

Factors Determining the Entry of Agricultural Farms into Agritourism

L. Pilař, J. Pokorná, T. Balcarová, J. Hron

Faculty of Economics and Management, Czech University of Life Science in Prague, Czech Republic

Anotace

Cílem článku je identifikovat motivy rozhodující při vstupu farmy do agroturistiky v oblasti České republiky. Dílčím cílem je analyzovat stupeň naplnění vstupních motivů. Součástí výzkumu byla identifikace rozdílů motivů pro vstup farmářů do agroturistiky v ČR s výsledky studie provedené na agroturistickém trhu v USA. K dosažení cílů byly využity deskriptivní statistiky a neparametrické testování prostřednictvím Wilcoxonova testu. Bylo zjištěno, že narozdíl od USA v ČR převažují ekonomické motivy pro vstup do agroturistiky. Výsledky srovnání postojů reflektujících vliv dosavadních zkušeností s agroturistikou se změnou postojů ke vstupním motivům.

Článek vznikl za podpory interní grantové agentury (IGA) České zemědělské univerzity v Praze, registrační číslo: 20121074.

Klíčová slova

Agroturistika, podnikatelské motivy, farma, sociální motivy, ekonomické motivy.

Abstract

The aim of this paper is to identify the motives of the decisions to join the agritourism business in the Czech Republic and the degree of fulfilment of these input motives. The research also identified the differences in motives for the entry of farmers into agritourism in the Czech Republic as compared to the results of a study on agritourism in the USA.

In order to achieve the aims, descriptive statistic methods and non-parameterized testing through Wilcoxon test were used. It was found out that unlike the USA, in the Czech Republic the most dominant motives for joining agritourism are economic motives. The results also included a comparison of the approaches reflecting the impact of existing experience with agritourism with the change of approaches to the input motives.

The article originated as a part of the Internal Grant Agency (IGA) of the Czech University of Life Sciences in Prague, Registration Number 20121074.

Key words

Agritourism, entrepreneurship motivation, farm, social motives, economic motives.

Introduction

The main aim of the article is to confirm or refute the assumption that in the Czech Republic the economic and social factors for joining agritourism are balanced. The sub-aim is to identify the differences of motives for joining between the Czech Republic and the USA and compare the approaches reflecting the impact of existing experience with agritourism with the change of approaches to the input motives. With the influence of experiences as a factor of changing motives in time, the research compare

decision-making motives weighing by entrancing the agritourism business and current farmer view at the structure of those determining motives.

Today agriculture climate is changing (Barbieri et al., 2009) as the Czech agriculture showed a significant decline until 2010. This decline has been turned into the best overall profit in agriculture after 1998 gained in the year 2011 (Denik, 2012). With the number of 47 233 of all the farm types (CSO, 2012), these changes can encourage farmers in searching for new possibilities to find alternative

strategies stabilize or increase the income for economic survival of farmers and their families (Barbieri et al., 2008; Barbieri et al., 2009). Previous empirical works have concluded, that diversification can be used as a farm adjustment strategy (Barbieri et al., 2009). According to Chaplin et al (2004), diversification is a process of decreasing of the farmers' households' dependence on the agricultural activities.

The traditional view of diversification is based on the new-income sources search (Bowler et al., 1996). Such farms were defined in the literature as alternative farm enterprises (Gasson, 1988; Ilbery, 1991). It is possible to diversify into different complex areas, than just to expand with related agricultural activity (Barbieri et al., 2009). Recent researches have changed the view at the diversification areas (McGehee et al., 2007; Maye et al., 2009). The previously published typologies as it is defined by Bowler et al (1996) and Bowler (1992) divided farm businesses into agriculture, non-traditional and non-agricultural with the regard to output of products and services provided by farms. A division used in this paper is based on the farm diversification typology developed by Ilbery (1991) and cited in later researches (Mace, 2005; McGehee et al., 2007; Maye et al., 2009) varies between farm-related (on-farm) activities such as specialist products, livestock, organic or crop products; food processing; direct marketing and non-farming activities such as sports/leisure facilities, accommodation services and hire/contract services. Recent researches have shown perceptible growth of farm diversification both on- and off-farm businesses (McGehee et al., 2007; Maye et al., 2009).

The second type was defined as agritourism business, including recreation, tourism and hospitality field (Barbieri et al., 2009; Bowler et al., 1996). There are two perspectives for agritourism studies. The definition within sociological perspective understands agritourism activity as a part of the complex farm structure. Tourism perspective shows the agritourism much more as the unique activity attracting public (Che et al., 2005; Barbieri et al., 2008). According to both perspectives Václavík (2008) defines agritourism as a form of complex agricultural farm or ranch business, aimed at seizing visitors, in order to bring additional income to farmers. Previous researches aimed at identification of farmers' entrepreneurial development motives defined the economic and social dimensions of farmers' intentions (Ollenburg

et al., 2007; Barbieri et al., 2008; Tew et al., 2012).

In recent studies, the intention to choose agritourism as a new resource for generating income and for adding a value, were presented as generally most common economic decision-making motives (Ollenburg & Buckley, 2007; Tew et al., 2012). In the Czech Republic, the economic motives are presented as determining. According to the Ministry of Agriculture, almost 250 projects aimed at agritourism were recorded since 2007 (FinanciNoviny, 2012). Academics suggested that the social motives as community and social contribution are believed to be valued as economic motives (Barbieri et al., 2008; Tew et al., 2012).

There were five economic motives determined in this research. The first motive is to assure the economic survival of the farm (Bowler et al., 1996). Most discussed motive especially in times of economic distress, such as a poor harvest, to start with an alternative activity as agritourism, is gaining additional income for the farmer, as well as the subsistence for the farmer and his family (Tew et al., 2012). According to Bowler et al. (1996) to maintain farm-related (on-farm) activities is one of the income resource that allows farmer to implement the venture within the farm property (McGehee et al., 2007). The subsidy gaining motive was included as a farm income adjustment, because of on-going state support. The State Agricultural Intervention Fund (MZE, 2009) as an administrator of financial subsidies both from the European Union and the national financial funds control programs as Axis IV, Leader - implementing local development strategies (quality of life/diversification) and the programming period was set for 2007 - 2013.

As farming and affiliated activities provide farmers the identity and the sense of achievement (Rob & Burton, 2004), the significance of social motive has to be evaluated. The preference of the satisfaction from the activity itself can be considered as a motive rather than to maximize income (Barbieri et al., 2009). The contribution to the farmers' family and his tight community (such as employees) has also been valued as an important rationale by previous researches (Getz & Carlsen, 2000; McGehee et al., 2007). The social interaction, social bonding such as bringing new people into farmers' life, was also evaluated in this research (Tew et al., 2012) as it is specified below. The evaluation of motives is crucial in the identification of the agritourism development intentions.

Material and methods

The Factors Motivating Agritourism Entrepreneurs (Mace 2006) questionnaire, translated independently by two authors of the article, was used to evaluate the economic and social motives for joining the agritourism. The differences in translations were subsequently consulted with a native speaker. The questionnaire consisted of 18 questions. 9 questions were focused on expressing agreement with economic and motives before joining agritourism using a 5-point likert scale.

The following 9 questions were focused on the evaluation of approaches reflecting the impact of the existing experience with agritourism.

Data for the motive analysis were obtained by contacting 225 farms involved in agritourism by the electronic form to e-mails that were obtained through a fulltext search on internet search engines (seznam.cz and Google.cz). The questionnaire return rate was 32.4% (72 farms). The questionnaire was addressed to the farm owners, which was stressed in the accompanying letter of the electronic inquiry. Characteristics of respondents: 21.3 % of the farmers are in agrotourism less than two years. 26.4 % of respondents 2-5 years and 52.3 % of the farmers are in agrotourism longer than 5 years. Farm size in hectares is divided as follows: up to 50 hectares - 24.6 %, from 51 to 250 ha 40.3 %, over 250 hectares - 35.1 %.

In order to be able to subsequently compare the results with the research on agritourism in the United States, the significance of factors influencing joining agritourism was evaluated using the percentage enumeration method for the frequency of agree and strong agree answers (Mace, 2005). The latent factors (group of economic and social factors) were evaluated using the arithmetic average of the sum of all evaluations in the given factor groups. Non-parameterized Wilcoxon pair test was used to analyze whether expectations were met, due to its suitability for testing ordinal variables. Wilcoxon pair test was also used to evaluate the change of approaches reflecting the experience gained from running business.

Results and discussion

Based on the analysis of the frequency of agreements, the most significant motive was identified: “joining agritourism because of the need of new income” (E2), with which 76 % of respondents agreed or strongly agreed. Second most significant motive was identified as “the possibility to expand the farm with the advantageous option to work on own farm” (E4). 72 % of respondents agreed or strongly agreed with this motive (see Table 1).

As far as social motives are concerned, the most significant factor reflected the importance of joining agritourism in order to sustain the farm community.

Motives			%	Mean
X2	Economic	E2	76.39	3.97
X4	Economic	E4	72.22	3.88
X9	Economic	E5	70.83	3.81
X5	Social	S1	68.06	3.82
X6	Social	S2	51.39	3.38
X3	Economic	E3	31.94	3.09
X1	Economic	E1	19.44	2.65
X7	Social	S3	18.06	2.55
X8	Social	S4	15.28	2.08

X1 My economic survival depends on the success of my agritourism business.

X2 My interest in agritourism is driven by my need for new income sources.

X3 Farming and ranching alone are not generating enough to make a living nowadays.

X4 Agritourism allows me to work at home instead of getting an off-farm job.

X5 Agritourism is important for my community's economic survival.

X6 My interest in agritourism is driven by my desire to see my community prosper.

X7 Operating an agritourism business provides me more satisfaction than the extra income generated.

X8 An agritourism business brings new people into my life, which is more important than the money I make.

X9 My interest in agritourism is driven by possibility of obtaining grants.

Source: own calculation, questionnaire survey, 2012

Table 1: Motives for Agritourism.

68 % of respondents agreed or strongly agreed with this motive. Second most significant motive was identified as the need to see the farm community satisfied. 51 % of respondents agreed or strongly agreed with this motive.

In order to be able to compare the economic and social motives, the individual variables were merged into two groups of latent factors: E6 – economic motives (E1 – E5) and S5 – social motives (S1 – S5). The economic motives can be considered as the more significant latent factor, since in average

54.17 % of respondents agreed or strongly agreed with the motives. On the other hand, 38 % of respondents agreed or strongly agreed with the social motives (see Table 2).

The obtained motive values for joining agritourism were compared with the values measured in the „Factors Motivating Agritourism Entrepreneurs” research (Mace, 2005). The following table represents the comparison of measured values. Factor E5 was excluded from the comparison, since it was included in the research in the Czech Republic

Motives			%	Mean	
X1	Economic	E1	19.44	54.17	Economic
X2	Economic	E2	76.39		
X3	Economic	E3	31.94		
X4	Economic	E4	72.22		
X9	Economic	E5	70.83		
X5	Social	S1	68.06	38.19	Social
X6	Social	S2	51.39		
X7	Social	S3	18.06		
X8	Social	S4	15.28		

- X1 My economic survival depends on the success of my agritourism business.
- X2 My interest in agritourism is driven by my need for new income sources.
- X3 Farming and ranching alone are not generating enough to make a living nowadays.
- X4 Agritourism allows me to work at home instead of getting an off-farm job.
- X5 Agritourism is important for my community’s economic survival
- X6 My interest in agritourism is driven by my desire to see my community prosper.
- X7 Operating an agritourism business provides me more satisfaction than the extra income generated.
- X8 An agritourism business brings new people into my life, which is more important than the money I make.
- X9 My interest in agritourism is driven by possibility of obtaining grants.

Source: own calculation, questionnaire survey, 2012

Table 2: Social and Economic Motives for Agritourism.

Motives		CZ	USA	Difference
Economic	E2	76	66	10
Economic	E4	72	63	9
Social	S1	68	82	-14
Social	S2	51	63	-12
Economic	E3	32	71	-39
Economic	E1	19	24	-5
Social	S3	18	47	-29
Social	S4	15	55	-40

- X1 My economic survival depends on the success of my agritourism business.
- X2 My interest in agritourism is driven by my need for new income sources.
- X3 Farming and ranching alone are not generating enough to make a living nowadays.
- X4 Agritourism allows me to work at home instead of getting an off-farm job.
- X5 Agritourism is important for my community’s economic survival
- X6 My interest in agritourism is driven by my desire to see my community prosper.
- X7 Operating an agritourism business provides me more satisfaction than the extra income generated.
- X8 An agritourism business brings new people into my life, which is more important than the money I make.

Source: own calculation, questionnaire survey, 2012 and Mace (2005)

Table 3: Social and Economic Motives for Agritourism in USA and the Czech Republic.

Motives		Before		After		Difference
X2	Economic	E2	76	E2p	85	-9
X4	Economic	E4	72	E4p	81	-9
X9	Economic	E5	71	E5p	65	6
X5	Social	S1	68	S1p	65	3
X6	Social	S2	51	S2p	49	2
X3	Economic	E3	32	E3p	40	-8
X1	Economic	E1	19	E1p	22	-3
X7	Social	S3	18	S3p	21	-3
X8	Social	S4	15	S4p	14	1

- X1 My economic survival depends on the success of my agritourism business.
- X2 My interest in agritourism is driven by my need for new income sources.
- X3 Farming and ranching alone are not generating enough to make a living nowadays.
- X4 Agritourism allows me to work at home instead of getting an off-farm job.
- X5 Agritourism is important for my community's economic survival
- X6 My interest in agritourism is driven by my desire to see my community prosper.
- X7 Operating an agritourism business provides me more satisfaction than the extra income generated.
- X8 An agritourism business brings new people into my life, which is more important than the money I make.
- X9 My interest in agritourism is driven by possibility of obtaining grants.

Source: own calculation, questionnaire survey, 2012

Table 4: Reflection of the Agritourism Motives in Time.

	E1p - E1	E2p - E2	E3p - E3	E4p - E4	E5p - E5	S1p - S1	S2p - S2	S3p - S3	S4p - S4
Z	-1.414	-0.24	-1.949	-1.279	-2.08	-1.342	-1.3	-1.342	-0.478
Asymp. Sig. (2-tailed)	0.157	0.811	0.073	0.201	0.061	0.18	0.194	0.18	0.633

For explanations of „E“ see table 4

Source: own calculation, questionnaire survey, 2012

Table 5: Wilcoxon Pair Test Analysis.

due to its high influence on joining agritourism.

The highest difference was found for factor S4 (40 %), which corresponds with the influence of economic factors for joining agritourism in the Czech Republic and points to a high orientation of farmers on income. Significant difference was also recorder for motive E3, which indicated that in the Czech Republic the entry of farms into agritourism was not decisive for the survival of the farm.

Another part of the research discovered approaches reflecting the impact of existing experience with agritourism on the change of approaches to input motives. The Table 4 shows the change of approaches reflecting the experience gained from running the business.

The Wilcoxon pair test was used to analyse the differences between approaches. Calculated p-values ranged within the interval (0.061 – 0.811), which is higher than the defined value 0.05 (see Table 5).

Therefore no statistically significant difference was found between the approaches.

Conclusion

The research results confirmed the assumption that economic motives are more significant for Czech farmers when deciding whether to join agritourism. The research identified two dominant economic motives: “joining agritourism because of the need of new income” and “the possibility to expand the farm with the advantageous option to work on my own farm”.

When comparing approaches reflecting the impact of existing experience with agritourism with the change of approaches to input motives, no statistically significant difference was found. The results may indicate that farmers had realistic expectations, which were fulfilled.

While in the Factors Motivating Agritourism entrepreneurs research (Mace, 2005) the economic

and social motives were balanced, in the Czech Republic the economic factors significantly exceeded the social motives (54 % and 34 %). Significant orientation of farmers on economic income can be explained by the funding policy. The question for further research can be the change of motive structures as a consequence of the change of EU fund program structure.

Acknowledgements

The article originated as a part of the Internal Grant Agency (IGA) of the Czech University of Life Sciences in Prague, Registration Number 20121074.

Corresponding author:

Ing. Ladislav Pilař

Department of Management, Faculty of Economics and Management,

Czech University of Life Sciences in Prague, Kamýcká 129, 165 21 Prague 6- Suchbát, Czech Republic

E-mail: pilarl@pef.czu.cz

References

- [1] Barbieri, C., Mahoney, E., Butler, L. Understanding the nature and extent of farm and ranch diversification in North America. *Rural Sociology*. Vol. 73 (2), pp. 205-229, 2008. [Online]. [Cit. 2012-10-10] Available at: <<http://onlinelibrary.wiley.com/doi/10.1526/003601108784514543/pdf>>.
- [2] Barbieri, C., Mahoney, E. Why is diversification an attractive farm adjustment strategy? Insights from Texas farmers and ranchers. *Journal of Rural Studies*. Vol. 25 (1), pp. 58- 66, 2009. ISSN 0743-0167.
- [3] Bowler, I. R., Clark, G., Crockett, A, Ilbery, B, Shaw, A. The Development of Alternative Farm Enterprises: A Study of Family Labour Farms in the Northern Pennines of England. *Journal of Rural Studies*. Vol. 12, No. 3, pp. 285-295. 1996. ISSN: 0743-0167.
- [4] Bowler, I.R. ‚Sustainable agriculture‘ as an alternative path of farm business development. In *Contemporary Rural Systems in Transition*. Vol. 2. Economy and Society., Bowler, I.R., Bryant, C.R. and Nellis, M.D. (eds). Wallingford: CAB International, 1992. ISBN 0-85198-811-3.
- [5] Chaplin, H., Davidova, S., Gorton, M. Agricultural adjustment and the diversification of farm households and corporate farms in Central Europe. *Journal of Rural Studies*, Vol. 20 (1), pp. 61–77, 2004. ISSN 0743-0167.
- [6] Che, D., Veeck, A., and Veeck, G. Sustaining production and strengthening the agritourism product: Linkages among Michigan agritourism destinations. *Agriculture and Human Values*, Vol. 22 (2), pp. 225-234, 2005. ISSN 0889-048X.
- [7] CZECH STATISTICAL OFFICE: Definitive results for 2010 and semi-definitive results for 2011. Praha: Czech Statistical Office, [online], 2012 [cit. 2012-11-18]. Available at: <http://www.czso.cz/csu/2012edicniplan.nsf/engpubl/2116-12-eng_r_2012>.
- [8] Finanční Noviny. Farem poskytujících ubytování v ČR přibývá, je jich přes 600. [Online]. [cit. 2012-10-23], 2012. Available at: <<http://www.financninoviny.cz/zpravodajstvi/zemedelstvi/zpravy/farem-poskytujicich-ubytovani-v-cr-pribyva-je-jich-pres-600/851632>>.
- [9] Gasson, R., Farm diversification and rural development. *Journal of Agricultural Economics*, Vol. 39 (2), pp. 175–181, 1988. ISSN 1477-9552.
- [10] Getz, D., Carlsen, J. Characteristics and goals of family and owner-operated business in the rural tourism industry and hospitality sectors. *Tourism Management*, Vol. 21 (6), pp. 547–560 2000. ISSN 0261-5177.
- [11] Ilbery, B., Bowler, I., Clark, G., Crockett, A., Shaw, A., Farm-based Tourism as an alternative farm enterprise: a case study from the Northern Pennines, England. *Regional Studies*, Vol. 32 (4), pp. 355–364, 1998. ISSN 1360-0591.

- [12] Mace, D. Factors Motivating Agritourism Entrepreneurs. Risk & Profit Conference Proceedings. Kansas. [Online], 2005. [cit. 2012-10-03] Available at: http://www.agmanager.info/events/risk_profit/2005/Mace.pdf.
- [13] Maye, D., Ilbery, B., Watts, D. Farm diversification, tenancy and CAP reform: Results from a survey of tenant farmers in England. *Journal of Rural Studies*, Vol. 25, Issue 3, pp. 333–342, 2009. ISSN: 0743-0167.
- [14] McGehee, G. N., Kim, K., Jennings, G. R., Gender and motivation for agri-tourism entrepreneurship. *Tourism Management*, Vol. 28 (1), pp. 280–289, 2007. ISSN 0261-5177.
- [15] MZE, Ministerstvo Zemědělství. Program rozvoje venkova České republiky na období 2007–2013, [online], 2009. [cit. 2012-10-03] Available at: http://www.mze.cz/UserFiles/File/EAFRD/PRV_oficiln_schvlen.pdf.
- [16] Ollenburg, K., Buckley, R. Stated Economic and Social Motivations of Farm Tourism Operators. *Journal of Travel Research*, Vol. 45(4), pp. 444-452, 2007. ISSN: 1552-6763.
- [17] Rob, R. J. F., Burton, J. F. Reconceptualising the ‘behavioural approach’ in agricultural studies: a socio-psychological perspective. *Journal of Rural Studies*, Vol. 20(3), pp. 359-371, 2004. ISSN: 0743-0167.
- [18] Tew, Ch., Barbieri, C. The perceived benefits of agritourism: The provider’s perspective. *Tourism Management*, Vol. 33 (1), pp. 215–224, [online], 2012. [cit. 2012-10-03] Available at: <http://dx.doi.org/10.1016/j.tourman.2011.02.005>.
- [19] Václavík, T. Agroturistika na ekofarmách: Jak na to. Brno: Ministerstvo zemědělství České republiky, [online], 2008 [cit. 2012-10-23]. Available at: http://eagri.cz/public/web/file/38603/Agroturistika_na_ekofarmach.pdf.