

## Government's Support for Farmers' Knowledge Dissemination and its improvement

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All over the World in evaluation of economic growth factors, knowledge is playing more and more important role. The supporters of the concept of knowledge-based economy (Burton–Jones, 1999; Romer, 1986; 1990) address knowledge as the resource necessary for the growth of competitive ability. Only the countries which applying up-to-date knowledge create innovative products or services, may expect higher price, and at the same time higher surplus value. Finally due to higher income received, higher taxes are paid, budgeted increases and larger opportunities for solving the problems of social isolation appear. Facing such a great benefit of knowledge the question arises whether the state should not support knowledge spread at the same time ensure further growth of competitive ability and welfare of the country. The opinions of scientists are different on this point.

Krugman (1986, 1994, 1996) claims that the market perfectly solves questions, and intervention may only impair the mechanism of self-adjustment unfreezing non-effective structure of the market. Other scientists (Vilpišauskas, 2004; Soete, 2002) think that the state must bear the responsibility for assurance of knowledge spread.

Talking exceptionally about agricultural support there are also some disagreements about the form of the support for farmers'. In Lithuania farmers are rendered support in various forms: investment support, manufacture subsidies, support for knowledge spread, and others. Only one tendency of the support is analysed in this article, i.e., the support for knowledge dissemination.

In the article the effect of knowledge spread on the growth and competitive ability of the state is emphasised. The attention is directed to the classification of research and due to this also to the possibilities of different knowledge spread. Usually knowledge is useful only while it is new, therefore it is subject to up-to-date scientific research. The competitive ability is most efficiently increased upon prompting basic research and knowledge spread obtained as the result of this research. Such promotion is indirect business promotion, since usually functions of basic research and knowledge spread are performed by scientific institutes.

The article determines the effect of the support for knowledge spread on the profit of farmers'. Due to the data of questionnaires it was determined, that farmers embracing the support for knowledge spread obtain better results. Still farmers, who do not find out anything new during the seminars, achieve similar results to those which

are achieved by the farmers, who obtained knowledge in the seminars. Therefore it may be said, that the possibilities of farmer's knowledge spread improvement is not completely used. In this case seminars should be differentiated according to levels, because in the future expansion of supply of free of charge seminars and trainings, increasingly larger number of farmers in sponsored seminars will not obtain any new knowledge. Knowledge promulgated in the seminars should be based only on basic research, in such a way a number of farmers, who find out nothing new in a seminar, would decrease.

Knowledge is constantly getting old, besides learning is a continuous process. Therefore the demand of farmers for new knowledge should always remain provided the spread in the seminars and trainings is really new. Participation of the farmers in the seminars had some influence on sufficiency of their knowledge, since those, who did not lack knowledge about agricultural business, more often took part in the seminars compared to those, who lack knowledge about agricultural business. When facing the changes in technologies, knowledge demand should affect even those, who recently had enough knowledge in agricultural business. Thus, after the evaluation of research results, the assumption that the impact of knowledge spread on the results of farmers will remain, as well as the benefit of support for knowledge spread and farmers' profits, may be sustained. Therefore the extent of support for knowledge spread is worth to be increased on the account of other support means.

Keywords: *government support for business, agriculture, knowledge spread, knowledge - based economy*

### Introduction

In the concept of knowledge-based economy the main clearly emphasised source of competitive ability of the country is knowledge and its spread. Scientists have no doubts about the benefit of knowledge, but there is no clear position between the supporters of knowledge-based economy concept, whether the government needs to prompt knowledge spread (to provide support for knowledge spread), or not to intervene the process of knowledge dissemination, leaving the question of benefit and demand of separate knowledge to the discretion of the enterprises themselves. If the source, the knowledge in this case, is supported by the government and does not cost anything, it should not be the basis of competitive ability,

since it becomes available to everybody. However this source differs a lot by its characteristics from some other. Therefore it is necessary to evaluate the influence of support for knowledge spread on the dynamics of profits.

Since it was agreed that farmers should be supported, but there is no unanimous opinion on the form of support, it is necessary to evaluate the benefit of the support for knowledge spread in respect to the farmers.

Goal of the article – define benefits of support for farmers' knowledge spread and possibilities for its increase.

Object of the article – influence of support for knowledge spread on the farms of farmers.

In order to reach this goal, such tasks were set:

1. To systematize the approach of representatives of knowledge economy concept to support knowledge spread.
2. To evaluate relationship between the support for knowledge spread and the amount of profits received.

Object of the research – governmental support for knowledge spread among farmers.

Methods applied for the research. In order to systematize the approach of knowledge economy concept to the support for knowledge it was referred to systematic and comparative analysis of scientific literature. When determining relationship between profit received and the extent of support for knowledge spread the following means were applied: a questionnaire and qualitative and quantitative comparative analysis.

The questionnaire was carried out in October – December of 2006. The aliquant random selection was applied. The questionnaires were distributed in territorial departments of NPA (National Paying Agency) under MoA (departments are established in every county). 219 questionnaires were collected. With rejection of 4 improper questionnaires, data used in the research was taken from 215 respondents (98 % of all received questionnaires).

### **Significance of support for knowledge spread in the conception of knowledge economy**

Different approach to the role of knowledge for the processes of the development of knowledge economy concept under which services and products based on up-to-date knowledge become more and more significant instead of exploitation of traditional manufacturing technologies. Burton–Jones (1999) claims that already in 1950 it was prognosticated that knowledge will become the main mover for the growth of economy and productivity. Sustaining this attitude Rogoski (1999), Ridderstrale and Nordstrom (2004) state that companies will compete only because of the employees of high qualification, the negotiating positions of whom will be better than of the companies due to its rareness, while the employees of medium and low qualification will experience a global competition and will have to accept it. These tendencies are constantly growing, since people are progressively freely moving all over the world (Castles, 2003; Stark, 2002; Straubhaar, 2000).

Foray (1996), Druker (2004), Toffler (2001), Porter (1990), Nonaka (1995), Machlup (1984) claim that informational revolution is already in progress and all societal institutes

including business organisations are expected to change. According to Lawler (1986), the cheaper informational technologies enable creating more efficient internal and external networks. Due to the free movement of knowledge employees the states compete, where the employees, who are able to ensure competitive advantage of the country will stay. In other words knowledge spread ensures the competitive ability of the state, since of efficiency also increases.

Postcapitalist economy should not be confused with Marxist theory. According to Drucker (1993), Toffler (2001), Houghton and Sheehan (2000) postcapitalist economy is not "non-capitalist". Simply, future society should be not a continuation of industrial capitalism, but its transformation. As in the capitalist society two main blocks existed (controlling capital and hired employees), in that way post-capitalist society will also be divided in to two parts: competent and average employees. Businessmen or even the states (talking of state's competitive ability) will be more competitive, if they have more qualified employees.

In this case the traditional economy models become unconfordable to the expectations of society, production and welfare. Romer (1986; 1990) and other his congenials started analysing and creating new models of long-term development. Since then in the theories of economy knowledge is acknowledged as the third most significant factor leading to the processes of development. The creation and usage of the latter lead to the development of technologies and their application in creation of innovations. Thus also the settlement of the state's competitive ability problem should be connected to the increase of knowledge in the country. Support should be provided for knowledge creation and spread (for training of employees, businessmen, users), but not to other sources (labour of employees, capital or land), which are not the main factors ensuring the competitive ability.

Soete (2002), Trewin (2002), Drucker (2004), Porter (1990), Groenwegen (1997), Nonaka and Peltokorpi (2006), Kriščiūnas and Daugėlienė (2006) envisaged and highlighted the transformation of traditional economy into knowledge-based or innovative economy. The latter is based on knowledge spread and its usage.

Analysing the increase of knowledge role in development processes Burton–Jones (1999), accentuates the idea of knowledge. Knowledge capitalism shows that the most important role in the capital accumulation of a man is played not by the wealth possessed, but the capital of knowledge. Due to these reasons we will not increase social welfare reallocating money by taxes and support for business. A man or a businessman would earn much more, if he had better knowledge and qualification and used them properly (knowledge possession does not guarantee its better application). Only the answer is negotiable – whether the state should take care of people knowledge or leave it to self-education. V. Snitka (2002) notices that it is not important by what products Lithuania will compete, but how Lithuania will compete. Only new, intelligent and high quality products or services are well paid. The export of competitive enterprises of high working efficiency increases the price of labour force in the country, increases economic efficiency and capital, and decreases the competitive ability of other industries.

The competitive ability of the country in post-capitalist society may be defined as high productivity, which generates high income of people and state's budget as well as better social guaranties in the country. In this case, when using the concept of knowledge economy, it may be stated that to withstand international competition, capital and labour force should be directed to the branches of economy creating a big surplus value. Such position is close to the one proposed by German Historical School "educational protectionism" – to support a young branch in the state until it reaches the maturity.

Other scientists (Krugman, 1986, 1994, 1996) criticize "educational protectionism" claiming that the markets themselves may decide which innovation is worth to be implemented. Still the attention is fixable that knowledge spread is related to the modern research. Government's support for scientific research is not direct support for business or individual industry. Though usually financing of scientific research is treated as the support of individual branch (Vilpišauskas, 2004), however, this is not correct. It is wrong to relate only to sectorial, but not to horizontal support. Though in the industrial society the cases of innovation diffusions were rare, however situation has changed in post-industrial society. As Drucker (2004) cognizes, if innovation (transistors) has been developed for one industry (for telephone industry), it was thought that only in this field it could be applied. However, it appeared to be quite contrary – innovation gained even more competitive application in absolutely different field – computer industry. Drucker (2004) presents even more examples of innovation diffusions. So governmental support for innovative researches and knowledge spread not necessarily should be adapted only in one separate sector, rather innovation can be applied in a wide range of industries (which may not be foreseen in advance). Thus, it may also be stated that the support for knowledge spread may be linked with a horizontal support (not excluding separate supported economy branches).

But not every governmental support for research in innovation and knowledge spread is classified as horizontal support. The support is horizontal if there are equal possibilities for innovation diffusion between separate economy branches. Snitka (2002) notices that innovation research may be classified in 3 types according to their potential to create economic value through knowledge spread, namely which is related with the possibility of innovation diffusion. Base researches are usually performed in universities or other scholastic institutions, where research is not directed towards commercial activities. Applied research is a continuation of basic researches, however, during their accomplishment a commercial purpose is planned. Product creation encompasses the field of research, which is directly related to the creation of an actual commercial product.

Since basic researches create knowledge under which all commercial applications are based, and their results belong to the entire society, the spread of basic researches may not be restricted. Their results are widely published, thus they should be financed by public resources. Thus government's support for the research of product creation is least justifiable. Most public interest may be linked to inducement of basic researches (because knowledge

created here is not patent and accessible to everybody). Knowledge obtained thanks to basic researches may be equated to a public advantage, therefore the support for creation and spread of such knowledge may give a positive effect on the country's competitive ability.

Business support policy and its measures should be related to the improvement of competitive ability conditions for the state's enterprises as well as for the promotion of innovations. Usually only new knowledge is useful, therefore it is linked to up-to-date scientific research. The competitive ability is most effectively increased with an inducement of basic researches and spread of knowledge obtained as a result of the research. Such support is indirect support for business, since usually the functions of basic research and knowledge spread are performed by scientific institutes. Exactly such kind of business support should be more efficient than a direct support. R. Čiegis and others (2006) note that the benefit of direct support to farmers (production subsidies and investment support) is reallocated among other market members. In the next section the question whether the support for knowledge spread really had some influence on the growth of farmers' profits is analysed.

### **Benefits of government's support for farmers' knowledge dissemination and its improvement**

Structural funds of the European Union support the services of training and consultation for the farmers. In order to evaluate their benefit for the farmers the latter have been questioned as to what benefit they have gained from trainings and consultations. After having summed up the results of the questionnaire, it was determined that in the seminars (trainings) 45 percent (98 respondents) have obtained new knowledge, similar quantity of the respondents did not take part in the seminars - 45 percent (96 respondents), and 10 percent (21 respondents) of the respondents claimed that they found out nothing new during the seminars.

The following step has been made in order to determine what relation is between the usage of support for knowledge spread and respondent's result, i.e. the profit obtained. Since 114 (101 of respondents have not revealed) indicated what income and expenses they have incurred, we can evaluate how many respondents have received profit on average according to individual groups., Comparing answers of all respondents with the answers of the respondents who have indicated income and expenditure the proportion, actually has not changed, i.e., 43 percent have obtained new knowledge, 44 percent have not taken part, and 12 percent have found out nothing new.

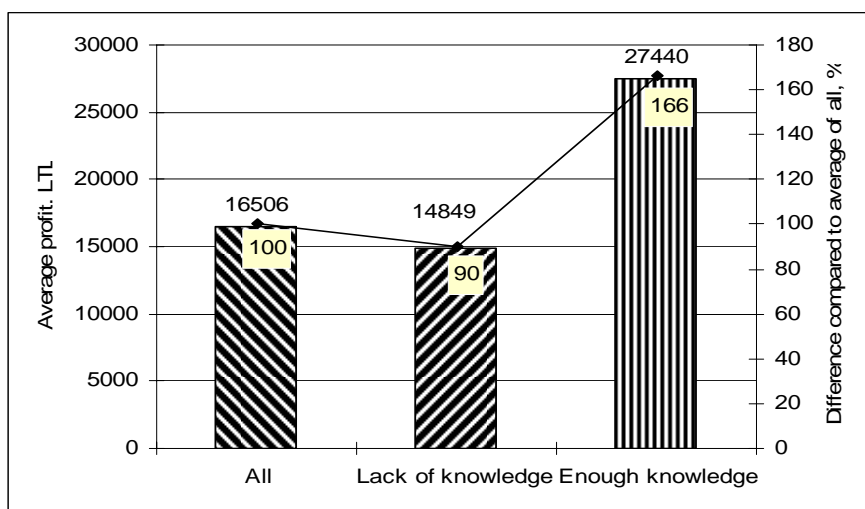
After the evaluation of average profit gained in separate groups during supported seminars and training, the following tendencies have been derived. The least average profit of LTL 4287.08 has been received by those, who have not participated neither in seminars, nor trainings. Their net average profit amounted to only 1/4 (26 percent) of average profit received by all respondents (LTL 16506.04). An average profit of all respondents 29 percent was exceeded by the respondents, who gained new knowledge in the seminars and trainings (average profit of those, who obtained knowledge in the seminars, without a

support is LTL 21237.69). The highest profits were obtained by the respondents claiming that they have not gained any new knowledge during the seminars, their profits exceeded the average profits obtained by all respondents more than 2.5 times excluding support – LTL 444457.14).

The difference of the profits between those participating in the seminars and those not participating, is huge. Those participating in the seminars obtained 6 times larger profits than those, who did not. Due to this reason it is possible to state that the farmers taking advantage of the support for knowledge spread obtain better results. However it should be noted that knowledge spread could be more effective. This is proved by the fact that those, who have not gained any new knowledge, reached more than 2 times better results of profit without a support than those, who have gained new knowledge. It could be assumed that lecturers of the seminars and training consultants are directed towards average level of knowledge, therefore some persons appear

with deeper knowledge than during free trainings and seminars (about 18 percent of all taking part in the seminars and trainings). Having deeper knowledge they reach better results, but do not get any benefit from free seminars. Seminars should be differentiated according to the levels, since in the future by expansion of supply of free seminars and trainings, increasingly bigger part of the farmers in the supported seminars will not obtain any new knowledge.

Knowledge benefit is additionally verified, after classification of data of respondents having revealed their profit (114 respondents) into 2 groups: not lack of knowledge (15 respondents) and lack of knowledge (99 respondents) about the business of agriculture. The responses of all respondents have not changed, i.e., 13 percent of them have claimed that they do not lack knowledge about agricultural business. Different results of average profit have been obtained in the groups according to agriculture demand.



Source: created by author

Figure 1. Influence of knowledge in agricultural business on profit results

In comparison to average profit obtained by all farmers without a support, less profit, i.e. 10 percent of profit has been gained by those who lacked knowledge about agricultural business (average profit without any support of farmers who lack knowledge was LTL 14849.37). The reverse situation was among the farmers who do not lack knowledge about agricultural business. Total average profit has been exceeded by 66 percent and their own average profit without any support amounted to LTL 27440. Thus evaluating of the influence of knowledge about agricultural business on the profit, it may be claimed that knowledge sufficiency increases profits. Furthermore, it may be assumed, that farmers rather exactly have evaluated their knowledge baggage. Though 13 percent of respondents have indicated that they do not lack any knowledge, the better could be overestimate by them as the results show that they also receive bigger profit than those who lack knowledge.

With an increase of support for knowledge spread, farmers' knowledge also increases. Therefore the doubts may occur whether the efficiency of support for knowledge spread will remain so high in future, i.e., while 9 of 10 farmers lack knowledge, the effect of knowledge spread on

the profit is so significant. However, it may decrease when a ratio is changed (when only 1 of 10 respondents will lack knowledge). In such a case the threat would appear that only 10 percent would use the support of knowledge spread. Then its efficiency would decrease accordingly. However, knowledge constantly gets obsolete and learning is a continuous process. This is the reason why the demand of farmers for new knowledge should always remain actual.

On the basis of the two groups described above (group of respondents, who lack knowledge about agricultural business, and the other group, of those who do not lack any knowledge about this business) the evaluation of seminars and trainings by the respondents was compared. Whether the lack of knowledge exists or not, the same part – 10 percent of respondents have not obtained any new knowledge during seminars. This is due to the fact that they have sufficient knowledge, or at least more than others, on the subject of the seminar they participated in. 47 percent of respondents have not taken part in the seminars/trainings though they lack knowledge, and 31 percent of respondents, who do not lack it. Farmers' participation in the seminars has some influence on sufficiency of their knowledge, since farmers

who do not lack knowledge in agricultural business more often take part in seminars than those, who lack knowledge about agricultural business.

Assessing the opinion of the farmers who have obtained knowledge during the seminars (98 respondents), we can see that even 83 percent (81 respondents) of this group claim that they still lack knowledge, and only 17 percent (17 respondents) state that they have enough knowledge. This proves that the participation in the seminars usually only deepens the knowledge. Upon deepening their knowledge in the seminars and trainings, farmers may find extra demand of the knowledge. With the changes in technologies, knowledge demand is felt also by those, who recently had sufficient knowledge about agricultural business. Hence, after evaluation of research results the assumption, that the influence of knowledge spread on the results of farmers will remain as well as the benefit of support for knowledge spread to farmers' profits, may be proved.

## Conclusions

Farmers' results development is closely connected with their knowledge. Farmers who have more knowledge achieve better results than those who lack knowledge. The only issue is under discussion, i.e., whether the state should take care of people's knowledge or leave it for self-education.

It may be said that farmers, who take advantage of the support for knowledge spread, reach better results. The least average profit was received by those, who did not take part in the seminars nor trainings, their total average profit amounted only to 1/4 of average profit gained by all respondents.

It may be assumed that lecturers of seminars and training consultants are directed towards average knowledge level, therefore some persons appear having deeper knowledge than provided during free of charge seminars and trainings. Possessing deeper knowledge they reach better results, but do not have any benefit of free seminars. Therefore it may be said that the possibilities of farmer's knowledge spread improvement is not fully used. Seminars should be differentiated according to the levels. Since in future a considerable part of the farmers may not obtain any new knowledge in the supported seminars.

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## Valstybės parama ūkininkų žinių sklaidai ir jos tobulinimas

Santrauka

Pasaulyje ir Lietuvoje vertinant ekonomikos augimo veiksnius vis svarbesnė vieta užima žinios. Žiniomis grįstos ekonomikos koncepcijos šalininkai (Burton-Jones, 1999; Romer, 1986; 1990; Soete, 2002; Trewin, 2002; Drucker, 2004; Porter, 1990; Groenwegen, 1997; Nonaka ir kiti, 2006; Kriščiūnas ir kiti, 2006; Toffler, 2001; Houghton ir kiti, 2000) atkreipia dėmesį į žinias kaip konkurencingumui didėti būtina išteklių. R. R. Rogoski (1999), J. Ridderstrale ir K. Nordstrom (2004) teigia, kad įmonės konkuruos tik dėl aukštos kvalifikacijos darbuotojų, kurių derybinės pozicijos bus geresnės už įmonių derybines pozicijas dėl jų rentumo. Vidutinės ir žemos kvalifikacijos darbuotojai patirs globalią konkurenciją ir turės ją priimti. Šios tendencijos nuolat didėja, nes žmonės vis laisviau juda visame pasaulyje (Castles, 2003; Stark, 2002; Straubhaar, 2000).

Tik tos šalys, kurios panaudamos naujausias žinias sukuria inovacinius produktus ar paslaugas, gali tikėtis didesnės kainos. Taip sukuria didesnę pridėtinę vertę. Galiausiai dėl gaunamų didesnių pajamų yra sumokami didesni mokesčiai, didėja biudžetas ir atsiranda didesnės galimybės spręsti socialinės atskirties problemas.

Anot A. Burton-Jones (1999), žinių kapitalizmas parodo, kad svarbiausią vaidmenį žmogui kaupiant kapitalą vaidina ne turimi turtai, o turimas žinių kapitalas. Dėl šių priežasčių socialinės gerovės nepadidinsime persikirstydami pinigais mokesčiais ar parama verslui. Žmogus uždirbtų daug daugiau, jei, turėdamas geresnes žinias ir aukštesnę kvalifikaciją, jomis tinkamai pasinaudotų (žinių turėjimas negarantuoja geresnio jų pritaikymo).

Matant tokia didelę žinių ir jų sklaidos naudą, kyla klausimas, ar valstybė neturėtų remti žinių sklaidą, taip užtikrindama tolesnį šalies konkurencingumo ir gerovės augimą. Šiuo atveju mokslininkai nėra vieningi.

Vieni mokslininkai (Krugman, 1986, 1994, 1996) teigia, kad rinkta puikiai išsprendžia klausimus, o kišantis tik galima pakentti savireguliacijos mechanizmui išaldant neefektyvią rinkos struktūrą.

P. Krugman (1986, 1994, 1996) taip pat kritikuoja ir „auklėjimąjį protekcionizmą“. Jis teigia kad pačios rinkos geriausiai gali spręsti, kurią inovaciją įgyvendinti komerciškai apsimoka. Kiti mokslininkai (Vilpišauskas, 2004; Soete, 2002) mano, kad valstybė turi priimti atsakomybę už žinių sklaidos užtikrinimą.

Vis tik atkreiptinas dėmesys, kad žinių sklaida yra siejama su naujausiais moksliniais tyrimais ir šių tyrimų valstybės parama. Valstybės parama moksliniams tyrimams nėra tiesioginė parama verslui ar atskirai pramonės šakai. Rinką iškreipia horizontalios paramos priemonės. Jos sietinos ir su parama žinių sklaidai. Taigi valstybės parama inovatyviems tyrimams ir žinių sklaidai nebūtinai turi būti pritaikyta tik vienam išskirtam sektoriuje, greičiau inovacija bus pritaikyta daugelyje pramonės šakų (kurių net iš anksto neįmanoma numatyti). Nors industrinėje visuomenėje retai pasitaikydavo inovacijų difuzijų atvejų, tačiau situacija pasikeitė postindustrinėje visuomenėje. Kaip pastebi P. Drucker (Drucker, 2004), jei inovacija (tranzistoriai) buvo kuriama vienai pramonei (telefonų pramonei), tai buvo anoma, kad tik šioje šakoje tik ir bus galima ją taikyti. Tačiau įvyko atvirkščiai – inovacija konkurencingiau buvo pritaikyta visai kitoje šakoje – kompiuterių pramonėje. P. Drucker (2004) pateikia ir daugiau inovacijos difuzijų pavyzdžių. Iš to galima teigti, kad parama žinių sklaidai gali būti susieta ir su horizontalia parama (neišskiriant atskirų remiamų, ūkio šakų).

Vis tik ne kiekviena valstybės parama inovacijos tyrimams ir žinių sklaidai priskirtina prie horizontalios paramos. Parama yra horizontali, jei yra vienodos galimybės inovacijų difuzijai tarp atskirų ūkių šakų.

V. Snitka (2002) pastebi, kad inovacinius tyrimus galima suskirstyti į 3 tipus, atsižvelgiant į jų potencialą kurti ekonominę vertę žinių sklaidai, kuri būtent ir sietina su inovacijos difuzijos galimybe. Baziniai tyrimai paprastai atliekami universitetuose ar kitose mokslinėse institucijose, kuriose tyrimai nėra orientuoti į komercinę veiklą. Taikomieji tyrimai yra bazinių tyrimų tęsinys, tačiau juos atliekant, jau yra numatomas tam tikras komercinis tikslas. Produkto kūrimas apima tyrimų sritį, kuri yra tiesiogiai susijusi su realaus komercinio produkto kūrimu.

Verslo rėmimo politika ir jos priemonės turi būti siejamos su šalies įmonių konkurencingumo sąlygų gerinimu bei inovacijų skatinimu. Paprastai žinios naudingos tik tos, kurios yra naujos, todėl jos sietinos su naujausiais moksliniais tyrimais. Konkurencingumas efektyviausiai didinamas, skatinant bazinius tyrimus ir iš jų gautų žinių sklaidą. Toks rėmimas yra netiesioginis verslo rėmimas, kadangi paprastai bazinius tyrimų ir žinių sklaidos funkcijas atlieka mokslo institutai. Kaip tik toks verslo rėmimas turėtų būti efektyvesnis už tiesioginę paramą.

Europos Sąjungos struktūriniai fondai remia mokymo ir konsultavimo paslaugas ūkininkams.

Kalbant atskirai apie žemės ūkio rėmimą, taip pat nesutariama ir dėl paramos ūkininkų ūkiams formos.

Lietuvoje ūkininkams teikiamos įvairios paramos formos: investicinė parama, gamybos subsidijos ir parama žinių sklaidai bei kitos. Šiame straipsnyje nagrinėjama tik viena paramos kryptis – parama žinių sklaidai. Norint įvertinti jos naudą ūkininkams, jiems buvo užduotas klausimas. Kokią naudą gavo iš mokymų ir konsultavimo paslaugų? Susumavus gautus anketinės apklausos rezultatus, nustatyta, kad seminaruose (mokymuose) įgijo naujų žinių 45 proc. respondentų (98 respondentai), 45 proc. respondentų (96 respondentai) seminaruose nedalyvavo, o likę 10 proc. respondentų (21 respondentas) seminaruose nesužinojo nieko nauja.

Toliau siekta nustatyti ryšį tarp naudojimosi parama žinių sklaidai ir respondento rezultato – gaunamo pelno. Kadangi 114 respondentų (101 respondentas neatskleidė) nurodė, kokias pajamas ir išlaidas patyrė, įvertinta, kiek iš nurodžiusių respondentų vidutiniškai pelno gaudavo pagal atskiras grupes. Proporcija, palyginus visų respondentų atsakymus su respondentų atsakymais, kurie nurodė gaunamas pajamas ir išlaidas, iš esmės nepasikeitė, t. y. 43 proc. įgijo naujų žinių, 44 proc. nedalyvavo ir 12 proc. nesužinojo nieko naujo.

Žinios nuolat sensta, be to, mokymasis yra nepertraukiamas procesas. Dėl šios priežasties ūkininkų poreikis naujoms žinioms visada turėtų išlikti, jei seminaruose ir mokymuose skleidžiamos žinios iš tiesų bus naujos. Ūkininkų dalyvavimas seminaruose turėjo įtakos jų žinių pakankamumui, nes tie, kuriems netrūko žinių apie žemės ūkio verslą, dažniau dalyvavo seminaruose, nei tie kuriems trūksta žinių apie žemės ūkio verslą. Keičiantis technologijoms, turėtų atsirasti žinių poreikis ir tiems ūkininkams, kuriems šiuo metu žinių apie žemės ūkio verslą pakanka.

[vertinus seminaruose respondentų įgijusių žinių, nuomonę (iš viso 98 respondentai), nustatyta, kad net 83 proc. respondentų (81 respondentas) vis dar trūksta žinių ir tik 17 proc. respondentų (17 respondentų) turi pakankamai žinių. Tai įrodo, kad dalyvavimas seminaruose dažniausiai tik pagilina žinias. Ūkininkams pagilinus žinias seminaruose ir mokymuose, gali atsirasti papildomas žinių poreikis. Keičiantis technologijomis, turėtų atsirasti žinių poreikis ir tiems, kuriems šiuo metu žinių apie žemės ūkio verslą pakako. Taigi, įvertinus tyrimo rezultatus, galima patvirtinti prielaidą, kad žinių sklaidos įtaka ūkininkų rezultatams išliks, kartu išliks ir paramos žinių sklaidai nauda ūkininkų pelnui. Todėl vertėtų didinti paramos žinių sklaidai mastą pasitelkiant kitas paramos priemones.

Pelno skirtumas tarp tų asmenų, kurie dalyvauja seminaruose, ir tarp tų, kurie nedalyvauja juose, yra didelis. Tie asmenys, kurie dalyvavo seminaruose, gavo 6 kartus didesnę pelną nei tie, kurie nedalyvavo. Dėl šios priežasties galima teigti, kad ūkininkai, kurie naudojami parama žinių sklaidai, pasiekia geresnių rezultatų. Tačiau reikėtų atkreipti dėmesį į tai, kad žinių sklaida galėtų būti efektyvesnė ir jos tobulinimo galimybės nėra pilnai išnaudotos. Tai įrodo tas faktas, kad tie asmenys, kurie neįgijo naujų žinių, pasiekė daugiau kaip 2 kartus geresnius pelno be paramos rezultatus už tuos, kurie įgijo naujų žinių. Galima daryti prielaidą, kad seminarų lektoriai ir mokymų konsultantai orientuojasi į vidutinį žinių lygį, todėl atsiranda ir tokių, kurių gilesnės žinios nei teikiamos nemokamų mokymų ir seminarų metu (apie 18 proc. visų dalyvaujančių seminaruose ir mokymuose). Turėdami gilesnes žinias, jie pasiekia geresnių rezultatų, tačiau iš nemokamų seminarų neturi papildomos naudos.

Siekiant didinti seminarų naudą, jie turėtų būti diferencijuojami pagal lygius, nes ateityje, plečiant nemokamų seminarų ir mokymų pasiūlą, vis didesnė dalis ūkininkų remiamuose seminaruose neįgis naujų žinių. Seminaruose platinamos žinios labiau turi remtis tik baziniais tyrimuose gautais rezultatais. Taip mažėtų tų ūkininkų kurie seminare nesužinojo nieko nauja.

Raktažodžiai: *valstybės parama verslui, žemės ūkis, žinių sklaida, žiniomis grįsta ekonomika*

The article has been reviewed.

Received in April, 2008; accepted in June, 2008.

DOI: 10.5755/j01.ee.58.3.11549