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Zbigniew Floriańczyk¹, Konrad Czapiewski,² Ewa Stawicka³

¹ IAFE – NRI, Poland
ul. Swietokryska 20, 00-002 Warsaw, Poland
florianczyk@irigz.waw.pl

² IGSO – PAS, Poland
Twarda 51/55, 00-818 Warsaw, Poland
konrad@twarda.pan.pl

³ Warsaw University of Life Sciences
e.stawicka@neostrada.pl

New paradigm of rural development – new challenges for extension ser- vices

Abstract: *The multifunctional concept became one of the most important directions of EU agriculture development. The success of multifunctional agriculture is based on growing demand for non-commodity outputs. The endogenous values of rural areas that used to be explored mainly by agriculture are turning to be a base for other economic activities. The new paradigm of rural development expands the multifunctional concept and equalises agriculture with other activities. Further it stressed that successful development of rural areas must depend on investment rather than income support and integrated cooperation of all stakeholders.*

In the article endogenous and exogenous stimulants of multifunctional rural development are discussed. The different channels of knowledge transfer to rural areas are pointed out with the special attention to advisory services. Based on field study conducted in Poland the opinion of farmers that decided to undertake non-agricultural businesses are to be analysed. Authors argue that one of the most important obstacles in broad utilisation of rural resources for non-agricultural activities is inadequate skills of farmers. That is partially an outcome of traditional agriculture orientation of extension services.

Keywords: *new paradigm of rural development, knowledge transfer, extension services*

Endogenous and exogenous factors of rural development

Development of rural areas is an outcome of wide spectrum of different factors. These factors could be divided into two major groups regarding their sensitivity on local community actions. The exogenous factors are undependable

of local community activities and characterizes its geographical and economic position, natural and political environment. On the other side are endogenous factors of development that are relatively dependent on local community activity and connected with its cumulated local population characteristics. This group of factors includes technical and social infrastructure, accessibility and quality of communication and education systems, activity and effectiveness of local governance and administration, level of development of local enterprises and socio-demographic structure of local community (Grochowski Kowalczyk 1999; Rosner 2007).

The exogenous development model stresses the power of external factors in stimulating local development. In opposite the endogenous development bases on internal socio-economic and natural resources that are mainly utilized to supply local community demands (Garofoli 1992). Along with economic aspects it takes into account broadly understood living standards of local population and alternative development models of individuals. Finally it makes preferences for investments that aim in development of knowledge and skills of local community (Keane 1990).

The existence of broad range of internal factors stimulating rural areas development was presented by different researchers in *Endogenous factors stimulating rural development* (Floriańczyk & Czapiewski 2006). Among most important the regulation and activities of local administration was stressed (Gramzow & Petrick 2006). This to create legal base for individual's activities that finally stimulate development of whole community. Similarly educational and human capital level with special attention to local leaders was closely associated with understanding the development opportunities (Czapiewski & Janc 2006). Strong relation between non-government organizations and level of human capital appeared to be critical for economic activation of local communities (Muilu & Onkalo 2006; Kovács Katona et al. 2006). On other hand correlation between level of development and local government Internet technologies utilization proves importance of efficiency in communication and information spreading (Székely & Michniak 2006). Combination of internal endowments like natural resources and cultural heritage could also be perceived as a value that stimulate regional development (Těšitel et al. 2006). Generally together with individuals related factors development level of local institutions were stressed as critical for rural areas. These ones are of great influence on administration, enterprises and economic activity of local community. Namely stimulate process of creation and implementation of strategies that increases local development capacity with the efficient utilization of external resources. Therefore optimal development strategy could be characterized as adequate to internal community assets with supportive role of external resources.

Multifunctional and endogenous factors aspects in new paradigm of rural development

The paradigm of agricultural development evaluates over time reflecting changes in role of agriculture and rural areas in socio-economic development on local communities, regional and global level. The recent most influential direction of rural development paradigm stresses the multifunctional character of rural areas and need to insure sustainability of it' development. The concept of sustainability in this respect follows the general rule of recent development not to be harmful for the future one. From the point of agriculture commodity production sustainability implies more careful utilization of farm resources and more environmental friendly techniques of production (Floriańczyk 2008). Less intensive production in case of conventional agriculture negatively affects farmer's incomes. One of the solutions to reduce this negative effect is connected with the concept of multifunctional rural development (Multifunctionality and rural development..., 2001).

Table 1. Multifunctional agriculture output

Multifunctional agriculture:		
Deepening of output	Broadening of output	Regrounding of resources
Organic farming	Rural tourism	Cost production reduction
High value added production	New on-farm activities	Off-farm incomes
Regional products	Nature and landscape management	
Short supply of chain		

Based on: Jan Douwe van der Ploeg, Dirk Roep, Multifunctional and rural development: the actual situation in Europe in Multifunctional Agriculture. A new Paradigm for European Agriculture and rural Development, Ashgate, England, 2003, Figure 3.3 p. 45

The multiple outputs of farm and expansion of non-agricultural functions of rural areas allows for more efficient exploitation of the rural areas potentialities. Combination on-farm and off-farm activities improve incomes of farms and support their expansion development. Success of the farm is therefore associated with reallocation of it' resources in innovative view to other economic activities (Huylenbroeck 2003).

The idea of innovative application of farm resources is in accordance with recommended by OECD "bottom-up" approach to increase competitiveness of local communities and regions (Table 2). This approach differs from former "top-down" with strengthening the role of investment and diminishing role of direct support to stimulate development. Similarly to multifunctional this new paradigm of rural development bases on exploitation of endogenous potentialities with expert knowledge. New paradigm directly recommends equal treatments of rural activities and therefore the equal access to support them.

Former dominative role of central administration and farmers in directing regional development are to be distributed among all rural development stakeholders (Ray, 1997 OECD 2006).

Table 2. New paradigm of Rural Development

	Old approach	New approach
Objectives	Equalisation, farm income, farm competitiveness	Competitiveness of rural areas, valorisation of local assets, exploitation of unused resources
Policy orientation	Sector	Territorial
Key target sector	Agriculture	Various sectors of rural economies
Main tools	Subsidies	Investments
Key actors	National governments, farmers	All levels of government (supranational, national, regional and local), various local stakeholders (public, private, NGOs)

Source: OECD 2006

In this light successful process of rural development requires shifting from sector orientated to integrated economies branches strategies. This implies involvement of different groups of local communities to coordinate sectors, social, environment and administration related development actions (Seibert 2006). This process is among most difficult ones while integrates wide range of economic and social issues that are conditioned by local and regional environment. Therefore rural development can be recognised as combination of different – community, business and administration – level sub actions (Strahl 2006). In this process balance between public - private and different level of governance actions is critical one. Other words level of accomplice with these rules measures harmony between desired development direction with the local special environment and community preferences (OECD 2006). Complex nature of new paradigm rural development necessitates combination of different types of knowledge. It includes management knowledge that is supported by local government authorities, local knowledge formed by community and expert's knowledge that is mainly provided by NGO's and external experts.

Rural knowledge transfer models and advisory services in Poland

Traditionally understand knowledge transfer to rural areas is concerned with modern agricultural technologies. Particularly induced innovation model of agriculture development links technical changes with agriculture progress (Hayami & Ruttan 2006). In this model progress is in need to overcome constrains on production expansion connected with scare supply of land and labour. Induced innovation model underlines role of scientist and public institutions in supporting agriculture development. Following the new paradigm of rural

development the induced innovation development model can be extended to cover multi sector concept of rural areas. Therefore in the article knowledge transfer refers to knowledge of technology to agricultural and non agricultural activities.

Authors propose three knowledge transfer models that are to be distinguished regarding the path of information flow: peer to peer, global information and direct from supplier. In peer to peer model farmer possess the amount of knowledge directly from the adviser or another farmer that is sufficient to implement new technology on its own. Model of global information bases on general information of new technology supplied by public access media (Floriańczyk Czapiewski & Stawicka 2007). In the second step detailed information are to be collected from the adviser or another farmer. Similarly to the peer to peer model the last stage is implementation of changes. The model direct from supplier omits the stage of gathering the information from advisor or other farmers. General information from public sources stimulates farmers to contact directly with supplier of technology in order to implement it. In this model the majority of farms is already technologically advanced and operates in relatively big scale to become a direct partner for technology supplier. From the above listed extension services are directly involved in the of knowledge transfer in peer to peer and global information models. Contrary the transfer in direct from supplier model these ones are common for small and medium size farms.

The economy transformation process created new challenges on agricultural and extension services in Central and Eastern European countries (Turski 2008). The new phenomena as fall of private farms incomes accompanied and employment opportunities outside of agriculture indicated weaknesses of rural areas to operate under market economies system (Zegar & Floriańczyk 2004). Extension services officially responsible for training, advisory and agricultural consultancy were enforced to restructure their organisation structures and scope of operation. In the two levels structure Agricultural Advisory Centre (AAC) operates on national level and reports to the Ministry of Agriculture and Rural Development. The second level covers regional advisory centres that are part of voivodship administration. The AAC plays the leading role in extension services system while elaborating and providing knowledge to be transferred to rural areas together with unified operational schemes for regional centres (Fadecka-Galicz & Witośław 2007). The knowledge transferred by AAC aims at improvement of agricultural performance (competitiveness and incomes of farms) and at supporting broadly understood rural sustainable development. In this light the extension services system in Poland is potentially in accordance with new paradigm of rural development while covering activities beyond agricultural production. However the preferences for “from up to down” information could negatively affect the balance between the desired by rural population actions. Similarly it may be an obstacle in utilisation of endogenous development factors that are locally specific.

Rural areas knowledge demand and up taking of non-agri-

The number of persons working on farms in Poland represents 15% of total working population. That relatively high number as compare with the other developed countries suggests inefficiency in labour utilization. Among main constraints for rapid changes in employment structures are low educational level of farming population. From the 2.2 millions of farming population only 1% is of tertiary education or post-secondary with agriculture specialization. Other 15% has secondary education while 26% is of vocational training. Summing up, more than half have non agricultural education. The generally low educational potential of farming populations indicates that the “direct from suppliers” model of knowledge transfer is limited to narrow population. On the other hand the models with advisory participation are of greater importance.

Field research indicates the strong correlation of farmer’s educational level and utilization of advisory services²⁰. From the total number of responders 30% of them declared that used assistance of extension services in farm management. In that group most frequently users of extension services are farmers between 40 – 50 years olds. Following them is group of younger farmers of 30 – 40 years old. Farmers of other ages are seldom looking for support from extension services.

Concerning the level of education the differences between higher and secondary educated farmers are insignificant. However in these two groups farmers were twice as much often declared their contacts with extension services than farmers with primary education (Table 3).

Table 3. Farmer collaboration with extension services

Educational level	Collaboration with extension services		Population
	YES	NO	
High	38%	62%	29
Post-secondary	36%	64%	290
vocational training	30%	70%	443
Primary	18%	82%	169
TOTAL	30%	70%	93

Source: own calculations based on Bański (2005)

Correlation between frequency of extension services utilisation and level of education is to be observed regarding the level of farmer household’s standards and perceiving the positive outcomes of accession to the EU (Bański 2005). Within the investigated group about 30% of farmers declare frequent collaboration with extension services. On the other hand the share of non-farmer rural population that contacts with extension services does not exceed 10%. That reflects either the rural population opinion of agricultural speciality of extension services or improper use of knowledge transfer models.

20 IGSO PAS survey on 1000 group of farmers realized in 2002.

Results of investigation conducted on micro businesses support these hypotheses²¹. Research on 3200 non-agricultural on farm activities in Poland among others was concerned the motives and the role of extension services in establishing micro businesses. Prevailing number of responders pointed out their willingness to improve living standard as a main driver of starting non-agricultural activity on farm. The lack or low profitability of traditional farming activity was the reason for exploring other than agriculture production opportunities for one quarter of responders. Among other, however of lower significance was intention to provide work places for family members, insufficient utilisation of farm resources and family tradition to provide services for local community (Przykłady przedsięwzięć..., 2001; Przedsiębiorczość wiejska 2006).

The knowledge necessary for starting new activities in most cases was gathered through the “direct from supplier” model. The initiative was inspired by other farmers or information taken from mass media and developed by contacting with suppliers or by its own. Only less than 1% of investigated farms declared consultancy with the extension services to gather information concerned with intended non-agricultural activity.

From the total group of investigated farmers 32% stated that has not received any outside information to start new business. This supports the hypothesis of high endogenous potential of rural population to broad the rural activities. Parallel it calls for intensification of extension services activities toward multifunctional rural areas concept of development.

Non satisfactory performance of extension services in the light of new paradigm of rural development is common opinion of farming population. They complained about knowledge gap and lack of information sources concerned with possibilities to obtain capital support – 79% and marketing skills – 56%. One thirty of responders directly pointed demand for information whether half of them for no and agricultural activities.

The extensions services structure of employment indicates graduate changes toward supporting broadly understand development of rural areas. In the beginning of 1990’s most of the extension services advisors were experts on agricultural production. Departments of agricultural technology together with business economics accumulated nearly $\frac{3}{4}$ of total 4000 advisors (Table 4).

In 2007 these two departments accounted for 60% of total advisors. This change was made in favour to establishing rural development department directly responsible for supporting non-farming rural initiatives. Similarly ecological production and nature protection gained greater attention of extension services. These changes could be summarised as being in accordance with supporting endogenous factors of rural development.

21 Data taken from Agrinpol Project database for years 1999-2002 and 2004-2006.

Table 4. Structure of extension services employment in Poland

Department:	1994	2007
Agriculture technology production	61%	46%
Business economics	13%	15%
Rural household	15%	10%
Advisory and educational methods	5%	7%
Rural development	—	7%
Ecology and natural environment	2%	8%
Information and communication	4%	7%

Source: Drygas & Wieteska 1996, Pabich 2007

Conclusions

Among most important and so far under explored factors of rural areas are social and natural values. Rural society development potential reflects individual's knowledge and skills as well as system values. The last ones are forming added values while cumulating individual's values with the use of place specific networks. Such networks facilitate information and support flow including originated from external resources.

The new paradigm that is taken into account variety of rural areas endowments should be recognised as a step forward in sustainable rural development. From the economic point of view advocates for more efficient allocation of resources traditionally devoted to agriculture activities. This is of great importance in case of rural areas in Central and Eastern European Countries. In some of them central planned economy wasn't able to provide optimal environment for rural areas development while focusing on agricultural productions. This resulted in non-optimal social capital utilisation revealed during transformation process.

New possibilities created by implementing market economy and accession to the EU allows for better exploration of rural values. However the transfer of external knowledge and resources are of critical role in stimulating development processes.

Extension services are traditionally recognised as a knowledge provider in rural areas and could play an important part in stimulation rural development. This however requires reorientation of their activities toward multifunctional character of rural areas. Investigation of extension services development in Poland suggests ongoing positive changes. These ones however are relatively slow and of not innovative character. From the knowledge transformation models perspective advisors are important source of general information while the expert knowledge is provided directly to farmers. Therefore most promising development of extension services should be based on further widening instead of deepening rural population knowledge.

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