, 47.1% of them indicate the security of employment as the most important factor, whereas among students from families with a high level of material assets this rate amounts to 39.8%.

Table 4.16
The most important work-related factor vs. the level of the family's material assets (in %)

The most important factor	Level of the family's material assets			Total
	Low	Medium	High	
Security of employment	47.1	44.4	39.8	44.2
Amount of remuneration	22.9	20.0	24.3	20.0
Opportunity of self-fulfilment	14.8	14.8	13.7	14.5
Working time	9.4	10.4	12.4	10.6
Opportunity of promotion	5.7	10.4	9.7	8.7
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

4.3 Project planning skill

One of the key elements of entrepreneurship is the project planning skill. Success in the achievement of goals certainly depends to a large extent on the degree to which they will be "put into practice". What is of particular importance here, are young persons' abilities to formulate plans in a manner enabling their implementation.

An attempt to diagnose project planning skills of agricultural school students was undertaken on the basis of two questions in which respondents were asked to plan the amount of PLN 1,000 for a one-week seaside holiday and the amount of PLN 1,000,000 won in a lottery. In both of these questions, young people had to specify the kind of expenses and

the amount that they plan to spend. Our analysis of planning skills will begin with the structure of the holiday trip budget.

As has already been mentioned, agricultural school students received PLN 1,000 at their disposal. In the first place, a considerable shortage of data must be emphasised (22%). More than every fifth agricultural school student evaded the above question, which may indicate, on the one hand, the lack of sufficient commitment to participation in the survey and, on the other hand, the lack of skills. The thesis that the task of planning of the holiday budget turned out to be too difficult for a part of agricultural school students is partly justified by the school skills of that population. The average score obtained in both parts of the middle-school examination by students who failed to undertake the task of planning of the holiday budget is 53.7 pts and is 3 pts lower than the average score of the entire surveyed population (56.7 pts). Also, school grades of students who failed to plan their holiday budget are lower than grades of the entire surveyed population (the average grade is respectively 3.36 and 3.47). In consideration of the specific nature of the task of planning of the holiday budget, the analysis covered also school grades obtained by students in mathematics. It turns out once again that young people who did not undertake the task of budget planning achieved lower grades in mathematics than the entire surveyed population (the average grade is respectively 2.68 and 2.82). Thus, it is highly probable that the evasion of the task of planning of the holiday budget by more than every fifth student is caused to a large extent by the lack of skills that would enable them to cope with this type of project.

The correct planning of the budget, which is understood here as the presentation of the structure of expenses equalling the amount of PLN 1,000 that agricultural school students had at their disposal, characterises more than half of the respondents (53.6%). At the same time, in the case of every fourth student (24.7%), the budget planned by him/her is either lower or higher than the amount that he/she had at his/her disposal. Taking into account the large number of missing answers and errors in expense planning, we can say that the analysed skills are possessed by slightly more than every second agricultural school student. Here, of course, we are putting aside the structure of expenses that will be the subject-matter of further analyses.

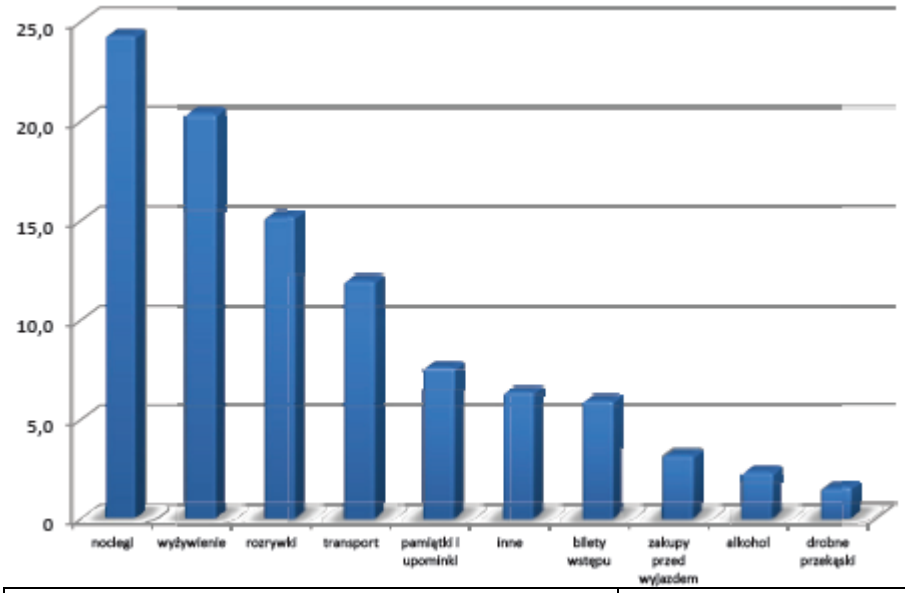
It turns out that discrepancies between the structure of holiday expenses planned by agricultural school students and the amount that they had at their disposal are quite large.

The minimum sum of expenses is PLN 170, and the maximum sum is 6,000 PLN; however, the last value constitutes a serious discrepancy, because the second highest amount of expenses is PLN 2,100. In most cases, the total amount reached by young people planning their holiday budget was higher (9.2% of all students who planned their expenses incorrectly) or lower (15.1%of the same group) by PLN 100.

It is difficult to indicate any clearly specific features of agricultural school students who planned their holiday budget incorrectly. Obviously, as has already been mentioned, young people who lack planning abilities have slightly lower school skills measured both by grades and scores at middle-school examinations. The expense planning skill is possessed by boys (58%) more often than by girls (45%). Factors such as the level of parents' education, material assets of the family of origin or educational aspirations of young people are of little significance here. Students coming from families where at least one of the parents is unemployed failed to plan the holiday budget, or did that incorrectly, relatively more frequently. On the other hand, the expense planning skill is shown more frequently by children of farmers and entrepreneurs in comparison to respondents from other social & professional categories; however, differences in this case are not as significant as with regard to sexes or school skills.

Let us now look at the structure of seaside holiday expenses planned by agricultural school students. The surveyed young people intend to bear the highest expenses for accommodation – the average amount of such expenses is PLN 228. Further significant items are costs of meals (the average amount of PLN 188) and entertainment costs (PLN 147). Transport costs (PLN 120) also constitute an important share of students' holiday budget. Costs of other items of the holiday budget are less significant (PLN 70 – souvenirs and gifts, PLN 56 – entrance tickets, PLN 30 – shopping before departure, PLN 23 – alcohol, PLN 15 – snacks and PLN 66 – miscellaneous costs).

Figure 4.4
Arithmetic averages of the percentage share of particular items in the holiday budget



noclegi	accommodation
wyżywienie	meals
rozrywki	entertainment
transport	transport
pamiątki i upominki	souvenirs and gifts
inne	other
bilety wstępu	entrance tickets
zakupy przed wyjazdem	shopping before departure
alkohol	alcohol
drobne przekąski	snacks

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The aforementioned costs of particular items of the holiday budget of agricultural school students are reflected by their share in the total amount that students had at their disposal or planned (the analysis of the structure of expenses does not take into account the correctness of planning for the amount that students had at their disposal). The leading item of expenses is accommodation, which is followed by meals, entertainment and transport. This structure of expenses can be regarded as the most proper one. Young people from agricultural schools seem to plan their holiday budget properly, being aware of costs that should be incurred for necessary expenses during a seaside holiday.

However, certain differences can be noticed in the structure of expenses in students' holiday budget that result from their social characteristics. For example, young people coming from families with a good financial situation would spend a slightly larger part of

their funds for entertainment (18.3%) in comparison to their peers coming from families with a low level of material assets (13%). The latter would appropriate slightly higher amounts (9% of the budget) for souvenirs (in the case of students from families with high material assets, this item accounts for 5% in the holiday budget).

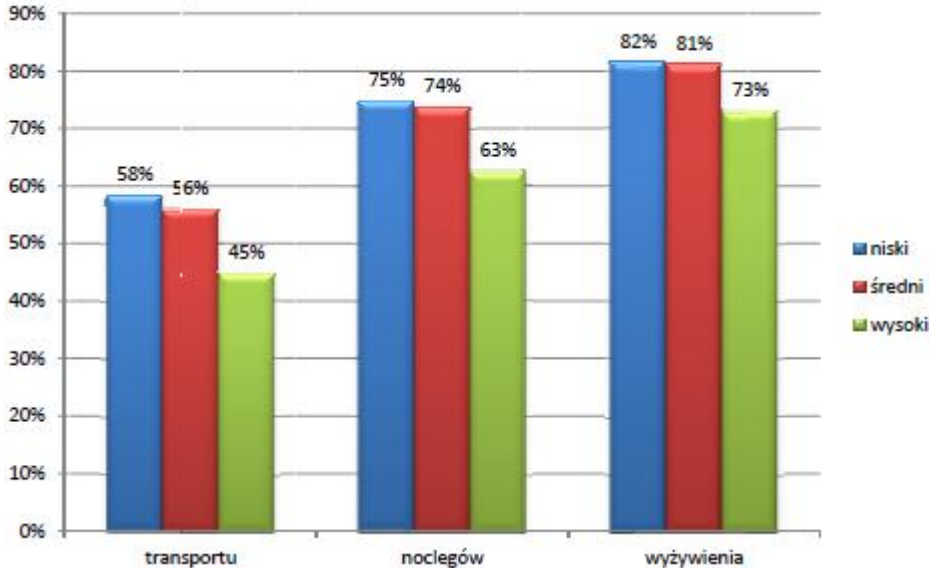
The level of parents' education is also the factor that diversifies the structure of students' holiday budget to some extent. Young people coming from families with a low level of parents' education reserve a larger part of their funds for primary costs, such as accommodation, meals, transport and souvenirs. Their peers from families with a high level of parents' education would appropriate higher sums for entertainment, shopping before departure and alcohol.

The aforementioned differences can certainly be regarded as a reflection of budgets of families of surveyed students, which are a function of the family's material assets on the one hand and of the family's cultural capital on the other hand. Primary maintenance costs, such as fixed charges or meals, are an undoubtedly important item of the family budget of students coming from families with low incomes and a low level of parents' education. In the case of families with a high level of parents' education, other expenses (e.g. entertainment costs) can also play a significant role.

We can, therefore, say that the holiday budget planned by agricultural school students is actually realistic and contains the most important items, such as costs of travel, meals or accommodation, whose share exceeds half of the funds that respondents had at their disposal. However, from the perspective of the analysis of key competences of agricultural school students with regard to planning skills, the structure of particular items is not as important as their presence in the budget itself. Even though it is possible to envisage low expenses for travel or accommodation (e.g. the tent stand) or even meals, the presence of these items in total seaside holiday expenses is necessary. For this reason, three items were assumed as a necessary part of the holiday budget, the absence of which may indicate the lack of planning skills of young people in the analysed case of seaside holiday expenses. These items include: meals, accommodation and transport. Without these items, it would be hard to imagine the possibility of spending holiday in any kind of place. The following analyses do not take account of the correctness of planning of the holiday budget according to the amount that young people had at their disposal. The only thing that we are concerned

about is whether planned expenses contain certain items that are necessary from the perspective of a holiday trip.

Figure 4.5
Percentage share of students who planned costs of transport, meals and accommodation in their holiday budget in consideration of the level of parents' education



niski	low
średni	medium
wysoki	high
transportu	transport costs
noclegów	accommodation costs
wyżywienia	meal costs

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The data presented on Figure 4.5 show the existence of the following two regularities. Firstly, the biggest percentage share of students included costs of meals in holiday expenses (81% of the total population). Agricultural school students were aware of the need to bear accommodation expenses to a slightly lesser extent (73% of the total population) and slightly more than half of respondents remembered to include transport costs (56%). The above results could be regarded as optimistic if we were not analysing the presence of necessary expenses in the holiday budget separately for meals, transport costs and accommodation. Planning skills of agricultural school students turn out to be much smaller when we analyse the percentage share of respondents who included all of the three aforementioned items. It

turns out that persons who planned expenses for accommodation, transport and meals in their holiday budget at the same time represent only a share of 38% in the entire population of young people. In other words, as far as the analysed items are concerned, the planning skill characterises only every third student of agricultural schools!

Table 4.17
Percentage share of respondents who included necessary expenses in the holiday budget vs. the level of parents' education and material assets of the family of origin

Level of material assets	**Level of parents' education**			**Total**
	low	**medium**	**high**	
Low	42.2	37.8	20.0	39.4
Medium	34.4	39.9	24.0	36.8
High	37.0	34.4	35.5	35.1
Total	38.3	37.8	28.8	37.2

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The second regularity that can be observed refers to the importance of the level of education of students' parents for their planning skills. With regard to each type of analysed expenses, we can observe the same regularity – the higher the level of education of students' parents, the smaller number of respondents includes necessary expenses in the holiday budget. When analysing the simultaneous presence of the three items regarded as necessary in holiday costs, we can notice the same regularity. Among students coming from families with a low level of education (i.e., not higher than basic vocational education), 38% include all necessary expenses. Among students coming from families with a medium level of parents' education, this percentage share is only a little smaller, i.e. 37%, but in the category of young people from families where at least one of the parents has higher education, the share of those including necessary expenses in the budget amounts to 29%. However, we must note that the level of the family's material assets is also significant for students' skill at planning the holiday budget.

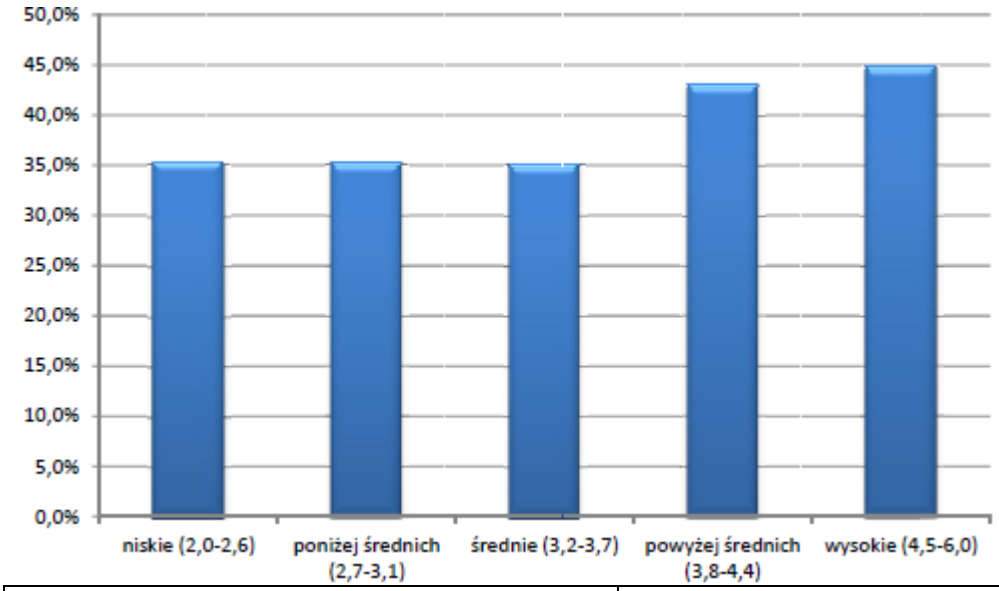
Paradoxically, the highest planning skills characterise students coming from families with a low level of parents' education and a low level of material assets (42%). The smallest share of respondents who include necessary costs of seaside holiday in their family budgets characterises young people coming from families with a high level of education of parents whose financial situation is, however, average or difficult (the low and medium level of

material assets). Among these categories of students, only every fifth one has the planning skill.

Apart from material assets of the family of origin and the level of parents' education, another factor that diversifies planning skills of agricultural school students is the social & professional position of their fathers. The largest percentage share of respondents who included necessary expenses in the planned holiday budget (accommodation, transport, meals) occurs among students coming from entrepreneurs' families (54% of that category). On the other hand, the smallest share of students characterised by the planning skill occurs among students coming from families of hired employees (35%) and farmers (37%). The small share of farmers' children having the planning skill can be surprising to some extent, if we take into account the fact that, in terms of the identification of that category of students with characteristic features of the entrepreneurial attitude, they did not differ much from entrepreneurs' children. Most probably, the above differences between planning skills of entrepreneurs' and farmers' children result from specific features of occupations of those two categories and their different holiday experiences.

Also, holiday budget planning skills occur more frequently among students who have better school achievements measured by final certificate grades. Among young people whose grades are average or lower than average, the percentage share of those who plan their seaside holiday expenses properly does not exceed 36%. In the group of students whose grades in the middle-school graduation certificate are higher than average (but not high), the percentage share of students characterised by the planning skill is also higher (43%). In the group with highest grades, this category of students accounts for 45%. On the other hand, scores achieved by respondents in their middle-school examinations are of minor significance for their planning skill.

Figure 4.6
Percentage share of students who planned costs of transport, meals and accommodation in their holiday budget in consideration of the level of school grades



niskie (2,0-2,6)	low (2.0-2.6)
poniżej średnich (2,7-3,1)	below medium (2.7-3.1)
średnie (3,2-3,7)	medium (3.2-3.7)
powyżej średnich (3,8-4,4)	above medium (3.8-4.4)
wysokie (4,5-6,0)	high (4.5-6.0)

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The analysis of project planning skills of agricultural school students that was carried out on the basis of expenses of the weekly seaside holiday suggests that their level is relatively low. Only slightly more than half of respondents planned particular expenses in such a way that their total amount was equal to the funds that they had at their disposal. At the same time, in the case of every fourth agricultural school student, the sum of planned expenses was lower or higher than the amount that they had at their disposal.

The structure of planned seaside holiday expenses that can be treated as an indicator of the skill of inclusion of necessary projects in planned tasks shows an even larger lack of young people's abilities in this respect. Only 38% of surveyed young people envisaged the need to bear certain expenses that must be included in connection with a weekly seaside holiday. This means that a vast majority of agricultural school students does not have the project planning skill.

The project planning skill of agricultural school students that is covered by analyses in this part of the report turns out to be independent of the extent to which respondents identify with characteristic features of entrepreneurial attitudes. Average scores in the scale of entrepreneurial attitudes differ only slightly in the case of students having the planning skill and students that do not have it.

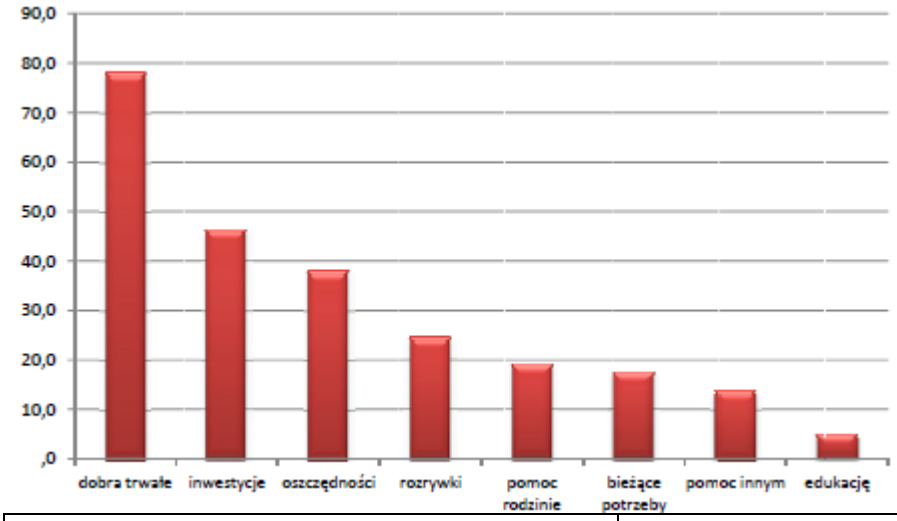
Students' planning skills that are an inherent part of key competences relating to entrepreneurship and the sense of initiative were also tested by means of a question about the method of spending the hypothetical prize won in a lottery in the amount of PLN 1,000,000.

First of all, it must be emphasised that the surveyed young people were slightly more successful in planning their prize than seaside holiday expenses. On the other hand, the percentage share of missing answers is similar in both cases and amounts to 22% in the case of planning the lottery prize. Nevertheless, nearly 2/3 of surveyed young people (63%) planned their lottery prize in such a way that the sum of incurred costs was equal to PLN 1,000,000. As has already been stated, the percentage share of agricultural school students who planned their holiday budget properly (total expenses being equal to available funds) amounted to 54%. This means that young people are slightly more successful in coping with the expense planning task when they have full freedom in that respect, without any limitations resulting from the need to incur necessary costs.

Boys planned their lottery prize much more successfully in comparison to girls. Agricultural school students coming from families where at least one of the parents has a higher education diploma were slightly more successful in planning their lottery prize (65% as compared to 61% among students from families with a low level of parents' education – mainly primary or basic vocational education), even though those differences can hardly be regarded as large. The social & professional position of parents also has an impact on the ability to plan expenses from the lottery prize. In this respect, highest skills were shown by students coming from families of entrepreneurs and farm owners, whereas skills of young people from families of the unemployed, pensioners or hired employees (particularly workers) were relatively lower. The cultural capital of the family of origin is undoubtedly an important factor here.

The level of the family's material assets also turns out to be a factor that largely diversifies the skill of planning expenses from the lottery prize. Among students coming from families with a low level of material assets, the correct planning of expenses from the lottery prize (in such a way that these total expenses are equal to the amount won) characterises 59% of students, as compared to 69% of young people coming from families with a high level of material assets.

Figure 4.7
Percentage share of agricultural school students who include particular items in the amount of the lottery prize



dobra trwałe	durable goods
inwestycje	investments
oszczędności	savings
rozrywki	entertainment
pomoc rodzinie	help to the family
bieżące potrzeby	current needs
pomoc innym	help to others
edukację	education

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

From the perspective of assessment of critical competences of agricultural school students, the method of planning expenses from the lottery prize is important. The tendency to excessive consumption and investment in durable goods can hardly be attributed to entrepreneurship. On the other hand, the inclusion of investments or savings in expenses from the lottery prize by young people attending agricultural schools can certainly be regarded as an indicator of entrepreneurship. Figure 4.7 presents percentage shares of

agricultural school students who took particular items into consideration while planning their expenses from the lottery prize.

A vast majority (as many as 78%) of agricultural school students would appropriate a part of their lottery prize for durable goods (house, apartment, car, audio/video equipment etc.). It is the most frequently stated method of appropriation of money won in a lottery. However, further frequently stated items are investments and savings. It turns out, therefore, that almost every second agricultural school student (46%) would appropriate a part of the lottery prize for investments in his/her own company or farm. At the same time, more than every third agricultural school student (37%) would appropriate the amount of the prize for savings (bank deposits, investment funds). The interpretation of the above results involves certain difficulties. On the other hand, taking into account the amount of the prize, it is hardly surprising that a part of it would be appropriated for durable goods. Apart from that, if we consider average expenses for real property or a car (slightly above PLN 380,000), it turns out that it is not even a half of the entire amount that students had at their disposal. At the same time, the average value of investment in respondents' own company or farm is almost PLN 0.5 million (half of the lottery prize), whereas the average value of savings is PLN 436,000, which also constitutes more than average expenses for durable goods (Table 4.18).

Table 4.18
Average expenses and standard deviations of particular kinds of expenses from the lottery prize

Kind of expenses	Average	Standard deviation
Education	117452.38	168424.58
Entertainment	136466.49	202219.17
Family's current needs	144871.99	217015.98
Help to others	186644.07	190837.45
Help to the family	237025.45	244927.61
Durable goods	381609.19	280046.01
Savings	436134.85	282823.41
Investments	494847.12	312195.03

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

On the other hand, having PLN 1,000,000 at their disposal, less than half of all agricultural school students included investments in their plans, and only slightly more than one third of them included savings. Obviously, these amounts are not low, and their inclusion (in such a large amount) in expenses proves undoubtedly that agricultural school students have a certain level of competence relating to entrepreneurship. However, if we include those two types of expenses together, it turns out that only 13% of all respondents plan to appropriate a part of their lottery prize for investments and savings, other 33% of them intend to invest without any savings, and thrifty respondents (i.e. those who plan savings) constitute 25%. This means that 29% of agricultural school students who had PLN 1,000,000 at their disposal did not intend to invest at least a part of their funds or to deposit them in banks or in investment funds.

As has already been mentioned, agricultural school students plan to spend the biggest average amounts from the lottery prize for investments (PLN 495,000 on average), savings (PLN 436,000 on average) and durable goods (PLN 380,000). The lowest expenses planned by young people attending agricultural schools refer to investments in their own education, although their average amounts are not low (PLN 117,000). Standard deviation values indicate that the largest differentiation of planned expenses occurs with regard to the items with the highest average value (investments, savings and durable goods). It must be emphasised, however, that the differentiation of planned expenses was very high also in the case of persons who intend to appropriate a part of the lottery prize for their own education (however, their share in the entire population was relatively the smallest, amounting to merely 5%).

When understood as a tendency to make investments and savings, entrepreneurship seems to be possessed much more often by boys than by girls in the light of results of conducted surveys. Plans to appropriate a part of the lottery prize both for investments and for savings are made by 15% of boys and 9.5% of girls. At the same time, boys want to spend a part of their lottery prize for investments three times more often than girls (43% and 14%, respectively). On the other hand, female students of agricultural schools would place their lottery prize more often on bank deposits or in any other saving instrument (32% of girls as compared to 21% of boys). Generally, however, nearly half of the girls (45%) do not include any investments or savings in their plans of management of the lottery prize. Among boys,

this percentage share amounts to 21%. We can presume that the above described gender differences relating to investments and savings result from the model of upbringing that is strictly connected with the social & professional position of parents. A vast majority of surveyed boys comes from farmers' families; in the case of girls, hired workers are the dominant category of the social & professional position of parents. The connection of boys with the farm and their participation in its running is reflected by their natural care of its condition, which is manifested by their readiness to appropriate a part of the lottery prize for investments.

Table 4.19
The father's social & professional position vs. planned expenses from the lottery prize relating to investments and savings (in %)

Planned items	Father's social & professional position						Total
	farm owner	entrepreneur	hired employee	pensioner	unemployed person	other	
Investments and savings	13.3	7.4	13.9	10.4	12.9	17.9	13.2
Only investments	45.2	22.2	14.8	18.8	19.4	17.9	33.3
Only savings	21.2	22.2	30.1	37.5	32.3	17.9	24.7
No investments and savings	20.3	48.1	41.1	33.3	35.5	46.4	28.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The validity of the above thesis is confirmed by differences that can be observed in the tendency to make investments and savings among students coming from families with different social & professional positions of parents (see Tables 4.19 and 4.20). Agricultural school students coming from farmers' families declare most frequently their readiness to appropriate a part of their lottery prize for investments (when we take into account the social & professional position of both parents). In the case of that category of students, nearly half of them would appropriate a part of the lottery prize for investments (in the farm, as we can easily guess).

Table 4.20
The mother's social & professional position vs. planned expenses from the lottery prize relating to investments and savings (in %)

Planned items	Mother's social & professional position						Total
	farm owner	entrepreneur	hired employee	pensioner	unemployed person	other	
Investments and savings	13.1	10.5	13.5	8.9	15.1	11.0	12.9
Only investments	44.4%	26.3	21.3	31.1	15.1	35.6	33.2
Only savings	20.6	42.1	28.7	26.7	27.4	28.8	25.1
No investments and savings	21.9	21.1	36.5	33.3	42.5	24.7	28.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

On the other hand, the lack of the tendency to make investments and savings characterises most often students coming from families of unemployed persons and hired employees (mainly blue-collar employees), if the social & professional position of both parents is taken into account. What can be surprising, is the high percentage share of students who do not plan any investments and savings and whose fathers conduct their own business activity. Here, however, it is necessary to take into account small population numbers making it possible to carry out a comparative analysis to a limited extent[22]. It can be noticed, however, that the tendency to make investments is present more strongly among young people coming from farmers' and entrepreneurs' families. Among students from families of other social & professional categories of parents, there is a considerable group of young people who do not plan any investments and savings, but also a relatively large group of students who would deposit a part of their lottery prize in a bank.

Now let us look at the structure of expenses from the lottery prize planned by agricultural school students in consideration of particular socio-economic characteristics. As has already been mentioned, one of the factors that diversify very strongly methods of management of the amount of PLN 1,000,000 is the gender.

[22] In the case of fathers n = 27, in the case of mothers n = 19.

Table 4.21
Structure of expenses from the lottery prize of PLN 1,000,000 vs. gender

Kind of expenses	Gender		Total
	female	male	
Education	1.1	0.8	0.9
Durable goods	44.1	35.9	38.5
Investments	9.7	34.1	26.3
Family's needs	5.1	2.6	3.4
Savings	19.7	16.6	17.6
Help to the family	9.6	3.9	5.7
Help to others	6.3	2.3	3.6
Leisure	4.4	3.9	4.1
Total	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The consumption-oriented attitude is presented much more widely among girls than among boys. On average, girls would appropriate as much as 44% of their lottery prize for durable goods, e.g. a house or a car. In the case of boys, the percentage share of expenses for investments in the entire lottery prize is three and a half times larger (34%) than among girls who would appropriate only one tenth of their lottery prize for their own company or farm. At the same time, girls show more concern about the family and closest friends. Girls would appropriate more than twice as much money as boys would do for everyday needs of their family or for help to their cousins and friends.

Apart from the gender, another factor that diversifies strongly the structure of expenses from the lottery prize planned by agricultural school students is the level of parents' education. The higher the level of parents' education, i.e. the higher the cultural capital of the family of origin and its resulting financial status, the higher part of the lottery prize is appropriated for durable goods and leisure in students' plans. For instance, among students coming from families where at least one of the parents has higher education, as much as 46% of the entire lottery prize would be appropriated for durable goods, e.g. a house, an apartment or a car. Young people coming from families with a low level of parents' education (mainly basic vocational education) would appropriate 38% of the prize of PLN 1,000,000 for the said purposes. At the same time, a part of the lottery prize that students from families with a high level of education plan to spend for leisure is twice as large as in

the case of students from families with a low level of parents' education (7.2% and 3.6%, respectively).

Table 4.22
The structure of expenses from the prize of PLN 1,000,000 vs. the level of parents' education (in %)

Kind of expenses	Level of parents' education			Total
	low	medium	high	
Education	0.7	0.6	1.2	0.7
Durable goods	37.5	39.0	46.2	39.1
Investments	25.8	27.2	20.6	26.1
Family's needs	3.6	3.0	2.4	3.2
Savings	18.5	17.4	15.3	17.7
Help to the family	7.0	5.3	2.1	5.6
Help to others	3.3	3.5	5.0	3.6
Leisure	3.6	3.9	7.2	4.1
Total	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

On the other hand, students coming from families with a low level of parents' education have a stronger tendency to make investments and savings; these are the purposes for which they would appropriate as much as 44% of the amount that they would win in a lottery. In the case of their peers from families with a high level of parents' education, funds appropriated for investments and savings would represent 36% of the prize. Differences in the structure of expenses of students coming from families with different levels of parents' education are also visible with regard to satisfaction of the family's needs. Young people from families with a low level of parents' education would appropriate on average as much as 7% of the prize for that purpose, whereas their peers from families with a high level of parents' education would appropriate only 2%.

It seems that the above described differences in the method of spending of the lottery prize should be explained with reference to their financial situation and living conditions rather than the cultural capital of families of origin. The low level of parents' education occurs together with a relatively worse financial situation of the family whose needs are certainly bigger. Stronger tendencies to make investments and savings among that category of young people may reflect their awareness of the need to secure their own future independently. In the case of young people from families with a high level of education whose financial situation is relatively better, the level of financial security is higher, which is

reflected by plans to appropriate a larger part of the prize for durable goods or leisure. It is also possible that young people from families with a high level of parents' education who have higher school skills and more ambitious educational and professional plans are convinced that the decisive factor for their future success is not only – or not in the first place – a prize won in a lottery, but their competences and skills.

4.4. Readiness to undertake new projects and risks

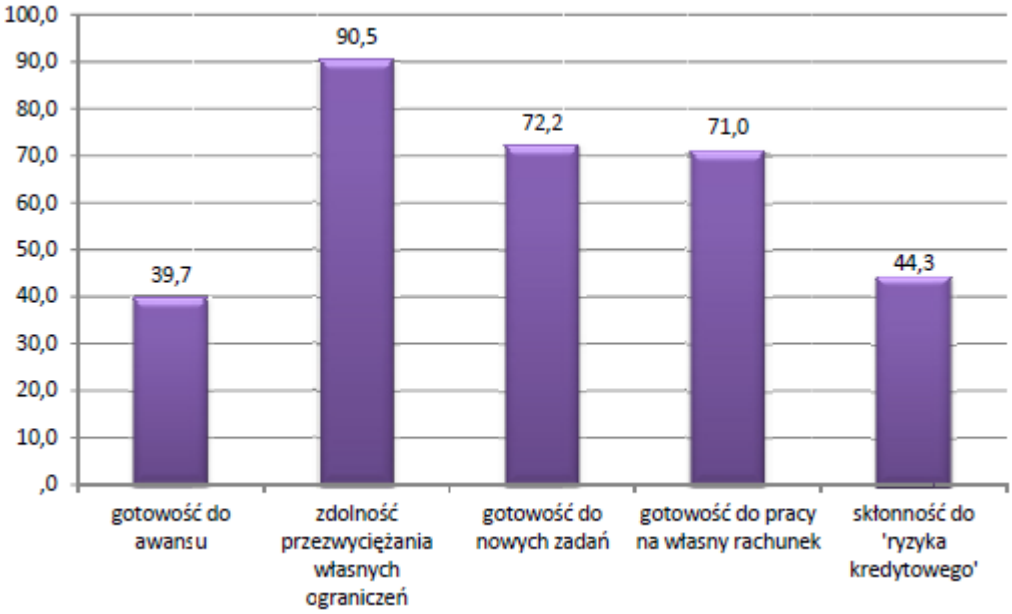
The characteristics of key competences of agricultural school students with regard to entrepreneurship and the sense of initiative would have certainly been incomplete if it had not considered the readiness to undertake new projects, challenges and risks. It is the ability to face the "new" that is of fundamental importance for the assessment of young people's attitudes with regard to entrepreneurship and the sense of initiative.

The readiness to undertake new projects and risks was tested during the survey by means of five projective questions presenting stories of fictitious persons who face important life dilemmas. The protagonist of the first story is a "man of success" who had an opportunity of further professional promotion, which created new opportunities and opened new prospects, but also involved huge challenges; failure to meet such challenges may result in the loss of the job (*readiness for promotion*). The protagonist of the second story is a young unemployed mother coming from a poor family, which received a job offer requiring her to take up studies. The dilemma faced by the protagonist of that story refers to the readiness to take up new challenges that she regards as unfeasible (*ability to overcome one's own limitations*). Thus, the presented hypothetical situations refer to the skill at undertaking new challenges, but in diametrically different conditions. In the first story, the protagonist achieved everything in his life, and the problem lies in the readiness to undertake new challenges. In the second story, the female protagonist has to face her lack of confidence in her own abilities. The protagonist of the third story faces a dilemma that is similar to the case of the first protagonist. He is a son of prosperous entrepreneurs who follows the "avoid stress" principle and, in spite of parents' suggestions, does not want to work in his family's company and works in various accidental places (*readiness to undertake new tasks*).

The dilemmas faced by protagonists of further two stories refer to their readiness to undertake risk. In the fourth story, the father of a family, who is a bricklayer by profession, faces a choice between the full-time employment that ensures small, often irregularly paid wages and the starting of his own business activity (*readiness for self-employment*). The theme of the last story is the incurring of a bank loan for starting a kind of business activity the profile of which gives much hope for success (*tendency to "credit risk"*). In the first place, we will look at the readiness to undertake new challenges and risks among agricultural school students.

Figure 4.8 presents percentage shares of students who choose options confirming their readiness to undertake new challenges and risks in the case of dilemmas faced by protagonists of presented stories. It is worth noting that agricultural school students would take the opportunity of promotion least probably if their achievements were high anyway. On the one hand, this kind of attitude cannot be surprising. We should remember that the protagonist of the first story is a man of success. On the other hand, we can state that a majority of surveyed young people seems to be satisfied with the fact of reaching a certain level of professional career to such a degree that they resign from the opportunity of promotion.

Figure 4.8
Readiness to undertake new challenges and risks (in %)



gotowość do awansu	readiness for promotion
zdolność do przezwyciężania własnych ograniczeń	ability to overcome one's own limitations
gotowość do nowych zadań	readiness to undertake new tasks
gotowość do pracy na własny rachunek	readiness for self-employment
skłonność do „ryzyka kredytowego"	tendency to "credit risk"

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

More than half of agricultural school students would not take the risk of incurring a bank loan for running their own business activity even if the idea of their own business seems to have a good chance of success. When faced with the same dilemma that the protagonist of the story has, agricultural school students would rather postpone their plans to start their own company for some indefinite time than risk a potential failure. A vast majority of respondents would be ready to take up studies if their employment depended on the completion of such studies, would give up full-time employment ensuring a certain level of professional stability for the running of their own business or would undertake the challenge of running a large family business, even if this decision involved new challenges. Thus, the readiness of students to undertake new tasks and risks is big if they are forced to do so by their professional or life situation. However, challenges that require a bank loan to be incurred or involve the risk of loss of previous achievements (which are assessed as high by young people) are not very popular among agricultural school students.

The factor that diversifies to a certain extent the readiness of young people to undertake new challenges and risks is the gender. Boys are characterised by *readiness for promotion* (42% and 36%, respectively) and *tendency to credit risk* (48% and 36%, respectively) more often than girls. On the other hand, girls would take up studies more often than boys if their employment depended on the completion of those studies.

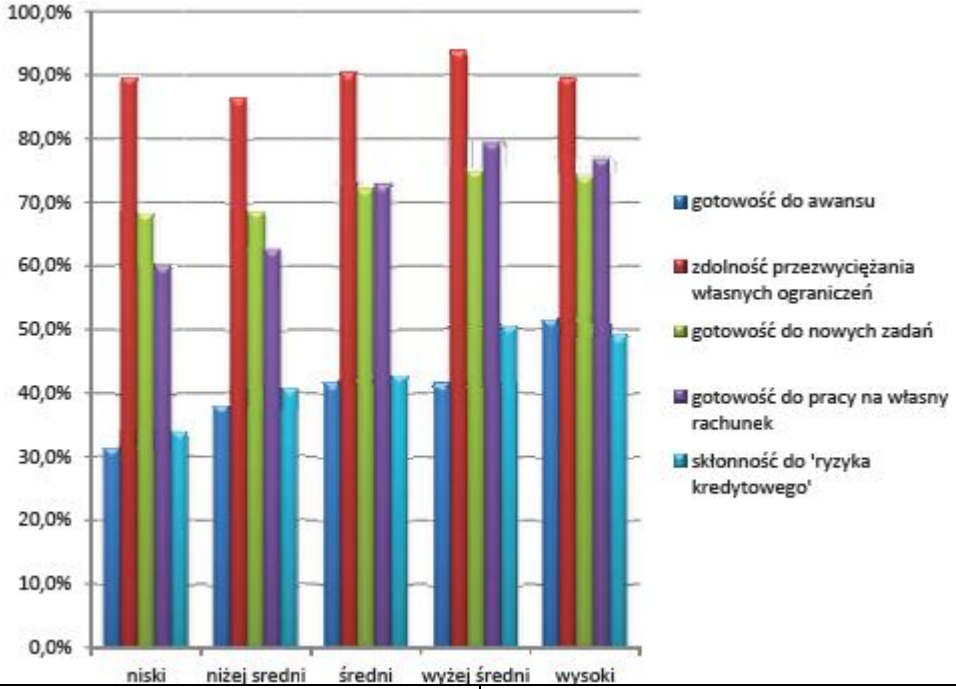
The social & professional position also diversifies the readiness of young people to undertake new challenges, but only with regard to credit risk. In this case, particular courage characterises entrepreneurs' children, among whom as many as 66% would incur a bank loan for the starting of their own business activity. The biggest concerns about the financing of their own business from this source are shown by children of unemployed persons (only 23% of them would decide on a loan) and hired employees (37%). Most probably, a relatively high level of readiness of entrepreneurs' children to bear credit risk derives from

their everyday observation of professional work of their parents, who often finance their activity from bank loans.

However, it is school skills of agricultural school students that are of highest importance for their readiness to undertake new challenges and risks. The better the school achievements of agricultural school students are, the higher is their readiness for promotion, overcoming of their own limitations, undertaking of new tasks, interest in self-employment or taking of credit risk.

For instance, almost every third student with low scores and every second student with high scores in middle-school examinations would take the opportunity of promotion in spite of the risk of losing their high achievements. Similar percentage shares can be observed with regard to "credit risk". 60% of students with low scores in middle-school examinations and 76% of young people with highest achievements in tests would prefer to start their business activity as an alternative to hired employment (*readiness for self-employment*).

Figure 4.9
Readiness to undertake new challenges and risks and the level of scores in middle-school examinations



gotowość do awansu	readiness for promotion
zdolność do przezwyciężania własnych ograniczeń	ability to overcome one's own limitations
gotowość do nowych zadań	readiness to undertake new tasks
gotowość do pracy na własny rachunek	readiness for self-employment
skłonność do „ryzyka kredytowego"	tendency to "credit risk"
niski	low

niżej średni	lower medium
średni	medium
wyżej średni	upper medium
wysoki	high

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Similar regularities can be observed with regard to "abilities to overcome one's own limitations" and "readiness for new challenges". Apart from students' scores in middle-school examinations, another factor that diversifies young people's readiness to undertake new challenges and risks in an analogous manner are final certificate grades. Thus, agricultural school students with higher educational skills are readier to undertake new challenges, including risky ones.

4.5 Creativity and innovativeness

The findings made so far allow us to conclude that the potential of mobility and entrepreneurship of young people attending agricultural schools is big. Those young people are also characterised by a high level of professional activity – as previous analyses show, as many as three fourths of surveyed students have already been engaged in paid work. Now we will look at their knowledge about the job search methods and the opportunities to obtain funds necessary for the satisfaction of needs of the local community that are known to them. More than half of the respondents indicate press job advertisements (53.5%) as possible job search methods. Other frequently indicated methods include: use of personal acquaintances – 38.1%, visits to the labour office – 19.4%, visits to workplaces – 9.6% and sending of CV's to employers – 5.4%.

Table 4.23
Possible job search methods

Job search methods	Percentage share*
Scanning of job advertisements in the press and on the Internet	86.6
Use of personal acquaintances	38.1
Visits to the labour office	19.4
Visits to workplaces	9.6

Sending of CV's to employers	5.4
Other	2.8

* possible multiple choice, the sum of percentage shares is not equal to 100%

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The knowledge of surveyed young people in agricultural schools about possible job search methods does not diverge from the average knowledge of a secondary or vocational school student. Young people declare mainly the knowledge of standard, usually passive job search methods. Those methods include: scanning of press and Internet advertisements and the use of respondents' own personal and family acquaintances. More active job search methods that go beyond the scanning of press advertisements and require more personal effort are remarkably less popular among young people. Those methods include, among others, sending of CVs to employers or visits to workplaces. It must be added, however, that until now young people have only been looking for occasional holiday jobs in order to earn additional money and have funds mainly for some specific planned aims. In order to find such job offers, it is certainly enough to scan the press or the Internet and to make use of personal acquaintances. Looking for a permanent job (and the knowledge how to do this) will occur most probably only upon completion of education and accumulation of experience collected during that time.

Inventiveness and creativity of students was also tested in the questionnaire by means of a projecting question referring to the potential situation in which they could find themselves as active members of the local community. The question (story) was constructed in a manner allowing young people to show their own initiative in the situation when there are no funds in the local budget for construction of the sports field in which they are interested. The task of respondents was to try to indicate methods of acquisition of money for that sports field. Generally speaking, every fourth (25.0%) student indicated the possibility of acquiring funds from the European Union, every seventh (16.0%) student indicated the possibility of raising money for a specific purpose, every eighth (12.7%) student suggested looking for a sponsor, and every eleventh (9.2%) student indicated the possibility of organizing a commercial event the income from which could be appropriated for construction of a sports field. Further places were occupied by the following indications: a

petition to authorities (8.4%) or construction of a sports field with one's own efforts and at one's own expense (3.1%).

The projecting question that requires the respondent to show both imagination, inventiveness and knowledge of the real possibilities of financing investment projects indicates significant problems of agricultural school students in this respect. The best indicator of problems with an answer to that question is the percentage share of missing data – in this case, it exceeds one third (36.1%) of the surveyed population. The collected answers seem to emanate from the experiences that young people have acquired so far in their local environment. Currently, the most common method of carrying out local investments is the obtaining of external funds. One of the least frequently indicated methods is intervention with the authorities. This is a consequence of the lack of trust in politicians and their poor reputation.

Table 4.24
Where to find money for construction of a sports field (in %)

Where to find money for construction of a sports field	**Percentage share***
Applying for funds from EU	25.0
Fund-raising	16.0
Looking for a sponsor	12.7
Organisation of an event	9.2
Petition to authorities	8.4
Personal work input	3.1
No data available	36.1

* possible multiple choice, the sum of percentage shares is not equal to 100%

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Summary

Results of analyses aimed at diagnosing key competences of agricultural school students with regard to entrepreneurship and the sense of initiative indicate a number of essential regularities. In the first place, it must be emphasised that most of the surveyed young people have already worked professionally. This testifies to the high level of activity among agricultural school students who make efforts to obtain a temporary (usually seasonal) job that may help them to finance their needs (usually daily expenses) in the face of the frequently difficult financial situation of their parents.

A vast majority of agricultural school students is convinced that it is necessary to obtain professional qualifications before taking up work. Slightly more than half of the respondents have a tendency to undertake various tasks and jobs rather than stick to one learned occupation. This reflects to a certain extent the readiness of young people to undertake new professional experiences. The problem lies in the fact that a much smaller part of the respondents (only every fifth agricultural school student) is convinced that it is better to change workplaces than to stick to one employer. In conditions of the diametrically changing situation on the labour market, these preferences of agricultural school students relating to employment give certain cause for concern.

Young people attending agricultural schools are convinced that it is better to be an entrepreneur (63%) than a hired employee (37%). Executive positions (80%) are also found more interesting than being a line employee (20%) by respondents. The readiness of young people to undertake new challenges (on the declarative level) can be noted once again, although this readiness is varied because of social & economic characteristics of the family of origin. The interest in self-employment or holding of an executive position is remarkably higher among students coming from entrepreneurs' and farmers' families.

Agricultural school students generally identify with characteristic features of the entrepreneurial attitude. Young people are convinced mainly about their teamwork skills, their own diligence, planning ability and knowledge of the thing they want to carry out. What they assess less favourably, is their own creativity and skill at putting ideas into practice. Those self-characteristics of young people relating to the issue of entrepreneurship are mainly varied in terms of the gender – boys are more "entrepreneurial".

Although preferences of young people attending agricultural schools that relate to the desired form of employment or their self-characteristics may support the thesis about the existence of a certain entrepreneurship potential among that part of the young rural generation, their project planning skills certainly do not. Only every third agricultural school student could plan his/her holiday budget properly (taking account of all necessary expenses). This skill characterises more strongly boys than girls and, paradoxically, young people coming from families with a low level of parents' education and the low amount of material assets.

The weak tendency of agricultural school students to make investments and savings gives also some cause for concern. It turns out once again that the skill at planning expenses within the scope of the lottery prize constitutes a big problem to nearly 1/3 of all respondents. Moreover, the readiness to make investments and/or savings characterises nearly every third agricultural school student. It turns out once again that the stronger tendency to investments characterises boys in comparison to girls and young people coming from families with a relatively low social & economic status, mainly farmers. Also, stronger tendencies to make investments and savings are present again among young people coming from families with a relatively low level of cultural capital (reflected by the level of parents' education).

Thus, planning skills of young people attending agricultural schools turn out to be substantially limited. Their creativity and innovativeness also seems to be low. Students are aware of those limitations themselves, which is confirmed by their relatively lower acceptance of the elements of self-characteristics that referred to the skill at formulating new ideas and putting them into practice.

On the other hand, the readiness of young people to undertake new challenges and risks can be regarded as satisfactory. However, this readiness occurs mainly in cases when it is not connected with any potential loss of previous achievements or excessive risk (identified with a bank loan). In those two situations, in spite of their young age, young people turn out to be very restrained.

This means that primary deficiencies in the field of key competences relating to the entrepreneurship and the sense of initiative of agricultural school students can be observed

with regard to their planning skill, creativity, innovativeness and, to a certain extent, readiness to undertake new challenges and related risk.

It is worth noting that boys and students coming from entrepreneurs' and farmers' families have relatively good characteristics in terms of their key competences within the entire surveyed population. There is no doubt that the factor determining higher key competences of that category of students is the kind of professional activity of their parents and the related model of upbringing in the family.

Jarosław Domalewski

Chapter 5

Life plans and aspirations vs. entrepreneurship and the sense of initiative of agricultural school students

Introduction

As a result of searching for determinants of key competences relating to entrepreneurship and the sense of initiative, it turned out that many components of these attitudes are homogeneous regardless of primary social & demographic & economic characteristics of young people. To a certain extent, higher key competences relating to entrepreneurship and the sense of initiative occur with regard to students coming from farmers' and entrepreneurs' families. Higher skills, abilities and attitudes in the sphere under analysis characterise also boys to a small extent. It is likely that life aspirations of agricultural school students are the factor that diversifies their competences.

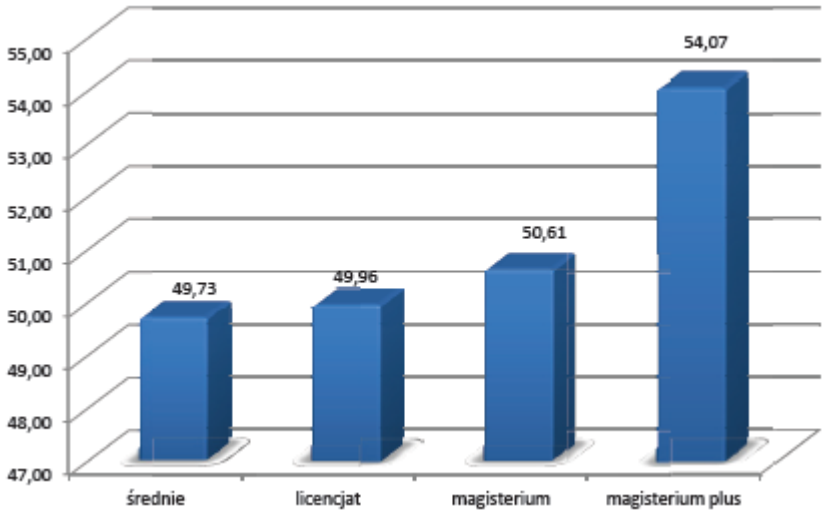
The aim of this part of the study is to answer the question to what extent life aspirations and plans of surveyed young people diversify their key competences relating to entrepreneurship and the sense of initiative. Are high educational aspirations and readiness for self-employment the factors that diversify features such as inventiveness, consistent action, diligence, readiness for risk and investments, planning and teamwork skills?

5.1 Competences vs. educational aspirations

In the first place, the impact of key competences relating to entrepreneurship and the sense of initiative on educational aspirations of rural young inhabitants attending agricultural schools will be analysed. As was described above, students of agricultural technical schools did not differ significantly from their peers attending non-agricultural technical schools in terms of the planned level of education, even though they intended slightly more often to finish their education on the level of secondary school and bachelor's studies. When we look at values of arithmetic averages of the scale of entrepreneurial

attitudes (see Subchapter 4.1), it turns out that remarkably higher scores are achieved by students aspiring to the highest level of education (master's degree + additional degrees).

Figure 5.1
Arithmetic averages in the scale of entrepreneurial attitudes vs. educational aspirations of agricultural school students



średnie	secondary education
licencjat	bachelor's degree
magisterium	master's degree
magisterium plus	additional degrees

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

While differences among students intending to finish their education on the secondary level and those aspiring to obtain the master's degree are small, young people who think of doctoral or postgraduate studies or the second field of studies already as secondary school students show the entrepreneurial attitude to a larger extent. In the case of those young people, the average value in the scale of entrepreneurial attitudes (as a personal quality) is 54.07 pts, being 3.5 pts higher than the average value characterising students that aspire to obtain the master's degree. Moreover, higher values achieved in the scale of entrepreneurial attitudes by young people with highest educational aspirations are not a consequence of the impact of other factors, such as the level of parents' education or school skills (which are reflected by grades in the middle school graduation certificate or scores in middle-school examinations). Students declaring the most ambitious plans as to their target level of education are characterised by relatively stronger entrepreneurial attitudes.

We can also notice certain differences in readiness to undertake new challenges and risks among students aspiring to particular levels of education (Table 5.1). The most distinct relationship that can be noticed is that between educational aspirations and readiness for promotion. Among students intending to finish their education on the secondary level, only 36% declare "readiness for promotion", but in the group of students aspiring to obtain the doctoral degree, complete postgraduate studies or the second field of studies this percentage share is as high as 48%.

Table 5.1
The percentage share of students characterised by readiness to undertake new challenges and risks and readiness for self-employment in particular categories of educational aspirations (in %)

	Educational aspirations				**Total**
	secondary	**bachelor's degree**	**master's degree**	**additional degrees**	
Readiness for promotion	36%	39%	44%	48%	39%
Ability to overcome one's own limitations	88%	91%	96%	89%	90%
Readiness for new challenges	70%	80%	72%	69%	72%
Readiness for self-employment	66%	76%	72%	77%	71%
Tendency to credit risk	44%	52%	37%	41%	44%

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

An interesting category is formed by students who intend to finish their own education on the level of vocational studies (bachelor's degree). It is worth noting that it is a category with the biggest percentage share of persons capable of overcoming their own limitations. This score is partly attributable to the content of the question itself, which seems to be the most adequate with regard to that category of young people in spite of its projective form. It is worth remembering that the dilemma faced by the female protagonist of the story concerns the need to take up studies because of job prospects and, at the same time, her very strong lack of confidence in her own abilities. This question was aimed at assessing respondents' skill in overcoming limitations that exist in their awareness and in the social sphere. Students intending to finish their education on the bachelor's level often come from families with medium and low social characteristics. In their case, the fact of declaring such

educational aspirations may indicate that they most probably managed to overcome certain structural limitations. However, the same category of young people shows the highest level of readiness to undertake new challenges and is characterised by the relatively biggest "tendency to credit risk". On the other hand, it can be seen clearly that the risk of incurring a loan for the running of business activity would be undertaken to the smallest extent by students characterised by highest educational aspirations. In the case of this category of respondents, it may be reasonable to indicate the idealisation of education. In spite of changes that occurred on the labour market during the last few years, the master's degree diploma or the doctoral degree may be perceived by students with highest educational ambitions as a guarantee of success in life. "Readiness for new challenges" is the weakest among those young people, too.

On the other hand, although readiness to undertake new challenges is relatively the smallest among young people characterised by highest educational aspirations, it is this category of respondents that has a stronger tendency to be an employer than an employee or to take up various occupations and tasks. Among agricultural school students aspiring to obtain additional degrees after the master's degree, as many as 74% stated that it is better to be an employer than an employee. In the group of students intending to finish their education on the level of secondary school, the percentage share of those who prefer being an employer is 53%. The belief that it is better to try new occupations and jobs than to stick to one learned occupation is declared by 67% of students aspiring to obtain additional degrees after the master's degree and by 47% of students declaring the will to finish their education on the secondary level.

Students aspiring to particular categories of the education level differ also in terms of opinions about professional strategies – whether to take up work as early as possible or to obtain professional qualifications in the first place. Obviously, the lower educational aspirations are, the stronger the belief that it is better to become professionally active as early as possible than to obtain professional qualifications for many years before entering the labour market. Obviously, these differences cannot be surprising if we take account of the fact that the declared educational aspirations are strictly connected with a certain period determining the time of entry into the labour market.

In comparison to the above discussed issues concerning young people's preferences relating to employment, educational aspirations diversify only slightly the interest in the holding of executive positions or the belief that it is better to change workplaces than to work for one employer only. In general, as many as 3/4 of young people are convinced that the security of employment associated with one workplace is definitely better than the change of the workplace. The belief that it is better to stick to one employer is expressed by 73% of students aspiring to the highest level of education (additional degrees after the master's degree) and by 80% of students intending to finish their education on the secondary level. As regards executive positions, the will to hold them is declared by 81% and 75%, respectively.

Table 5.2
Educational aspirations vs. the most important work-related factor (in %)

The most important work-related factor	**Educational aspirations**				**Total**
	secondary	**bachelor's degree**	**master's degree**	**additional degrees**	
Security of employment	44.9	45.2	44.5	35.1	43.8
Amount of remuneration	23.4	21.5	22.0	19.6	22.2
Working time	10.7	6.8	12.6	16.5	10.8
Opportunity of self-fulfilment	12.5	17.4	14.3	15.5	14.3
Opportunity of promotion	8.5	9.1	6.6	13.4	8.8
Total	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Educational aspirations are also a factor which diversifies young people's preferences concerning their future professional work and things considered by young people to be the most important in such work. For instance, "security of employment" is relatively less important for students having the highest educational aspirations. Remuneration is also relatively less important for young people having ambitious educational plans. Agricultural school students who intend to finish their education only after obtaining the doctoral degree or completing the second field of studies or postgraduate studies appreciate more strongly the opportunity for promotion and self-fulfilment in their professional work. Working time is also slightly more important for them than in the case of students with lower educational

aspirations. Thus, it can generally be said that the higher the level of educational aspirations of agricultural school students, the lower the significance of the security of employment and the amount of remuneration (although these two factors are indicated most frequently as "important" in professional work), and the factors of higher importance are the opportunity for promotion and self-fulfilment and the working time (although this last factor turns out to be the least important for young people aspiring to obtain the bachelor's degree).

Also, project planning skills of agricultural school students turn out to be diversified due to the planned target level of education. However, it is not a linear dependence. For example, the skill in planning holiday budget expenses in such a way that their sum is equal to the amount that students had at their disposal characterises 75% of young people aspiring to obtain additional degrees after the master's degree and 67-68% of respondents declaring lower educational aspirations (irrespective of their level). Similar regularities can be observed with regard to the skill in planning expenses from the lottery prize. Nearly 2/3 of students declaring the most ambitious educational plans and 59% of students aspiring to the secondary level of education planned their lottery prize expenses in such a way that their sum equals the value of the prize.

Paradoxically, although young people with highest ambitions in terms of the planned level of education have relatively highest financial planning skills, the largest share of them failed to include necessary expenses for accommodation, meals and travel (75%, as compared to 61% among students aspiring to secondary education and the bachelor's degree and 57% among those aspiring to obtain the master's degree). This may result from the relatively higher financial status of families of origin of students declaring the most ambitious educational plans, due to which it is students' parents who take care of necessary expenses in the planning of holiday trips.

Table 5.3
Educational aspirations vs. the structure of planned expenses from the lottery prize

Planned expenses from the prize	Educational aspirations				Total
	secondary	bachelor's degree	master's degree	additional degrees	
Investments and savings	12.1	11.5	18.5	12.8	13.3
Only investments	37.1	30.3	23.8	39.5	33.0
Only savings	22.1	29.3	26.2	24.4	24.9

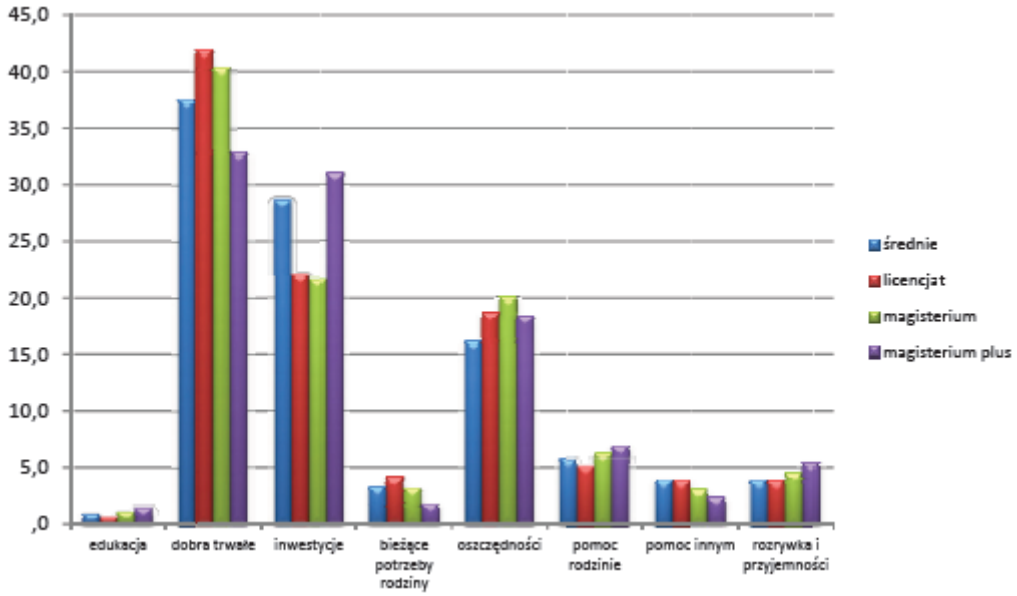
No investments and savings	28.7	28.8	31.5	23.3	28.7
Total	100.0	100.0	100.0	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The distribution of planned expenses from the prize declared by young people aspiring to particular levels of education looks interesting. The tendency to make investments and savings (considered jointly or separately) is present most frequently among agricultural school students characterised by highest educational aspirations – over 77% of them intend to appropriate a part of their prize for investments or savings, or both of them. In the case of young people with the lowest educational aspirations, this percentage share varies from 68 to 71%. On the other hand, readiness to appropriate a part of the prize for investments is relatively the highest among those who declare highest and relatively lowest educational aspirations (additional degrees after the master's degree and the secondary level of education). As regards students aspiring to obtain higher education on the level of the bachelor's degree or the master's degree, they plan to appropriate a part of their prize for savings more frequently. We must point out that the observed differences in the structure of planned prize expenses are not large and it is difficult to interpret them without considering their share in the entire amount that students had at their disposal.

If the share of particular items in the total value of the prize is analysed, the structure of expenses turns out to be very similar regardless of the level of education to which agricultural school students aspire (Figure 5.2).

Figure 5.2
Share of particular items in lottery prize expenses vs. the level of education



średnie	secondary education
licencjat	bachelor's degree
magisterium	master's degree
magisterium plus	additional degrees
edukacja	education
dobra trwałe	durable goods
inwestycje	investments
bieżące potrzeby rodziny	family's current needs
oszczędności	savings
pomoc rodzinie	help to the family
pomoc innym	help to others
rozrywka i przyjemności	entertainment and pastimes

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In comparison to their peers aspiring to obtain the bachelor's degree or the master's degree, students who intend to complete their education on the secondary school level or upon completion of the second field of studies or postgraduate studies or upon obtaining of the doctoral degree (additional degrees after the master's degree) intend to appropriate a smaller part of their prize for durable goods and a larger part of it for investments. Differences in the share of other items in the total amount of the prize that respondents had at their disposal turn out to be small.

Thus, the tendency to make investments characterises most often young people with highest and lowest educational aspirations; however, the former have also a higher project planning skill, which is reflected by the proper planning of the holiday budget or the amount

of the prize that they had at their disposal. Young people declaring the most ambitious educational plans are also characterised by stronger readiness to take up new challenges and flexibility on the labour market. They also value more favourably promotion and self-fulfilment opportunities in their professional life.

5.2 Attitudes of agricultural school students to self-employment prospects

As regards professional plans made by agricultural school students, specific features of this category of young people are clearly visible (see Subchapter 3.3). First of all, agricultural school students lack precise professional plans more frequently than their peers from schools with non-agricultural specialisations do. Moreover, every fifth student of an agricultural technical school intends to pursue an agriculture-related occupation. These kinds of professional plans have not been popular among young people in secondary schools with graduation examinations for years [Kwieciński 2002]. In general, students of agricultural technical schools intend to perform mainly such work that does not require higher qualifications (blue-collar occupations and the farmer's occupation). It is worth emphasising that only 0.5% of agricultural technical school students would like to work as an entrepreneur in the future.

Apart from the question about the planned occupation, respondents were asked whether they consider the possibility of working as self-employed persons. It turns out that 38% of respondents consider such a possibility. At the same time, more than every fifth student of agricultural technical school (22%) does not intend to undertake his/her own business activity, and 40% of respondents did not provide any answer to the said question. Nevertheless, the above result can actually be regarded as satisfactory. Self-employment turns out to be a likely prospect for more than every third agricultural school student.

Those of the surveyed young people who definitely reject the possibility of self-employment justify their decision mainly with the lack of competences and skills (20%), the fear of the risk involved in the running of independent business activity (19%) and the shortage of funds for investments (17%). However, a vast majority of respondents rejecting the possibility of self-employment were unable to justify their decision (no answer, "I don't want to", "I'm not interested").

The possibility of self-employment is declared slightly more often by boys (39%) than by girls (36%). The possibility of self-employment is also declared more frequently by students coming from families with a high level of parents' education (44%, as compared to 39% of students from families with a low level of parents' education). We can also observe a strong linear dependence between the financial status of the family of origin and the acceptance of self-employment by students. Among young people coming from families with a low financial status, self-employment is accepted as a potential form of future professional activity by 34% of students, as compared to 39% of respondents from families with an average financial status and 43% of those from families with a high financial status.

The above findings are obvious to a certain degree and confirm previously observed regularities – students coming from entrepreneurs' families (48%), farmers' families (38%) and hired employees' families (40%) are potentially more often interested in self-employment. Students coming from pensioners' families (27%) are interested relatively least frequently in self-employment. The analysis of key competences of surveyed young people carried out in Chapter 4 showed that respondents coming from entrepreneurs' and farmers' families are characterised most often by entrepreneurial attitudes. It is noteworthy that school achievements, which are reflected mainly by scores of middle-school tests, are of minor significance for young people's interest in self-employment.

In one of the questions, respondents were asked to indicate the kinds of business activity that they consider to be particularly profitable today. Answers provided to these questions are quite largely diversified:

- Agriculture-related activity (17.3% of the entire population who declare that they have a conception of their own company) - agrotourism, cereal purchase, fruit-and-vegetable processing, milk processing, trading in fertilisers, feeds and farm machines, servicing of farm machines;
- Trade and catering (14%) – traditional forms of catering, such as a bar, restaurant, pizzeria, groceries, general stores, computer shops etc.;
- Traditional services (9%) – hairdresser's shop, beauty parlour, plumbing services;
- Transport (8%);
- Own farm (8%);

- Landscape, garden and green area planning (7%);
- Construction services (6%);
- Horticulture and plant raising (4%);
- Other (commercial art, freelance occupations, medical and IT sectors).

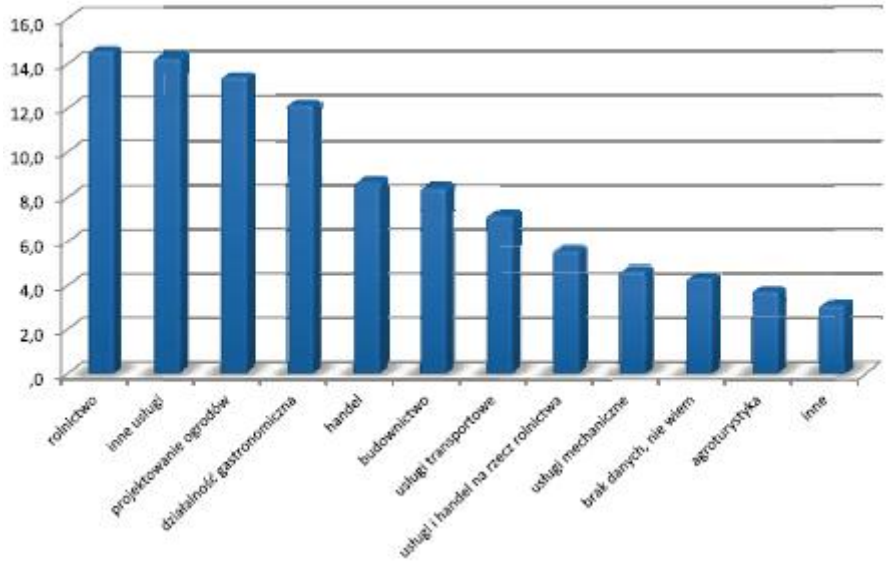
We should note that the forms of business activity that are considered to be profitable by agricultural school students are strongly connected with rural areas and agriculture. On the one hand, this situation can be regarded as natural. Agricultural school students obtain their knowledge about the potential profitability of selected forms of business activity from the environment in which they function. Moreover, a vast majority of agricultural school students intends to live in the countryside in the future. Thus, profitability is assessed to a certain extent from the perspective of personal plans of agricultural school students concerning their adult life. On the other hand, this clearly rural perception and assessment of selected forms of business activity, which is rooted in respondents' area of residence and educational environment, can be a certain limitation of the diversification of professional activity of rural inhabitants.

Among respondents declaring their readiness to undertake their own business activity in the future, as many as 41% already have a specific idea of its profile, whereas further 9% have a general idea of what they would like to do in the future. In view of the fact that the survey covered students of second classes of technical schools (seventeen-year-olds), the fact that every second respondent declaring the possibility of running his own business activity has any idea of the profile of such activity should be regarded as a very good result. Let us now see what ideas of their own business activity agricultural school students have.

It is hardly surprising that profiles of business activity planned by young people largely correspond to indications concerning currently profitable forms of business activity (Figure 5.3). Profiles of business activity planned by students are connected most often with agriculture. What also deserves attention, in the fact that agricultural school students indicate very often detailed aspects of their planned agricultural activity, such as beekeeping, horse breeding, seed production, beef cattle production, mushroom growing etc. This shows that young people have very clearly specified plans of their future activity in farming. The service sector is equally popular among agricultural school students.

Respondents would like to render both traditional kinds of services (hairdressing, beauty parlour) and those that are rarely present in rural areas, such as a photographic workshop or a fitness club. This group has also other visions of their own business activity, such as a computer design office or advisory services for farmers with regard to acquisition of financial aid from EU funds. The forms of business activity that are only slightly less popular among agricultural school students declaring the will to run their own business include the design of green areas and catering services. Other ideas of business activity declared by young rural inhabitants, although less frequently, include the broadly understood trade as well as building and transport services.

Figure 5.3
What would be the profile of your business?



rolnictwo	agriculture
inne usługi	other services
projektowanie ogrodów	garden planning
działalność gastronomiczna	catering
handel	trade
budownictwo	construction industry
usługi transportowe	transport services
usługi i handel na rzecz rolnictwa	agriculture-oriented services and trade
usługi mechaniczne	mechanical services
brak danych, nie wiem	no data, I don't know
agroturystyka	agrotourism
inne	other

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Once again, it turns out that profiles of future business activity planned by young people attending agricultural schools are connected mainly with such forms of business activity that are present in rural areas. Nevertheless, as has already been mentioned, some respondents mention also the kinds of business activity that are not peculiar to rural areas. The impact of the specialisation taught to young people can also be noticed (e.g., mechanical services concern primarily the repair of farm machines).

Agricultural school students intending to undertake business activity in the future have a number of interesting ideas concerning the sources of its financing. More than half of students considering the possibility of self-employment (54%) indicated European funds as a source of financial aid for the starting of their business activity. This kind of financing of one's own business activity is indicated most often (73-80%) by students intending to work in their own farm or to render services addressed to agriculture or agrotourist services. On the other hand, European funds are indicated least frequently as a source of financial aid for the starting of business activity by students planning to render mechanical services in the future (43%). Other potential sources of financing of business activity specified by agricultural school students are the commercial credit (29%) and private savings (21%). The commercial credit would be used relatively most often for the starting of business activity by students intending to engage in the design of green areas, transport services and catering services. As regards private savings, they make it possible to start the business activity that consists in the provision of mechanical and catering services. Agricultural school students intending to conduct they own business activity in the future would start it relatively less frequently with the use of help from their family or friends (10%). It is noteworthy that only 7% of young people are unable to indicate potential sources of financing of their business activity.

5.3 Readiness for self-employment vs. key competences relating to entrepreneurship and the sense of initiative

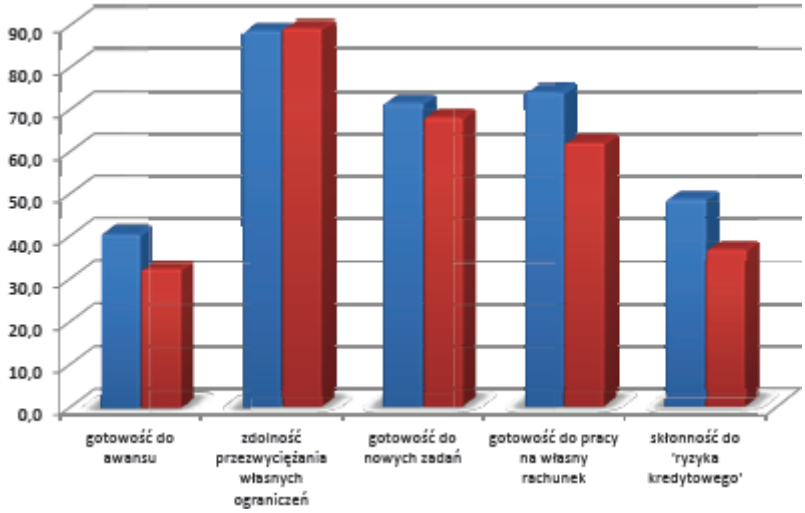
The analyses carried out so far indicate that more than one third of all surveyed agricultural school students consider the possibility of self-employment in their future professional life. The aim of this part of the report is to find an answer to the question

whether those students differ from their peers who also attend agricultural schools, but reject the possibility of self-employment, in terms of key competences relating to entrepreneurship and the sense of initiative.

The analysis of attitudes of students who would like to conduct business activity in the future shows that they are characterised only to a slightly higher extent by qualities attributed to "entrepreneurship" than their peers preferring to be employed (the arithmetic average on the scale of entrepreneurial attitudes is 51.3 pts and 47.8 pts, respectively). While students intending to conduct their own business activity are not very different from their peers rejecting such possibility in terms of identification with features such as teamwork skills, belief in their own knowledge of their field of activity, diligence, planning skills, inventiveness or coping with difficult situations, there are certainly larger differences in terms of readiness to undertake risks and new challenges (Figure 5.4).

Figure 5.4

Potential plans of self-employment or hired employment vs. readiness to undertake new challenges and risks



gotowość do awansu	readiness for promotion
zdolność przezwyciężania własnych ograniczeń	ability to overcome one's own limitations
gotowość do nowych zadań	readiness to undertake new tasks
gotowość do pracy na własny rachunek	readiness to self-employment
skłonność do "ryzyka kredytowego"	tendency to "credit risk"

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Agricultural school students who consider the possibility of running their own business in the future are obviously characterised by stronger readiness for self-employment and taking of credit risk and the promotion-oriented attitude. Those components of the entrepreneurial attitude are diversified to a certain extent by the acceptance of the prospect of self-employment by young people. It must be emphasised, however, that the differences observed here are not big.

Preferences of surveyed young people as to the form of future professional activity are certainly more diversified. Although students planning to run their own business and students preferring to be employed agree to the same extent with the opinion that it is necessary to obtain professional qualifications in the first place before taking up work, or that it is necessary to undertake various occupations and jobs, and value teamwork more than individual work, their opinions on other issues are different (Table 5.4).

Table 5.4
Potential plans of self-employment or hired employment vs. young people's preferences as to the form of their future professional activity

Which alternative is better?	**Workplace preferences**	
	self-employment	**work under an employment contract**
To be an employee	34.9	61.5
To be an entrepreneur	65.1	38.5
Total	100.0	100.0
To hold executive positions	82.5	66.5
To be a line employee	17.5	33.5
Total	100.0	100.0
To change workplaces	27.6	17.6
To stick to one employer	72.4	82.4
Total	100.0	100.0

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

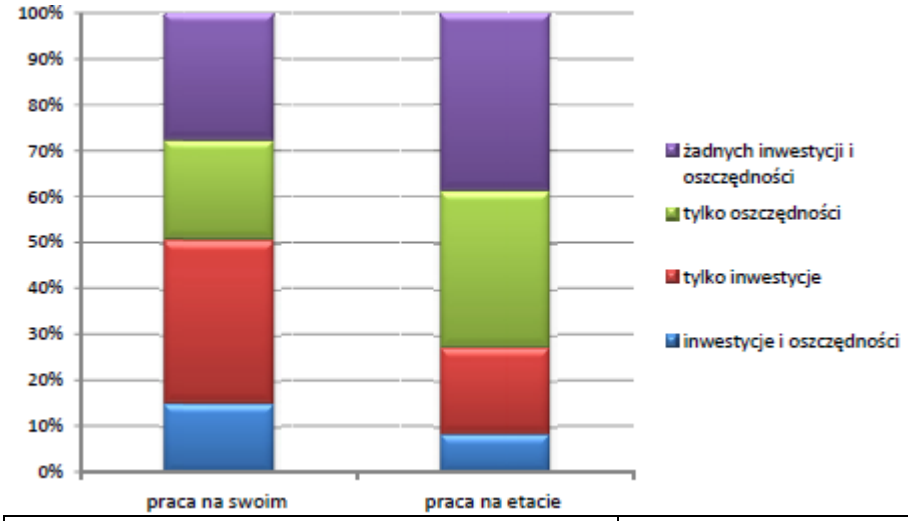
Obviously, young people considering the possibility of running their own business prefer being an entrepreneur to being an employee much more frequently. Actually, proportions are reversed here. 65% of students intending to be self-employed think that it would be

better to be an entrepreneur in the future, whereas 62% of students preferring to work under an employment contract indicate that it is better to be an employee. Students declaring the will to be self-employed are also more often interested in the holding of executive positions and believe more often than their peers preferring to work under an employment contract that it is better to change workplaces than to stick to one employer. It is noteworthy that differences in preferences as to the future workplace can be seen with reference to spheres that are clearly different in the case of self-employed persons and hired employees.

Agricultural school students who consider the possibility of self-employment to a lesser extent than their peers preferring to work under an employment contract attach high importance to the security of employment (40% and 49%, respectively). On the other hand, they indicate the opportunity of promotion much more frequently when stating the most important factors of work (12.6% and 5.6%, respectively).

Thus, the fact whether surveyed young people intend to conduct their own business activity or prefer definitely work for hire diversifies attitudes relating to entrepreneurship and the sense of initiative only to a limited extent. When we look at project planning skills of agricultural school students wanting to be self-employed and students preferring to work under an employment contract, they turn out to be slightly higher in the case of the first group. More than half (56%) of students declaring their readiness to undertake business activity in the future and almost half of students rejecting such possibility (48%) planned their holiday budget properly. An even smaller difference can be observed with regard to the proper planning of expenses from the lottery prize, which characterises 61% of students preferring to be self-employed and 57% of students preferring to be an employee. Clear differences can be noticed only in the structure of expenses from the prize.

Figure 5.5
Potential plans of self-employment or work under an employment contract vs. the structure of expenses from the lottery prize



żadnych inwestycji i oszczędności	no investments and savings
tylko oszczędności	only savings
tylko inwestycje	only investments
inwestycje i oszczędności	investments and savings
praca na swoim	self-employment
praca na etacie	work under an employment contract

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

More than half (51%) of agricultural school students declaring the will to conduct business activity in the future would appropriate a part of their prize only for investments or for investments and savings. Among students preferring to be an employee this percentage share is twice as small, amounting to 27%. Young people rejecting the possibility of self-employment are characterised by consumption-oriented attitudes to a clearly larger extent. As many as 40% of them would not appropriate any part of their prize for investments or savings and would spend their funds for help to the family, durable goods, entertainment and – to a small extent – education. Among students planning to establish their own company in the future, this percentage share is 28%. Thus, while young people attending agricultural schools and intending to conduct their own business activity in the future differed from their peers intending to work as hired employees only to a small extent in terms of attitudes or project planning skills, the observed differences can be regarded as large with regard to material orientations.

Summary

The aim of this chapter was to find an answer to the question whether agricultural school students declaring various educational and professional plans are characterised by different key competences relating to entrepreneurship and the sense of initiative. An important part of the analyses were also professional plans of young people attending agricultural schools – the extent to which readiness for self-employment is present in those plans and assessment of how precisely those plans are specified.

First of all, it must be stressed that a large number of students (more than 1/3 of them) consider the possibility of self-employment. Those differences seem to be even more significant because they are reflected mainly by young people's plans concerning the profile of their future business activity. Even though such precise visions of the nature of that business activity are declared by half of respondents considering the possibility of self-employment, this means nearly one fifth of all agricultural school students. We can, therefore, risk the statement that young rural inhabitants have a strong potential of readiness to undertake independent business activity in the future.

Many agricultural school students turn out to be attentive observers of the surrounding reality, but that reality means the nearest environment connected with their place of residence and education. Forms of business activity perceived by them as profitable include mainly those that are present in rural areas. Ideas for business enterprises are also formulated to a large degree with regard to rural areas. Other forms of activity that could give hope for success are rarely mentioned. On the one hand, this situation can be regarded as obvious. On the other hand, if we take into account the necessity of diversification of forms of professional activity of rural inhabitants, this fact can be alarming. In terms of preferred forms of business activity, rural young people reproduce existing ones without bringing too many novelties to rural areas.

The situation stated in the survey may originate from key competences of young people relating to entrepreneurship and the sense of initiative. The assessment of the significance of these competences for educational and professional plans of young people turns out to be difficult. Young people declaring the most ambitious educational aims are characterised to a certain degree by higher competences relating to entrepreneurship and the sense of

initiative. At the same time, agricultural school students considering the possibility of running their own business in the future are not very different from their peers in terms of key competences in fields of our interest. On the other hand, the specific feature of this group of respondents is the clearly investment-oriented attitude. Maybe the development of key competences of agricultural school students would result in the materialisation of their readiness to conduct business activity declared by them at the age of 17.

Ryszard Kamiński

Chapter 6

Social capital of agricultural school students

Introduction

Social capital is today an extremely popular category, which is analysed in all possible contexts. Apart from the specific popularity of that issue, social capital is mentioned increasingly often as a necessary factor of social and economic development. The report "Polska 2030"[23] contains the following words: *Today new forms of social capital are needed: development capital that is necessary to meet current and future challenges. Development capital is people's ability to trust one another in all spheres of life – from trust between individuals to citizens' trust in the institutional infrastructure of the state.* Similar conclusions and alarmingly low results concerning social capital, participation and civic attitudes of Poles can be found in the Diagnosis for the Social Capital Development Strategy prepared in 2011 under the direction of the Minister for Culture and National Heritage[24].

In this context, it is also worth analysing the social capital of the young generation of rural inhabitants, including particularly young people attending agricultural schools. The Polish countryside was once known for its strong social capital; today, opinions about its condition are very divergent [Wieruszewska 2002, Fedyszak and Radziejowska 2006, Halamska 2009]. Wieruszewska [2007, p. 203] proves that taking different features of social capital into account leads to wrong interpretations resulting from the confusion of levels of analysis. Generalisations and simplifications concerning both the knowledge of the situation of rural areas and the nature of social capital certainly do not help to make a proper assessment. When Sztompka [2007 p. 227] defines social capital as *bonds of trust, loyalty and solidarity, which are expressed by self-organisation and self-governance, mainly within*

[23] Polska 2030. Wyzwania rozwojowe (*Development challenges*). Ed. M. Boni. Warszawa 2010.
[24] Strategia Rozwoju Kapitału Społecznego – Diagnoza (Social Capital Development Strategy – Diagnosis), Warszawa 2011, pp. 19-35.

the framework of voluntary associations, it is necessary to emphasise the inadequacy of focusing on those associations in the case of rural relations. The earlier quoted characteristics of traditional rural communities are specified by experts as bonding capital [Putnam 2000, Woolcock 2001] and are based on strong bonds inside a small closed community, such as a family, or a neighbourhood or ethnic group. Describing this form of social capital, Putnam draws our attention to its favourable impact and the opportunities that it creates for individuals and communities as a whole. The strength of bonding capital of the traditional village was connected with its relative self-sufficiency and the complementary character of functions fulfilled by particular individuals and groups. Traditional rural communities correspond also to the definition of social capital according to Pierre Bourdieu [1997]. In his opinion, *social capital is the sum of current or potential resources that are connected with the possession of a permanent network of less or more institutionalised relations (acquaintances and mutual recognition). This network is a collectively owned capital and provides support to each of its members*. According to Bourdieu's theory, social capital occurs alongside economic capital (which means all material resources or resources that can be converted into them) and cultural capital in personified form (individual features connected with the socialisation of an individual and his/her own self-improvement and personal development), in objectified form (connected with the tangible form of transferable products of culture, such as painting, literature, instruments, machines etc.) and in institutionalised form (in the form of acquired, socially recognisable educational competences, mainly as academic degrees and titles) [in: Trutkowski and Mandes 2005, pp. 52-53]. In the opinion of Bourdieu, an individual's social position depends on the combination (structure) of various forms of capital possessed by members of a given network of connections – the community. On the other hand, social capital makes it easy to accumulate other forms of capital. Beyond all doubt, traditional rural communities had a high level of social capital, which was understood by Putnam [1995] *as characteristics of social organisation, such as networks, standards and social trust facilitating co-ordination and co-operation to the benefit of both sides*. As Wieruszewska [2007, p. 207] writes, frequently appearing opinions about the weakness of social capital in rural areas result from the fact that authors of such opinions do not mean traditional attributive resources of social capital, but individual voluntary participation in new types of associations which better fit in with the system of liberal democracy. Thus, the only critical remark that can be made

towards traditional rural communities is the fact that the bonding form of social capital prevailing there resulted in a sort of confinement of these communities, or even creation of certain barriers for external individuals through strengthening of bonds and relations within a given group or community. However, it is those features that helped rural communities to survive many centuries, and reinforced local identity was a source of their strength and vitality.

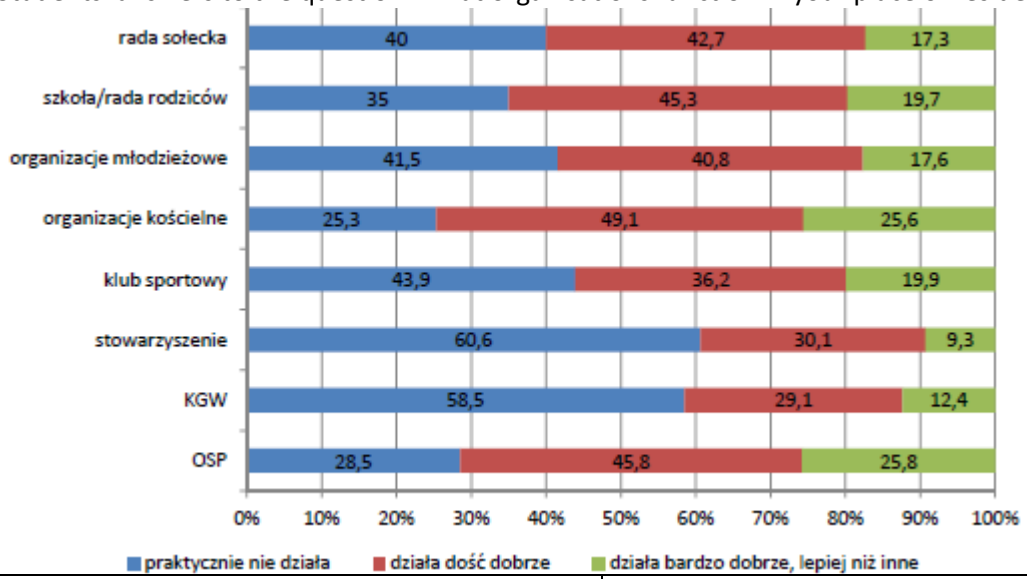
As a result of changes in the education system and the loss of the typically "rural" character of many secondary and vocational schools providing education in agricultural occupations, the poll conducted among students of these schools does not fully reflect attitudes of young people coming from farmers' families (in the past they were called peasants' families). However, in view of the basic lack of access to information on young people from persons' families, an analysis of attitudes and opinions of students from the aforementioned schools may provide a certain base for making conclusions. In consideration of the fact that the main quoted reports concerning the state of social capital of Poles [25] refer to the Public Opinion Research Center (CBOS), CBOS surveys and in some cases Eurobarometer surveys are also assumed as a basis for these analyses. Obviously, it is difficult to assume full adequacy and compatibility, but establishing such a point of reference makes it easier to interpret data about agricultural schools. The primary aim of surveys conducted among agricultural school students was to diagnose key competences of their aspirations and possession of entrepreneurship traits and life plans, so certain references to social capital were of supplementary nature. This does not give a full picture of the state of social capital of agricultural school students, but merely indicates certain trends concerning students' knowledge of the functioning of certain social structures in their environment and persons engaged in activities for the benefit of their environment. There are also references to the personal involvement of students in activities within formal and informal organisations and relationships existing between such attitudes and their environment of origin. Social responsibility and civic maturity is also reflected by students' assessment of positive and negative phenomena that have occurred in their place of residence during the last two years and recommendations concerning desirable actions.

[25] Op. cit. 1, 2.

6.1 Knowledge of organisations in students' place of residence and assessment of their activity

Answering the question: “What organisations are active in your place of residence?", students could choose from the closed list of institutions as well as add and assess the activity of other organisations functioning in their place of residence. The list of institutions to choose from included: a volunteer fire service, a farmers’ wives’ circle, an association, a sports club, church organisations, youth organisations, a school with a parents’ council and a village council. Out of 1,101 answers, an institution outside the list was added only in 61 cases. The task of respondents was to assess the activity of particular organisations in the following scale: does not actually function, functions quite well, functions very well (i.e. better than others).

Figure 6.1
Students’ answers to the question: What organisations function in your place of residence?



rada sołecka	village council
szkoła/rada rodziców	school/parents’ council
organizacje młodzieżowe	youth organisations
organizacje kościelne	church organisations
klub sportowy	sports club
stowarzyszenie	association
KGW	farmers’ wives’ circle
OSP	volunteer fire service
praktycznie nie działa	does not actually function
działa dość dobrze	functions quite well
działa bardzo dobrze, lepiej niż inne	functions very well (i.e. better than others)

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

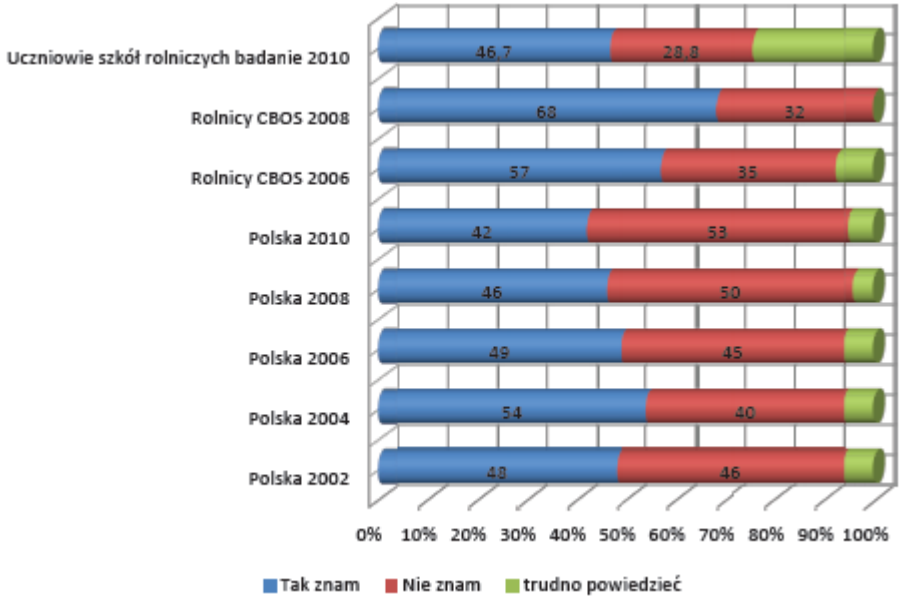
As can be seen in Figure 6.1, most students noticed the activity of church organisations, indicating that as many as 25.6% of them function very well. Volunteer fire services are mentioned equally often, with their functioning assessed as very good in 25.8% of indications, which is the best score. The school and the parents' council is indicated relatively often, whereas the activity of the village council is noticed less frequently and assessed as worse. Young people notice also the existence of sports clubs and youth organisations and have a relatively favourable opinion on their activities. The existence and functioning of "associations" is noticed least frequently, although we must admit that this category is not specified precisely in the list of alternatives and the previously mentioned organisations have the legal form of an association. What comes as a big surprise, is the limited perception of farmers' wives' circles by students. These organisations, which currently seem to be thriving in rural environments, were assessed as very good only by 12.4% of respondents, which is the lowest score.

6.2 Readiness to co-operate for the benefit of one's own community

Just like most Poles, a majority of young people from agricultural schools participating in the survey (53.3%) do not know or cannot indicate in their environment any social workers whom they would like to help in their work for the benefit of their own housing estate or place of residence or in support of the needy. In comparison to recent CBOS surveys (BS/10/2010) (Figure 6.2), the score of young people from agricultural schools is not different from the score of the entire Polish population. It must be added, however, that in CBOS surveys carried out in successive years the population of farmers can indicate more frequently local leaders or social activists whom they are ready to support. This may indicate an average insight of young people into activities being undertaken in their local environment. Probably, however, such insight can be acquired through many years of living in relatively small local communities.

Figure 6.2

Answers of respondents of IRWiR/CEKIN surveys to the question: “Do you know any person from outside your family whom you would be ready to help carry out voluntary and free work for the benefit of your environment, housing estate, village, city or for the needy?" in comparison to CBOS surveys



Uczniowie szkół rolniczych badanie 2010	Agricultural school students survey 2010
Rolnicy CBOS 2008	Farmers CBOS 2008
Rolnicy CBOS 2006	Farmers CBOS 2006
Polska 2010	Poland 2010
Polska 2008	Poland 2008
Polska 2006	Poland 2006
Polska 2004	Poland 2004
Polska 2002	Poland 2002
Tak, znam	Yes, I do
Nie znam	No, I don’t
Trudno powiedzieć	It’s hard to say

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

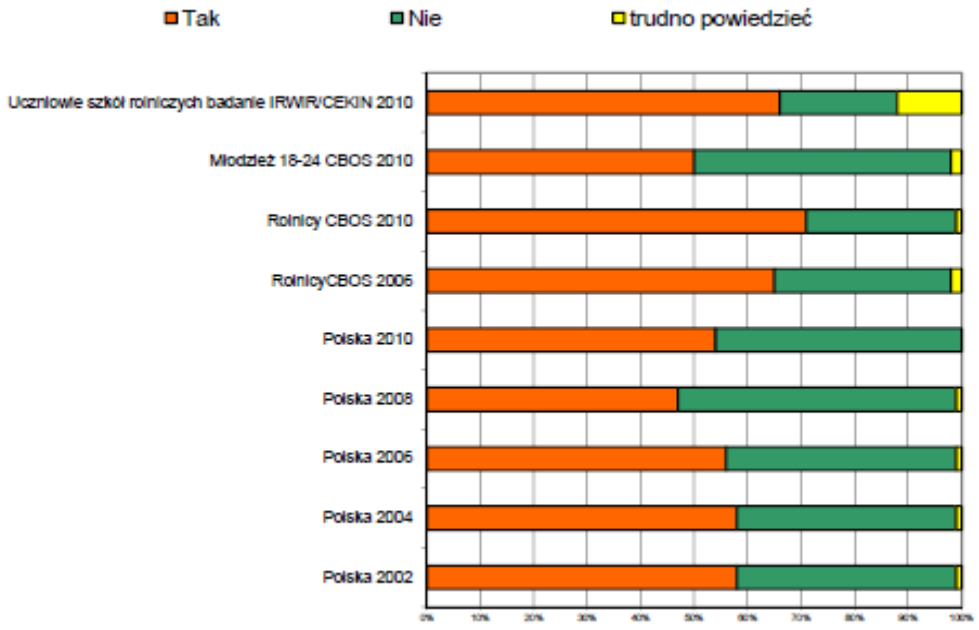
6.3 Experience of social work for the benefit of one's own local community

According to CBOS surveys (BS/10/2010), the number of persons declaring the will to perform voluntary and free work for the benefit of their environment or the needy has increased during the last few years. In 2010 such activity was declared by 54% of respondents; even though this value has improved since 2008 (when 47% of Poles provided this answer), it is still lower than in 2002 and 2004 (at that time, involvement in social work was declared by 58% of respondents surveyed by CBOS). Men (59%) engage in social work more often than women (50%) do; these are rather persons who have higher education, earn

more and – traditionally for many years – are farmers. According to data presented in Figure 6.3, farmers largely exceed all results of declarations of social involvement of the entire Polish population. Interestingly enough, in the case of the age group of 18-24, declarations of involvement in successive surveys carried out every two years from 2002 till 2010 are always the lowest. In 2010, 50% of young people declared their participation in social work. Answers provided by agricultural school students, in which as many as 66% of respondents surveyed under the said CEKIN project declared their participation in social work in the past, are definitely more similar to answers provided by farmers (71%) than by typical representatives of their age group (18-24). Thus, general declarations concerning involvement “at any time” in work for the benefit of respondents' own community are "generally correct", because it is proper to admit and state any kind of activity for the benefit of respondents' own environment. However, in the case of more specific questions, e.g. those concerning voluntary work in the last year, the number of persons declaring their involvement decreases remarkably.

Figure 6.3

Answers of respondents of IRWiR/CEKIN surveys to the question: “Have you ever done voluntary and free work for the benefit of your environment, church, housing estate, village, city, or in support of the needy?" – in comparison to CBOS surveys



Tak	Yes
Nie	No
Trudno powiedzieć	It’s hard to say
Uczniowie szkół rolniczych badanie IRWIR/CEKIN	Agricultural school students IRWIR/CEKIN survey

2010	2010
Młodzież 18-24 CBOS 2010	Young people aged 18-24 CBOS 2010
Rolnicy CBOS 2010	Farmers CBOS 2010
Rolnicy CBOS 2006	Farmers CBOS 2006
Polska 2010	Poland 2010
Polska 2008	Poland 2008
Polska 2006	Poland 2006
Polska 2004	Poland 2004
Polska 2002	Poland 2002

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00 and CBOS reports

Interesting results were brought by general European surveys of young people carried out under *Eurobarometer* in the spring of 2011. In the poll conducted by the Gallup Organisation from Brussels at the request of the European Commission under the *Youth on the Move* programme[26] among persons aged 15-30 from 27 EU countries, young Poles obtained very poor scores. In the category of voluntary work, they ranked in the last but one place with a score of 16% of declared involvement in the year preceding the survey. In comparison to data of young people from countries with the highest level of involvement, such as the Netherlands, where the declared level of involvement in voluntary work was 40%, or Ireland, Denmark or Slovenia (approximately 36%), these scores are alarmingly low. Many Polish commentators question those data, pointing out[27], like Jerzy Owsiak, that a large number of mass voluntary campaigns and one-off initiatives is organised in Poland. In other comments [Rudnicki[28]] the potential misinterpretation of the term "voluntary work" is suggested. It is also worth mentioning the Eurobarometer data which show that Poland is one of the countries where most young people declare the receipt of various kinds of documents or certificates confirming their voluntary work[29]. As many as 39% of young Poles who took part as voluntary workers in campaigns received certificates. In the Netherlands, the receipt of a certain form of certificate (attestation) is declared by 12% of young voluntary workers, 16% of young Belgians, Slovaks or Danes and merely 7% of French youth. Thus, we can state that while in Poland there is the smallest level of involvement in voluntary work,

[26] Youth on the move, Analytical report 319a, The Gallup Organization, upon the request of Directorate-General Education and Culture, May 2011 p. 19.

[27] Eurobarometer: Młodzi Polacy nie angażują się w wolontariat (Young Poles do not engage in voluntary work), JAPA, PAP, 17 May 2011.

[28] Ibidem.

[29] Eurobarometer, op. cit, p. 20.

the existing involvement is perfectly documented. The aforementioned Eurobarometer survey also indicates that 26% of young Poles in the same age group (15-30) were involved in the activity of a sports club, youth organisation or cultural organisation during the last 12 months. This score puts Poland in the last place among 27 EU states, whereas the European average is 46% in this case (Dutch respondents declared 68% of involvement, Belgian and Irish respondents – 61% and Danes – 59%). In the context of great expectations concerning the performance of Polish sportsmen in the EURO 2012 football championship and the Olympic Games in London, it is also worth quoting a few figures describing the involvement of young Europeans in sports organisations. Activity in sports clubs was declared by 59% of young Dutch respondents, 53% of Irish respondents, 48% of Belgians, 47% of Germans, 40% of French respondents, 35% of Estonians and only 15% of Poles. It seems that poorer results of Polish sportspeople should not be attributed only to the infrastructure of stadiums, gymnasiums, swimming pools and other facilities. The functioning and structure of youth sports organisations (clubs and associations) seems to be of equal importance.

6.4 Social activity of young people

Although the involvement of young Poles in one-off initiatives (such as the Great Orchestra of Christmas Charity) deserves acceptance and appreciation, we should note that declarations of participation in any kinds of organisations in Poland are on the lowest level in Europe[30]. The Eurobarometer question about participation in any kinds of organisation was answered affirmatively by only 33% of young Poles, as compared to 72% of Dutch respondents, 67% of Irish respondents and 65% of Danes. In this case, the European average is 52%. Eurobarometer results are confirmed by CBOS surveys and surveys carried out under the CEKIN project (Figure 6.4). 31% of agricultural school students participating in the survey provided an affirmative answer to the question: *Are you a member of social organisations (association /e.g. angling association/, sports club, music band, other)?* (Table 6.1).

Table 6.1
Answers to the question: Are you a member of social organisations?

Are you a member of social organisations?	Number of answers	% of valid answers N = 1101
Yes	313	30.6

[30] Ibidem, p. 8.

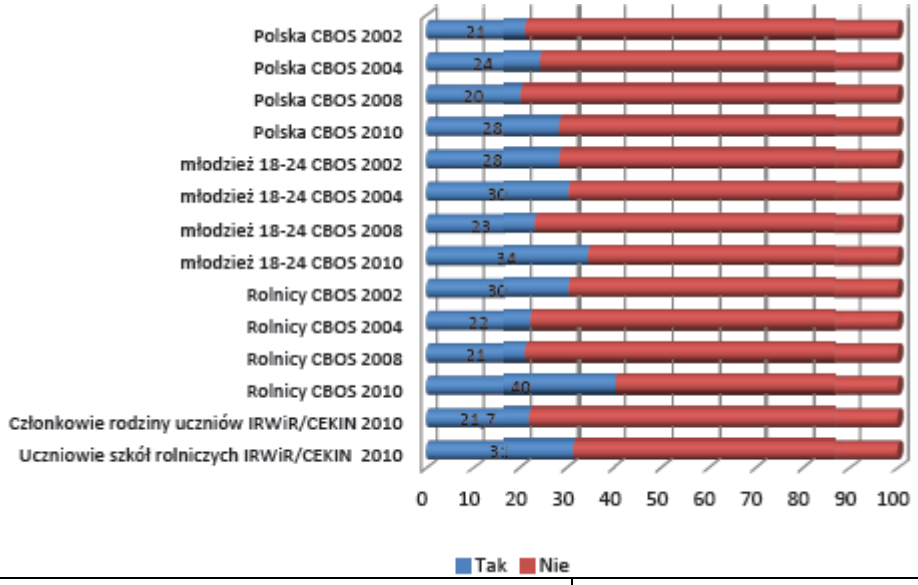
No	710	69.4
No data available	78	-
Total	1101	100

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

In CBOS surveys carried out in 2010, affirmative answers were provided by 34% of young people aged 18-24. Interestingly enough, declarations of activity of young people have exceeded the activity of the entire Polish population by a few percentage points in all CBOS surveys since 2002. Farmers' activity examined in successive CBOS surveys is varied, although it has actually never been lower than the national average.

Figure 6.4

Activity in social organisations

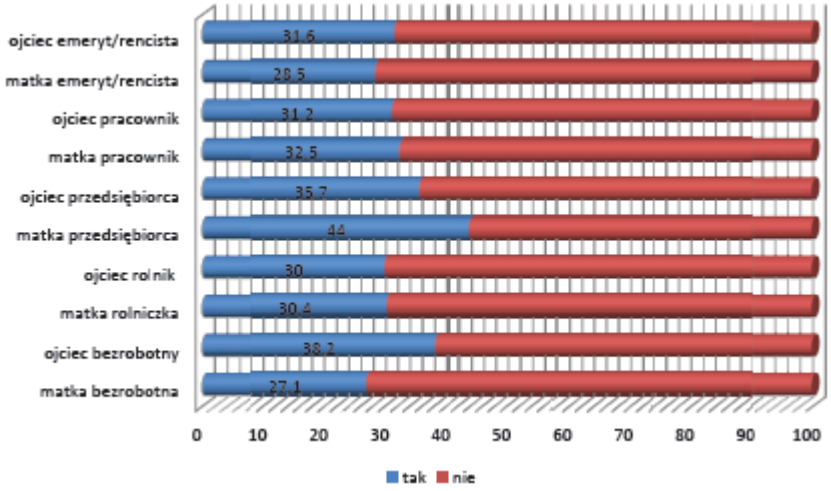


Polska CBOS 2002	Poland CBOS 2002
Polska CBOS 2004	Poland CBOS 2004
Polska CBOS 2006	Poland CBOS 2006
Polska CBOS 2008	Poland CBOS 2008
młodzież 18-24 CBOS 2002	young people 18-24 CBOS 2002
młodzież 18-24 CBOS 2004	young people 18-24 CBOS 2004
młodzież 18-24 CBOS 2008	young people 18-24 CBOS 2008
młodzież 18-24 CBOS 2010	young people 18-24 CBOS 2010
Rolnicy CBOS 2002	Farmers CBOS 2002
Rolnicy CBOS 2004	Farmers CBOS 2004
Rolnicy CBOS 2008	Farmers CBOS 2008
Rolnicy CBOS 2010	Farmers CBOS 2010
Członkowie rodziny uczniów IRWiR/CEKIN 2010	Members of students' families IRWiR/CEKIN 2010
Uczniowie szkół rolniczych IRWiR/CEKIN 2010	Agricultural school students IRWiR/CEKIN 2010
Tak	Yes
Nie	No

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00 and CBOS reports

In view of the participation of a relatively large group (over 1,000 respondents) in the IRWiR/CEKIN survey, an attempt was made to analyse the relationship between the activity of young people in civil organisations with certain additional variables. The first factor diversifying the involvement of young people in organizations was the professional activity of their parents. The lowest level of involvement in activities of organizations was declared by young people whose mother was an unemployed person (27.1%). A similarly low level of activity in organisations was declared by persons whose mother was a pensioner (28.5%). A slightly higher level of activity in organisations was declared by persons whose mother was a farmer (30%) or an employee (32.5%). The definitely highest level of readiness to work together was represented by persons whose mother's professional status was declared as an "entrepreneur" (44%). In the case of the father's status, the least active group in organisations were students whose father was a farmer (30%); the result was slightly higher for employees (31.2%) and pensioners (31.6%). As could be expected, children of entrepreneurs (35.7%) were active in organisations, whereas the fact of having an unemployed father determined young people's involvement in as many as 38.2% of cases. However, taking account of the fact that the survey was carried out as a poll, we can risk the conclusion that it is the mother's professional activity that determines young people's activity to a large extent. If the mother is a professionally passive person (unemployed person, pensioner, or even farmer), the likelihood of the child's activity is slightly lower than in the case of a mother who is an entrepreneur. This may bear some relation to the breaking of a certain model and, at the same time, the stereotype of a family where the mother's activity actually inspires children to undertake independent actions. In the case of fathers' professional activity, the smallest level of activity in organisations (i.e. "outside home") cannot be surprising if the father is a farmer.

Figure 6.5
Membership of students in organisations vs. professional activity of parents

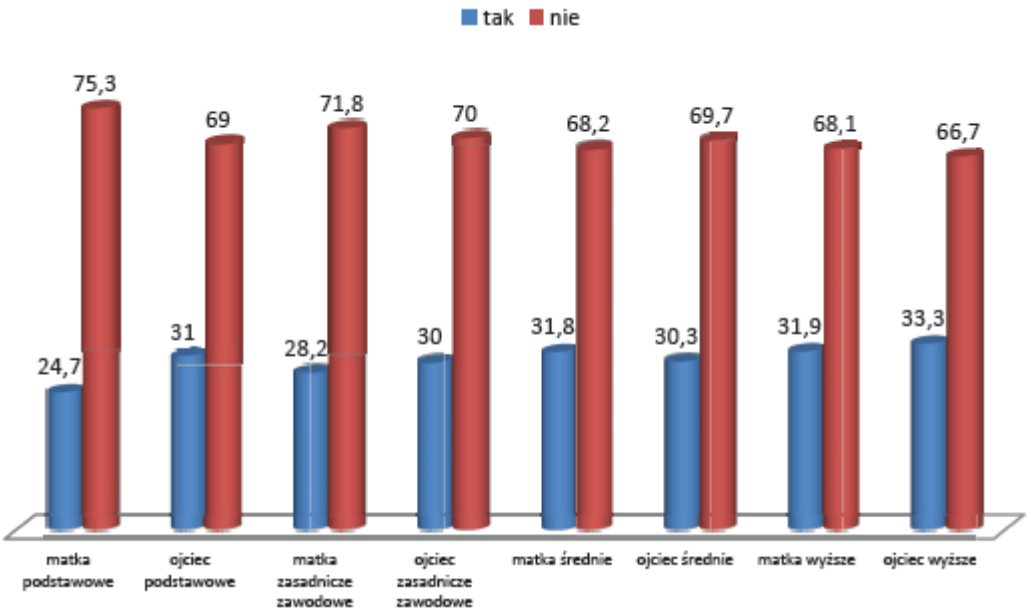


ojciec emeryt/rencista	pensioner (father)
matka emeryt/rencista	pensioner (mother)
ojciec pracownik	employee (father)
matka pracownik	employee (mother)
ojciec przedsiębiorca	entrepreneur (father)
matka przedsiębiorca	entrepreneur (mother)
ojciec rolnik	farmer (father)
matka rolniczka	farmer (mother)
ojciec bezrobotny	unemployed father
matka bezrobotna	unemployed mother
tak	yes
nie	no

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00 and CBOS reports

The groups that engage actively in the activity of organisations are entrepreneurs' children and – which can also be explained to some extent – children of unemployed fathers. In the last case, children treat organisations as opportunities to get out of their current status outside their family. Thus, the most active category are entrepreneurs' children, the second active category are employees' children, whereas the lowest level of activity occurs among farmers' and pensioners' children. In families where parents are unemployed, it is highly important which parent is affected by such a situation.

Figure 6.6
Membership of students in organisations vs. parents' education



tak	yes
nie	no
matka podstawowe	primary (mother)
ojciec podstawowe	primary (father)
matka zasadnicze zawodowe	basic vocational (mother)
ojciec zasadnicze zawodowe	basic vocational (father)
matka średnie	secondary (mother)
ojciec średnie	secondary (father)
matka wyższe	higher (mother)
ojciec wyższe	higher (father)

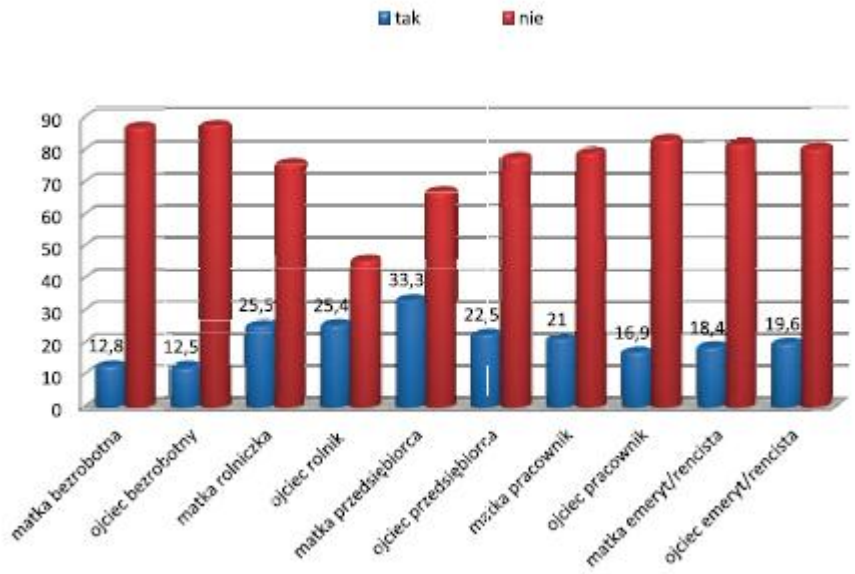
Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The second important variable diversifying young people's involvement in organisations is the level of parents' education (Figure 6.6). As in the case of professional activity, the definitely smallest level of involvement in organisations is declared by students whose mothers have primary education (24.7%). Children of mothers with vocational education are more active in organisations (28.2%), whereas the most active group consists of the students whose mothers have secondary (31.8%) or higher education (31.9%). The students whose fathers had higher education (33.3%) were the most active in conducted surveys. If the father's education was on the secondary or vocational level, there were no significant differences, but it must be noted that children of fathers with primary education were

socially active more often (31%) than those of fathers with vocational (30.0%) or secondary (30.3%) education.

In response to another question: *Is any member of your family (parents, siblings) a member of social organisations or a self-government activist?* (Figure 6.7), most affirmative answers were provided by respondents whose mothers were entrepreneurs (33.3%). This means that if mothers "go out" to start their own business activity, it is highly probable that they will also engage in social organisations and encourage their children to do so.

Figure 6.7
Students' answers to the question about social activity of family members



tak	yes
nie	no
matka bezrobotna	unemployed mother
ojciec bezrobotny	unemployed father
matka rolniczka	farmer (mother)
ojciec rolnik	farmer (father)
matka przedsiębiorca	entrepreneur (mother)
ojciec przedsiębiorca	entrepreneur (father)
matka pracownik	employee (mother)
ojciec pracownik	employee (father)
matka emeryt/rencista	pensioner (mother)
ojciec emeryt/rencista	pensioner (father)

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Unemployed parents engage in social organisations least frequently - on the level of 12.5% (fathers) and 12.8% (mothers). Students declare also the low social activity of their

parents when their father is an employee (16.9%) and their mother is a pensioner (18.4%). Working mothers (21%) and fathers being entrepreneurs (22.5%) are slightly more active. The social activity of parents is declared relatively often by farmers' children (approx. 25.5%), although, according to previous data (Figure 6.5), they are least engaged in social activity themselves in such cases. It must also be added that the average declared level of students' activity was 31%, whereas the level of activity of parents and family members declared by students was only 21.7%. The above data are consistent with CBOS analyses[31] carried out for young people in 2010. In the aforementioned report concerning surveys conducted among students of final classes of secondary and vocational schools, we can read: *Declarations of affiliation with a group bear also relation to the assessment of the family's social position. The higher such assessment is, the more frequently the membership of associations, societies, organisations, clubs, groups of supporters (fans) or religious movements is declared.*

6.5 Students' opinion on their place of residence

Apart from questions referring directly to the involvement of students and their parents in the activity of organisations or their knowledge of local social leaders, a part of questions covered by CEKIN surveys concerned young people's attitude to activities being undertaken in their surroundings. For the indirect diagnosis of characteristics related to assets and social capital of students, both opinions on favourable activities that happened in the student's place of residence during the last two years and negative opinions are important. Questions about favourable and negative transformations and events were open and were categorised in the course of data analysis, whereas in the next step a closed question was asked about the most desirable actions that should be taken in the student's place of residence. Eventually, respondents were also asked about their knowledge of sources of financing of desired projects.

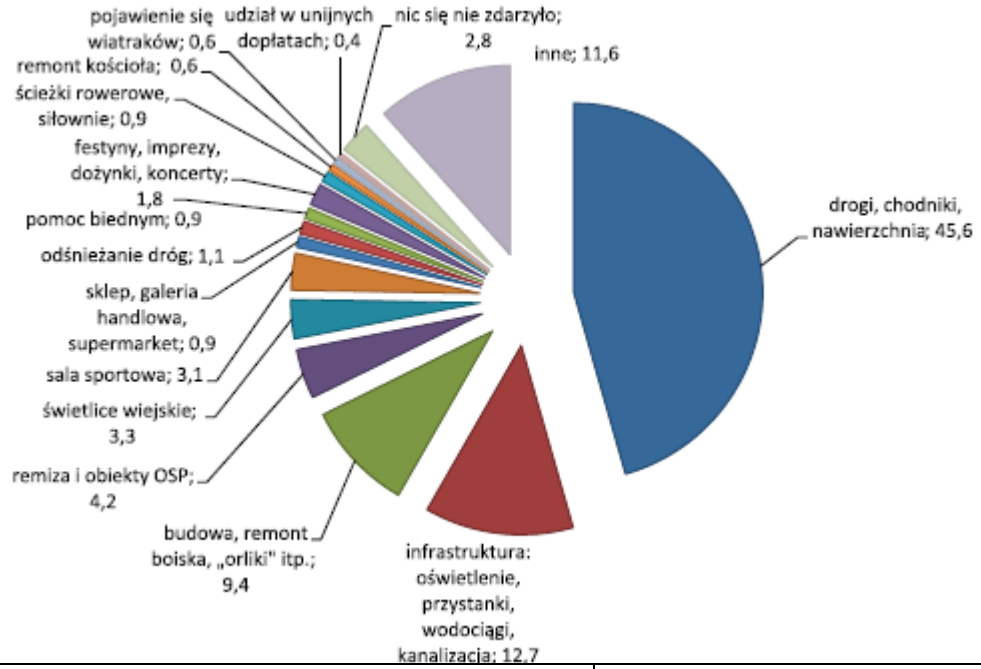
[31] Centrum Badania Opinii Społecznej "Opinie i Diagnozy" (Opinions and Diagnoses), Młodzież 2010, Warszawa 2010, p. 104.

Successes in students' places of residence

Students were eager to provide extensive answers to questions about favourable activities in their places of residence. They provided 1,101 answers, which were later categorised so as to reflect the original thoughts and expressions of residents to the largest possible extent. Results were presented in the form of a circular chart (Figure 6.8). Most of the students recognise the ongoing repair and construction of roads and their new pavement as favourable activities (45%). Other elements of infrastructure, such as lighting, renovation or construction of new bus stops, power lines, construction of water supply pipelines, a sewerage system, a sewage treatment plant, including mini-sewage treatment plants, accounted for 12.7% of answers. This number contains also a series of indications concerning repairs of dykes, drainage and clearing of ditches. Thus, nearly 60% of answers referred to the construction or renovation of primary elements of technical infrastructure. Other favourable activities recognised by young people include obviously the construction of sports fields, including those being built under "Orlik" sports complex construction programmes (9.4%). If we add further 3.1% of indications concerning sports halls and 0.9% concerning bodybuilding gyms, cycling paths and other sports facilities, it is still altogether less than 15% of favourable activities relating to sport and recreation. Young people recognise investments in volunteer fire service depots (4.2%) and rural common rooms (3.3%). Only 1.8% of indications of favourable activities concerned various kinds of favourable events, festivities, harvest festivals, sleigh rides, concerts, "days of corn" etc. The recognition of cultural initiatives of local authorities addressed to young people in the form of the laconic expression "they organise events" can be a significant praise for local authorities, but less than 2% of such indications mean the lack of considerable success in this field. Another explanation can be common expectations concerning the construction of roads and technical infrastructure, which are also present among young people. In less than 1% of answers, respondents expressed satisfaction with the opening of a new shop, a shopping mall or simply a supermarket. Renovations of churches, the construction of wind power plants or the installation of the Internet were noticed on a similar scale. In theory, similar answers should appear more frequently, but they were provided only sporadically; the same goes for clearing the roads of snow in the winter, help to the poor and to flood victims. Several persons indicated the “European Union” or “EU funds” as favourable

activities in their place of residence, which may also bear some relation to investments in infrastructure. Almost 3% of students said that nothing important had happened in their place of residence for the last two years. Among individual opinions recorded in the category "other", it is worth noting indications of changes in local authorities: "a new village administrator was chosen", "there is a new village-mayor", "my neighbour has become a member of the council". There was only one favourable opinion about the establishment of the farmers' wives' circle and several personal successes, such as: "I coped with the flood", "I met a lot of people", or the success attributed to the place itself: "life without stress". Virtually no spectacular events are mentioned as advantages of local life, apart from expressions like: "Americans have arrived" or "a bank robbery".

Figure 6.8
Students' answers to the open question about favourable activities in their place of residence during the last two years



infrastruktura: oświetlenie, przystanki, wodociągi, kanalizacja; 12,7	infrastructure: lighting, bus stops, water supply pipelines, sewerage system; 12.7
budowa, remont boiska, „orliki" itp.; 9,4	construction or repair of a sports field, sports field built under "Orlik" programme etc.; 9.4
remiza i obiekty OSP; 4,2	volunteer fire service depot and facilities; 4.2
świetlice wiejskie; 3,3	rural common rooms; 3.3
sala sportowa; 3,1	sports room; 3.1
sklep, galeria handlowa, supermarket; 0,9	shop, shopping mall, supermarket; 0.9
odśnieżanie dróg; 1,1	clearing the roads of snow; 1.1
pomoc biednym; 0,9	help to the poor; 0.9
festyny, imprezy, dożynki, koncerty; 1,8	picnics, events, harvest festivals, concerts; 1.8

ścieżki rowerowe, siłownie; 0,9	cycling paths, bodybuilding gyms; 0.9
remont kościoła; 0,6	renovation of a church; 0.6
pojawienie się wiatraków; 0,6	emergence of windmills; 0.6
udział w unijnych dopłatach; 0,4	participation in EU subsidies; 0.4
nic się nie zdarzyło; 2,8	nothing happened; 2.8
inne; 11,6	other; 11.6
drogi, chodniki, nawierzchnia; 45,6	roads, pavements, road surface; 45.6

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Unsuccessful initiatives in the place of residence during the last two years

Among unsuccessful initiatives students mentioned almost the same items that were indicated as successful. Most often, however, shortages of the sports infrastructure were mentioned (the lack of sports fields or the lack of success in their construction). Other frequently indicated items were holes in roads and other defects of technical infrastructure as well as the liquidation of the school and, in some cases, generalising statements like: "they always fail". There were also complaints about social issues: "unsuccessful attempts to get rid of alcoholics", unsuccessful reactivation of the farmers' wives' association, organisation of picnics in a wrong manner or in wrong places (e.g., "the organisation of a picnic for flood victims was a failure"). Students complained also about: "the lack of a place for spending time with friends", "the lack of a meeting place for young people" and the lack of involvement of inhabitants. According to one of the students, one of the failures in his place of residence during the last two years was the fact that "my father failed to become a member of the council". Nevertheless, attitudes of agricultural school students can be assessed as "responsible" as compared to results of other surveys. According to an elaborate study by Krystyna Szafraniec (2010), nineteen-year-olds show much more frequently critical, indifferent or ambivalent attitudes towards the surrounding reality; in the author's opinion, one of the consequences of this was a mass emigration after 2004, when this became possible. Even when expressing critical attitudes, the surveyed students of agricultural schools show more concern about the place in which they live.

Desirable activities in the place of residence

In the third question concerning the functioning of students' place of residence, students were asked to choose three most desirable activities from a list. In this case, students had at their disposal a closed catalogue of 10 activities, which they could supplement with their own proposals.

Table 6.2
Most desirable activities

Optional activities	Answers		Percentage share of observations
	N	Percentage share	
Playground for children	208	7.7%	20.8%
Opening of a rural kindergarten	74	2.7%	7.4%
School sports field	330	12.2%	33.0%
Repaired roads and pavements	553	20.4%	55.4%
Sewerage system	234	8.6%	23.4%
Renovation of the rural common room or any other meeting place	175	6.5%	17.5%
Internet cafe	276	10.2%	27.6%
Development of the village centre	286	10.5%	28.6%
Activities aimed at the fostering of social and cultural life	266	9.8%	26.6%
Tourist-oriented projects	259	9.6%	25.9%
Other	51	1.9%	5.1%
Total	2712	100.0%	271.5%

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

The full choice list included: 1 – playground for children, 2 – opening of a rural kindergarten, 3 – school sports field, 4 – renovated roads and pavements, 5 – sewerage system, 6 – renovation of the rural common room or any other meeting place for inhabitants, 7 – Internet cafe with free Internet access, 8 – developed village centre being the flagship of the place and, at the same time, public space and a place of recreation for inhabitants and visitors, 9 – activities aimed at the fostering of social and cultural life, maintenance of tradition, heritage etc. (joint festivities, events, picnics, contests, memorial rooms etc.), 10 – tourist-oriented projects (pedestrian and cycling routes, educational routes etc.), 11 – other, which?

Among desirable activities (Table 6.2) repairs of roads and pavements (20.4%) and development of the village centre (10.5%) are mentioned again. The need to build a sewerage system was indicated surprisingly often (8.6%). Having the possibility of choice, young people indicate the need to build sports fields (12.2%) and to carry out tourist-oriented projects (9.6%). Among recommended activities, as many as 10% of respondents suggest the improvement of the Internet access.

Table 6.3

Answers to the question: Do you know any programmes that could be used for financing the above activities?

Do you know any programmes that could be used for financing the above activities?	**Number of answers**	**% of valid answers N = 1101**
Yes	207	23.7
No	668	76.3
No data available	226	
Total	1101	100

Source: the survey *Key competences of agricultural school students* carried out under the HCOP project no. UDA-POKL.03.03.04-00-290/09-00

Out of the total number of 1,101 answers, only 207 students (19% of the total population) answered affirmatively the question whether they know any programmes that could be used for financing activities aimed at the development of their place of residence. As many as 97 persons used general statements, indicating funds from the European Union (answers such as: “EU funds”, “from EU”, etc.). The name of specific EU programmes was indicated by 57 persons; the most frequently indicated name was the Rural Development Programme (RDP) for years 2007-2013 (47 answers), the European Social Fund (indicated 9 times as EFS or under the name of the Human Capital Operational Programme). The European Regional Development Fund was indicated three times; in addition, the Eastern Poland Development Programme was mentioned and the Ministry of Agriculture was indicated twice. Apart from that, the village administrator’s fund was mentioned three times, and five persons indicated the village mayor or the commune office. None of the students mentioned the LEADER programme.

Summary

The surveyed young people from secondary and vocational schools who learn agricultural specialisations speak willingly of the social environment of their place of residence. From among indicated institutions and organisations, the activity of church organizations and volunteer fire services was mentioned most frequently and assessed most favourably. Young people have a relatively good opinion about sports and youth organisations and, on the other hand, completely fail to notice traditional women's organisations (farmers' wives' circles) and "new associations", e.g. relating to rural development.

Just like most Poles, more than half of young people from agricultural schools participating in the survey (53.3%) do not know or cannot indicate in their environment any social workers whom they would like to help in their work for the benefit of their own housing estate or place of residence or in support of the needy.

As many as 66% agricultural school students participating in the survey declared their involvement in social work in the past. This score is similar to the one achieved for the entire population of Polish farmers (71%), but largely exceeds the average of typical answers by representatives of the entire Polish youth aged 18-24. It is worth mentioning that in the recent Eurobarometer survey Polish young people ranked definitely at the bottom of EU classifications nearly in all categories of social involvement and voluntary work. Interestingly enough, however rarely young Poles may engage in voluntary work, they document this fact very often with a formal certificate. This prompts us to ask whether the Polish model of upbringing for voluntary work has not been affected too much by formalization and bureaucracy.

The factor that diversifies the level of involvement of young agricultural school students in social organisations to the largest extent is the occupation practiced by their parents. The most passive group are students whose mother is an unemployed person and a pensioner. The highest level of activity is shown by the students who declared that their mothers conduct business activity. In the case of the father's occupation, his running of business activity also stimulates young people to be independent entrepreneurs, whereas the stronger tendency to collective work for hire is shown by the students whose father is

unemployed. In the case of both parents, the farmer's occupation (running of the farm) has a strong impact on the limitation of social activity declared by their children.

The level of parents' education is another factor that strongly diversifies the activity of students. The highest level of activity in organisations is represented by students whose parents have higher education, whereas the clearly weakest tendency to such activity is shown by students whose mothers have primary education.

Students take notice of favourable changes in their places of residence. As many as 60% of students point out that roads, pavements and other elements of technical infrastructure were built in their place of residence during the last two years. The second advantage is the improvement of the sports infrastructure, which is noticed by every sixth respondent only. Among activities that are desirable in their places of residence, students also indicate repairs of roads and pavements, the development of the village centre and the sewerage system. Having the possibility of choice, young people indicate the need to build sports fields and to introduce tourist-oriented projects and propose the improvement of the Internet access.

The activities that young people consider most often to be biggest failures during the last two years include the lack of sports fields and the lack of success in their construction, the poor condition of roads, the liquidation of the school, failure to combat pathologies effectively, unsuccessful events and picnics and the lack of the offer addressed to young people.

Young people cannot indicate any sources of financing of activities that they expect in their places of residence. Such answer was provided by 76% of respondents. Those who stated that they knew such sources usually made only a generalizing statement about "EU funds" when asked to specify them. None of the 1,101 respondents mentioned the LEADER programme.

To sum up, we can state that the level of social capital of agricultural school students does not deviate substantially from other groups of young people of similar age. The level of social activity is strongly influenced by the student's family environment, the level of parents' education and the occupation pursued by parents. The level of participation of agricultural school students in social organisations is similar to that of the entire population of Polish young people, although it is definitely lower than in the case of peers from other European states. Young people express resolute opinions on favourable and negative

changes in their environment, but they cannot indicate any possible sources of financing of activities that are necessary for improvement of the standard of living in the countryside.

Conclusion

The aim of this report was to diagnose trends of development of the agricultural education system in Poland and key competences of agricultural school students relating to entrepreneurship and the sense of initiative. Results of surveys conducted among representatives of schools providing education in occupations relevant to the agricultural & food sector show that the educational offer is not adjusted to the requirements of the labour market. Young people's interest in agricultural occupations turns out to be low, which is also reflected by opinions of representatives of schools. From this perspective, it is necessary to make such changes in curricula and profiles of education in agricultural schools that would make those schools more attractive for students. In the light of completed analysis, the theory that young people attend agricultural schools as a result of the necessity faced by the young generation rather than their educational potential seems to be largely justified.

Still, rural people turn out to form a significant (not only in terms of quantity) potential of the Polish countryside that has not been fully utilised until now. Nearly every fifth representative of the young generation is unemployed, and almost half of the unemployed persons aged 15-24 look after a job for the first time. As a result of this, agricultural schools face new challenges as regards the aforementioned adaptation of the educational offer to the requirements of the labour market.

As has already been mentioned in the introduction, agricultural schools in Poland have always been distinguished by specific features reflected in social and educational characteristics of students. Today, in the light of results of completed analysis, speaking of such specific features seems to be not fully justified. In terms of their social composition, agricultural technical schools do not differ substantially from schools offering non-agricultural specialisations, although the former are clearly "rural" schools (in respect of young people's place of origin). Educational aspirations declared by agricultural school students are similar to those of their peers from non-agricultural schools. The main differences can be noticed mainly with regard to respondents' professional plans and plans concerning their future place of residence. Young people attending agricultural schools express their intention to live in the countryside much more frequently (which is largely determined by their rural origin). They also declare slightly less ambitious professional plans,

which are consistent with the profile of their education relatively less frequently than in non-agricultural technical schools. It is another argument which confirms the thesis about the need to introduce changes in the agricultural education system.

There is a question: to what extent can young people attending agricultural schools form the development potential of the Polish countryside? The survey conducted among students of second classes of technical schools was aimed at diagnosing key competences of the young generation relating to entrepreneurship and the sense of initiative. Competences seem to be a necessary resource for the launching of development processes in the countryside. In the light of completed analysis, the unequivocal assessment of the level of competences of agricultural school students seems to be impossible, which is largely attributable to the complexity of the subject-matter under analysis.

First of all, it must be emphasised that surveyed young people identify with characteristic features of the entrepreneurial attitude – mainly diligence and consistency in pursuance of aims. The qualities assessed as slightly worse by agricultural school students are their own creativity and skill at putting their ideas into practice. Importantly enough, those competences are not dependent on the level of parents' education. This means that the cultural capital of the family of origin is not very significant for qualities such as diligence, the skill at putting ideas into practice, creativity, consistency in action, or respondents' belief in their own knowledge of challenges being undertaken. Taking into account the structure of education of rural inhabitants, we can regard this result as favourable to a certain extent. On the other hand, it turns out that entrepreneurial attitudes depend to some extent on the kind of parents' professional activity. Students coming from entrepreneurs' and farmers' families are characterised by entrepreneurial attitudes to a larger extent than their peers from families of hired employees or professionally passive persons.

The young people who participated in the survey are convinced that it is necessary to obtain professional qualifications before taking up work. This shows that young rural inhabitants are aware of the requirements of the present-day labour market. At the same time, farmers' and entrepreneurs' children once again seem to be more interested in the holding of executive position or self-employment, although those two categories of students take the relatively smallest interest in teamwork on the other hand. Thus, we can say that among the analysed social & educational characteristics of students, the social & professional position of parents is of biggest importance for their possession of characteristic features of

the entrepreneurial attitude or preferences concerning their future workplace (its characteristics). Students coming from farmers' and entrepreneurs' families seem to possess the highest level of competences relating to entrepreneurship and the sense of initiative within the scope of the analysis. Another diversifying factor is also the gender – a higher level of competence is shown by boys. Those differences seem to be rooted in family and environmental socialisation. The running of business activity or a farm requires the qualities that make up the entrepreneurial attitude. As regards gender differences, they seem to be rooted in different models of bringing up for social roles, which are much more distinct in the countryside than in the city; this is partly reflected by the experience of the surveyed population in work for hire, which is larger the case of boys.

The problem lies in the fact that while both of the aforementioned categories of students (coming from entrepreneurs' and farmers' families) are characterised by the entrepreneurial attitude to a relatively larger extent, their project planning skills turn out to be low. Even though they are relatively high in the case of young people from entrepreneurs' families (which gives hope for the utilisation of the entrepreneurship potential that this category of young people has), they are slightly lower in the case of farmers' children. This is because the level of project planning skills depends basically on their educational competences. What gives rise to some concern, is the relatively weaker investment-oriented attitude that characterises students coming from entrepreneurs' families. In the case of this category of young people, diligence, creativity, consistency in pursuance of aims and the planning skill do not go hand in hand with the tendency to make investments. The situation in this field looks slightly better for students coming from farmers' families and – once again – boys.

In general, it turns out that young people covered by the survey are ready to overcome their own limitations. However, their readiness to undertake any risk connected with professional promotion or incurring of a bank loan is much smaller. It turns out once again that the strongest readiness for involvement in risky situations characterises students coming from entrepreneurs' families. School achievements also play a very important role in this field.

To sum up, it must be stressed that key competences of agricultural school students relating to entrepreneurship and the sense of initiative turn out to be quite good. The problem lies in the fact that entrepreneurial attitudes are not sufficient to activate the potential of the young generation; for that purpose, it is also necessary to have project

planning skills, which are not very high in this case. The low level of young people's readiness to undertake risk is also a problem.

The groups that are clearly distinguished by favourable characteristics within the entire analysed population are students from entrepreneurs' and farmers' families and boys. In the case of those categories, we can observe the relatively biggest competences relating to entrepreneurship and the sense of initiative.

Do educational and professional plans of young people determine differences in the level of possessed competences relating to entrepreneurship and the sense of initiative? It turns out that they do to a limited extent only. Entrepreneurship and the sense of initiative characterise mainly the students who declare the most ambitious educational plans.

In general, among nearly 40% of respondents declaring their readiness to work as self-employed persons, students from entrepreneurs' and farmers' families constitute a majority again. The question whether young people consider the possibility of self-employment or not seems to have no connection with their competences relating to entrepreneurship and the sense of initiative – with one exception. Students declaring their interest in self-employment are characterised by a stronger tendency to make investments than in the case of persons preferring to be hired employees.

This potential, which exists mainly among students coming from entrepreneurs' children, may turn out to be a rural asset which is very likely to be utilised if another kind of assets – social capital – is activated. This is because the strongest readiness for teamwork occurs among entrepreneurs' children. However, it must be stressed that the general level of social capital of agricultural school students does not differ from the level of that capital possessed by all young people in Poland.

Results of completed surveys indicate clearly that the primary qualities that need improvement among agricultural school students are the project planning skill and readiness to undertake risks. Moreover, it seems important to enrich school curricula with contents and forms that will lead to the improvement of creativity and the sense of initiative among young people in agricultural schools.

Bibliography

- Boguszewski R. (2010), Centrum Badania Opinii Społecznej. Komunikat z badań BS/10/2010, Działalność społeczna Polaków, p. 10.
- Bourdieu P. (1997), The Forms of Capital [in:] *Education: Culture, Economy, Society*, A.H. Halsey, H. Lauder, P. Brown, A.S. Wells (ed.). Oxford: Oxford University Press.
- Centrum Badania Opinii Społecznej (2010). Opinie i Diagnozy, Młodzież 2010, Warszawa, p. 104.
- Centrum Badania Opinii Społecznej (2009), Aspiracje zawodowe Polaków, BS/92/2009, Warszawa.
- Domalewski J., Mikiewicz P. (2004), Młodzież w zreformowanym systemie szkolnym, IRWiR PAN, Warszawa.
- Eurobarometer, Młodzi Polacy nie angażują się w wolontariat (Young Poles do not engage in voluntary work). JAPA, PAP, 17 May 2011.
- European Social Survey (2006), (ESS) *www.europeansocialsurvey.org.*
- Fedyszak-Radziejowska B. (2010), Społeczności wiejskie pięć lat po akcesji do UE – sukces spóźnionej transformacji [in:] Polska wieś 2010. Raport o stanie wsi, J. Wilkin, I. Nużyńska (ed.). Fundacja na Rzecz Rozwoju Polskiego Rolnictwa, Wydawnictwo Naukowe Scholar, Warszawa, p. 90.
- Fedyszak-Radziejowska B. (2006), Czy kapitał społeczny bez społecznego zaufania jest możliwy? [in:] *Jednostkowe i społeczne zasoby wsi,* K. Szafraniec (ed.). Instytut Rozwoju Wsi i Rolnictwa PAN, Warszawa, p. 127.
- Fukuyama F. (1997), Trust: The Social Virtues and the Creation of Prosperity. Polish translation: Zaufanie. Kapitał społeczny a droga do dobrobytu by A Śliwa, L. Śliwa. Wydawnictwo Naukowe PWN, Warszawa – Wrocław.
- Herbst J. (2008), Wieś obywatelska [in:] Polska wieś 2008. Raport o stanie wsi, J. Wilkin, I. Nużyńska (ed.), Fundacja na Rzecz Polskiego Rolnictwa, Warszawa.
- Kamiński R. (2008), Aktywność społeczności wiejskich. Lokalne inicjatywy organizacji pozarządowych, IRWiR PAN, Warszawa, pp. 31-36.
- Kaźmierczak T. (2007), Kapitał społeczny a rozwój społeczno-ekonomiczny – przegląd pojęć [in:] Kapitał społeczny. Ekonomia społeczna, T. Kaźmierczak, M. Rymsza (ed.), Instytut Spraw Publicznych, Warszawa, p. 55.

- Kierunki Rozwoju Obszarów Wiejskich. Założenia do Strategii Rozwoju Obszarów Wiejskich (2010), Ministerstwo Rolnictwa i Rozwoju Wsi, Warszawa, p. 79.
- Kwieciński Z. (2002), *Wykluczenie*, UMK, Toruń.
- Polska 2030. Wyzwania rozwojowe (2010), Warszawa.
- Putnam R. (2000), *Bowling Alone – The Collapse and Revival of American Community*. Simon & Schuster, New York.
- Putnam R.D. (1995), *Making Democracy Work. Civic Traditions in Modern Italy* (title of the Polish translation: *Demokracja w działaniu. Tradycje obywatelskie we współczesnych Włoszech*). Znak, Kraków, Fundacja im. S. Batorego, Warszawa.
- Szafraniec K. (2001), Wartość wykształcenia na wsi – fakty, tendencje, konsekwencje [in:] Wieś i rolnictwo na przełomie wieków, I. Bukraba-Rylska, A. Rosner (ed.). IRWiR PAN, Warszawa.
- Szafraniec K. (2010), Młode pokolenie a nowy ustrój, Instytut Rozwoju Wsi i Rolnictwa PAN, Warszawa, pp. 71-123.
- Sztompka P. (2007), *Socjologia. Analiza społeczeństwa*. Znak, Kraków, p. 224.
- Trutkowski C., Mandes S. (2005), *Kapitał społeczny w małym mieście*. Warszawa.
- Youth on the move, Analytical report 319a, The Gallup Organization, upon the request of Directorate-General Education and Culture, May 2011 p. 19.
- *Samoorganizacja w społecznościach wiejskich. Przejawy, struktury, zróżnicowania* (2002), M. Wieruszewska (ed.). IRWiR PAN, Warszawa.
- Wieruszewska M. (2007), W kręgu kapitału społecznego [in:] *Tu i tam. Migracja z polskich wsi za granicę*, M. Wieruszewska (ed.). IRWiR PAN, Warszawa, p. 203.
- Woolcock M. (2001), The Place of Social Capital In Understanding Social and Economic Outcomes. ISUMA. *The Canadian Journal of Policy Research*, vol. 30, no 2.