## CONTRIBUTION OF EU FUNDS TO THE DEVELOPMENT OF HUMAN CAPITAL IN RURAL AREAS

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#### Abstract

The paper aims to explore at which extent the investments in human capital in rural areas could contribute to rural development and competitiveness. European Union is investing substantial resources for faster growth and competitiveness, addressing the faster development needs of the regions lagging development under cohesion policy. The EU cohesion policy emphasizes the role of the urban areas to reduce disparities in economic development, employment and opportunities between the most advanced and the most disadvantaged areas of the Union, while the rural development pillar under Common Agricultural Policy (CAP) focuses on promoting competitiveness and developed 1ment of rural areas. Since the economic and social patterns, as well as the development indicators of the rural areas deviate very much from the average EU values (European Commission, 2014a), the goal of reducing the regional development disparities cannot be achieved unless urban and rural development needs are considered together with the cohesion policy. The paper is based on the assumptions that: (a) investments in human capital are considered drivers underpinning competitiveness and development in both urban and rural areas (Marinas L., 2015) and (b) under scarcity of available local resources, the effective EU funds under cohesion and rural development policies could significantly complement local investments to human capital development in rural areas. The paper also aims to assess at which extent the EU funds within 2007-2013 programming period have contributed to rural human capital development.

### Keywords

human capital, European Social Fund, rural development European Agricultural Fund for Rural Development, Romanian rural development

#### Introduction

European Union is investing substantial resources for faster growth and competitiveness, addressing the faster development needs of the regions lagging development under cohesion policy. The 2007-2013 and 2014-2020 EU cohesion policy design emphasizes the role of the urban areas (Marinas L, 2015; Percoco M, Gagliardi L, 2015) to reduce disparities in economic development, employment and opportunities between the most advanced and the most disadvantaged areas of the Union (Crescenzi R, Giua M, 2014) with limited consideration to rural areas of which specific needs are addresses by the rural development pillar under Common Agricultural Policy (CAP). Since the economic/social patterns of the rural areas, as well as related indicators, deviate very much from the average EU values (European Commission, 2014a; European Commission, 2014b), the aim of reducing the development disparities cannot be achieved unless urban and rural development needs are

considered together and integrated into an overarching comprehensive strategic framework so that to ensure the consistency between rural development policy and the cohesion policy. At present, global digitalized economy, as well as global challenges, are transforming labor markets (Bollman, 1999, OECD, 2007, Marinas L., Prioteasa E, 2015; Marinas L, 2015): new occupations are developed, job content changes, new competences and new skills are needed. With this view, investments in human capital development are needed to efficiently address the changing requirements of the labor markets. Based on the assumption that the quality of the labor force has a major effect on productivity and competitiveness and so on the economic development (Marinas L, Prioteasa E, 2015; Marinas L, 2015), investments in human capital should-become effective tools to support competitiveness and development goals under both the cohesion and the rural development policies In new member states, rural areas still remain largely dependent on agriculture and related activities as compared to EU 15 and the average figures for EU-27 or EU-28. Romania is a particular case since agriculture represents almost 30% of the total employment (Eurostat, 2015), 6 times higher than average figures for EU-28. Rural areas in Romania are subject to economic deprivation and severe educational backwardness (UNICEF, 2014), limiting development and quality of human capital and maintaining increased dependency of the rural economies to agriculture. This pattern or rural economy in Romania differs significantly of the EU trends and rural development models: during the last 2 decades, European Union experienced a continuous decline of the contribution of the agriculture and primary sector (prevalent in most rural economies) to Gross Added Value (GVA) and to employment in favor of industry and services (European Commission, 2014a).

The paper aims to explore at which extent the EU funds could contribute to human capital development in support for rural development, with a particular view to Romania. The EU funds, as main investment tools, should significantly contribute to the improvement of human capital in rural areas, in Romania. Two EU funded programs within 2007-2013 programming period will be assessed in relation with their proposed targets and contribution to the development of human capital in rural areas: Human Resource Development OP (HRD OP) and National Plan for Rural Development (NPRD), respectively.

The paper is based on the assumptions that: (a) investments in human capital are considered as key drivers underpinning competitiveness and development in both urban and rural areas and (b) under scarcity of available local resources, the EU funds significantly complement local efforts and contribute to human capital development in rural areas. The paper also aims to assess at which extent the EU funds available within 2007- 2013 programming period under the cohesion and rural development policies have effectively contributed to human capital development in rural areas in Romania and how these investments have benefited to rural development. The methodology consists in literature survey, data collection and interpretation comparative analysis, survey and analysis of official programming documents and reports to estimate impact and assess effectiveness of EU funds contribution to the human capital development in rural areas.

#### 1. Reasons to invest in human capital to support development of rural areas

Economic development of any region, the economic development of rural areas included, is dependent on its capacity to support learning and innovation, which are also key processes for enhanced competitiveness and employment. To this end, investments in human capital in both urban and rural areas become essential: it is the human capital which may generate innovation and it is also the human capital which is responsible for assimilating the innovation produced elsewhere and for integrating new methods in the economic activities and business management to foster sustainable development in rural areas (Marinas L, 2015).

In terms of knowledge creation and transfer, rural areas (in Romania as well as it is the case of the European Union) seem to be disadvantaged: the knowledge is mostly created in universities and other research facilities which are mostly located in urban areas, but the effective use in rural based activities of the knowledge and innovation created elsewhere (in urban areas) remain a key element for fostering rural economic and social development and competitiveness (Marinas L, 2015). To this end, the challenge in the rural regions is to improve educational attainment; in case of less developed countries it becomes also important "to favor youngsters' ongoing enrolment in the education system until they join the labor market and to facilitate their access to middle and higher education and a high level of vocational training and qualifications" (Regidor J, in Innovative Rural Regions - Conference Report, OECD 2007, also quoted in Marinas L, Prioteasa E., 2015). In agriculture dependent rural economies, such as Romania, two negative trends may be observed: on the one hand, there are very limited employment opportunities for highly educated people, in particular youngsters, on the other hand, the educational attainment is very low due to the scarcity of resources and relatively high costs of higher education which cannot be undertaken by rural population. Concerted measures are needed to support both rural economy diversification, with positive effect on employment opportunities, and increasing educational attainment and qualification of rural workforce stock throughout lifelong learning. These should provide incentives for policymakers to support, through various local and/or EU funded programs and tools, access to quality education and lifelong learning for rural population, based on the assumption that only highly educated people could make use of relevant knowledge innovation, new technologies and new business management tools to support efficiency, competitiveness and sustainable development (Marinaș L, Prioteasa E, 2015, Marinas L, 2015) of rural areas. Education and training processes remain thus, the most important tool to increase the competitiveness of the human capital in support for development in rural areas. Main actions to be undertaken refer to: (a) improving the educational attainment and participation through wider access to quality education, in particular wider access to upper secondary and university education; (b) improving the relevance of learning, in particular adult learning, as well as initial and continuous vocational training, to better address challenges and needs of rural development..

Technological change is very much influencing economic development and competitiveness at global scale, including the European Union case. Technology is bringing unprecedented changes in rural areas; transportation technology, geographical information systems (GIS), computational technology and information and communications technology (ICT) are the main categories of technology affecting the rural development (OECD, 2007, Marinas L, 2015). In rural areas, the use of ICT may be more difficult since "high cost of infrastructure deployment leads to weak demand for ICT services, which further increases the cost of infrastructure and discourages rural businesses, which leads again to lower and declining population" (OECD, Innovative Rural Regions –Conference Report, 2007). Thus, measures undertaken should focus on making ICT available to rural population and rural business through both infrastructure development measures and educational programs. In a digitalized global economy, the most effective human capital related measures to reduce the informational gap between urban and rural areas should refer to the development of rural digital literacy programs equip rural population with digital competences, in particular the development of specific education and training programs.

Existing studies revealed, since mid'90s (OECD, 2007), that high-education rural regions experienced higher employment growth (or lower employment losses) than low-education rural regions. Consequently, local economic development strategies in rural areas should

focus on more than human capital development to stimulate local job and growth (Bollman, 1999).

# 2. Considerations regarding the EU financial support for the development of human capital in rural areas

In the European Union, there are two main policies supporting development goals: the cohesion policy and the second pillar "rural development" under Common Agriculture Policy (CAP). Important funding for human capital development goals development and related priorities is allocated under both EU policies, based on the assumption that the human capital is a valuable territorial asset for the development of any region or community (Marinas L, Prioteasa E, 2015, Marinas L, 2015), including rural areas. The territorial drivers for development are different under the 2007-2013 and 2014-2020 EU cohesion and rural development policies: the cohesion policy focuses on the role urban areas in support for economic development and growth (Crescenzi R, Giua M, 2014) with limited consideration to rural areas of which specific needs are addressed by the rural development policy under CAP. Despite their different territorial drivers, under both the cohesion policy and the common agriculture policy (CAP), investments in human capital are considered major contributors to local development, based on the assumption that "the quality of the labor force has a major effect on productivity and so on economic development. High levels of human capital mean that workers are more efficient and more innovative. In addition, high levels of human capital can increase the flexibility and adaptability of the labor force" (European Commission, 2014b). Under this circumstance, investments in human capital could contribute to make easier the shift of the rural economy to the service based economy and to better exploit new opportunities as the market evolves (OECD, 2007; European Commission 2014a; European Commission, 2014b, Marinas L, 2015). The EU cohesion policy is designed as "a set of specific funds and Community initiatives redistributing financial resources partly collected from the member states and partly gained from the Union's so-called traditional own resources through the EU budget" (Eiselt, 2006) of which instruments basically consisted in financial transfers (trough EU budget) from more affluent member states to economically weaker members states to reduce disparities in economic development, employment and opportunities between the most advanced and the most disadvantaged areas of the Union (Marinas L, Prioteasa E, 2015; Marinas L, Priotesa E, 2016). To avoid increased intraregional disparities between urban and rural areas, the rural development pillar under CAP is addressing the particular development needs of rural areas, so that to compensate the adverse effects of the urban centered development strategy developed under the EU cohesion policy. Thus, starting with 1990, the rural development policy was extended to nonagricultural, territorially oriented, activities, which were clearly linked to the economic and social development of rural areas and enabled farmers to diversify into other activities; at present, the rural development policy is aiming to ensure economic and social progress in rural areas while providing support for the supply of reasonably-priced food to EU consumers (European Commission 2014b, Marinas L, 2015)

The assumption that human capital is a major contributor to development, underpinning both the EU cohesion and rural development policies, is supported by various studies (OECD, 2007; Bollman, 1999, European Commission, 2014a; Crezcenzi R, Giua M, 2014; Barefield A, 2009). Under cohesion policy the human capital development objective is supported by the European Social Fund (ESF) interventions. The ESF remains a "soft fund", used for human resources development, training, educational activities and social inclusion (Marinas L, Prioteasa E, 2015). Empirical evidences and studies provide grounds for increasing investments in human capital, in particular through ESF funded programs; this is translated

into the EU conditionality for 2014-2020 that ESF funded programs should account for at least 20% of the total structural funds allocations. Consequently, ESF remains the European Union's main financial instrument, aiming at improving human capital through better education and training, better employment, more effective social inclusion measures and better governance (Marinas L, Prioteasa E, 2015). ESF interventions are addressing also the specific human capital formation and development needs both in urban and in rural areas, in particular related to: (a) increased access to quality education and higher educational attainment for students from rural areas, (b) acquisition of key competences and provision of relevant skills and knowledge for rural population for qualifications related to nonagricultural activities, (c) job creation in rural areas in non-agricultural industries, (d) social inclusion and support for disadvantaged population resident in rural areas. Under the rural development pillar of CAP, the human capital development is supported by European Agricultural Fund for Rural Development (EAFRD) interventions. EAFRD human capital development related interventions are spatially targeted (Crescenzi R, Giua M, 2014, Marinas L, 2015) to rural areas and rural population, focusing on the provision of the specific skills and competences required for the management and development of all business (both agriculture based and non-agricultural activities) and for promoting sustainable development in rural areas.

As a trend, in European Union, the employment in agriculture constantly declined, as productivity increased; the decrease in the number of jobs in agriculture and industry declined and consequently more jobs were created in services (European Commission, 2014a): mobility of labor force from agriculture to services or industry often requires to the rural population (previously employed in agriculture and related industries) for the acquisition of new set of skills. Consequently, the provision of training to rural population who want to find a job in a different sector (industry or services) can support this change. To this end, both ESF (under cohesion policy) and EARDF (under rural development policy as 2<sup>nd</sup> pillar of CAP) may provide financial resources and deliver project for training and retraining the rural population for qualifications in industry and services for sustainable insertion in the labor market.

Entrepreneurship represents an effective tool for the creation and support of rural businesses; the creation of business in agriculture is supported by EAFRD, while entrepreneurship in non-agricultural activities is supported by both ESF and EAFRD. Variations in entrepreneurship (supported from EU funds under cohesion policy and rural development policy), as measured, across the 125 regions are substantial: the regions with the lowest scores are in Romania, Hungary and Greece (European Commission, 2014b); the large share of rural population and rural demography (accelerated aging population in rural areas) in Romania is the main explanation for this poor performance.

# 3. EU funds contribution to human capital development in rural areas in Romania. Main challenges and outcomes

The rural population in Romania represents 45% (NIS, 2014) of the total population and agriculture, main industry in the rural areas, contributes by 6,6% to the Gross Added Value(GVA) (European Commission, 2014), more than 3 times higher than EU average (agriculture contributes, in average, by 1.7% to the EU GVA). Agriculture in Romania contributed by 5.40% (an increase by 1.5 pp as compared to previous year) to the GDP in 2013 (an increase of 33pp as compared to previous year) and by 4,73% to the GDP in 2014 (National Institute for Statistics, 2015). Even if workforce recorded in the Romanian agriculture has a high share, qualified agricultural workforce has a low share. In this regard Romanian agricultural legislation has not yet introduced professional certificate in farm

business nor has established (Aceleanu&all, 2013). The employment development of the nonagricultural sector within the rural areas in Romania is much lower than in the EU developed countries which leads to increased dependence of rural population income on the agriculture of subsistence, and a low degree of attraction of the rural areas because of lack of activities which might generate increased incomes (Burja&Burja, 2014). Agriculture, as main sector in rural areas, is employing for about 30% of the total employment in 2012 and 2013; this makes Romania a particular case since the average employment in agriculture in EU-28 is 6 times lower (European Commission, 2014a, European Commission, 2015, online at http://ec.europa.eu/esf/main.isp?catId=443&langId=en). At the end of second guarter of 2015, in Romania, employment in agriculture slowly decreased but it still represented over 27% of total employment (National Institute for Statistics, 2015), still about 6 time higher as compared to EU-28 average (declining form 6.25 in 2004 to 5.1% in 2013) (Eurostat, 2014). The employment in agriculture remained almost constant in Romania, around 30% of the total employment since 2006 unlike the EU declining trend. The comparison of the employment in agriculture to the contribution of this sector to the GDP and GVA in Romania, as compared to the European Union, indicates that the productivity in agriculture in Romania remains the lowest in EU, representing 30% of EU average levels which affects the efficient valorization of the existing potential in the sector. One significant weakness (Rural Development Plan 2014 -2020) refers to the dominance of the subsistence and semisubsistence farms (93% of holdings managing 30% of the agricultural areas) which are poorly technically equipped and lacking market orientation. The employment development of the non-agricultural sector within the rural areas in Romania is much lower than in the EU developed countries which leads to increased dependence of rural population income on the agriculture of subsistence, and a low degree of attraction of the rural areas because of lack of activities which might generate increased incomes (Burja&Burja, 2014).

The low quality of the human capital remains major concern challenging the rural development in Romania (Dachin A, 2008; Mursa G, Paraschiv R. 2008); main influencing factors of the quality of the workforce in rural areas consist of: (a) demographic trends, in particular aging of the population (Dachin, 2008), (b) migration flows, either to urban areas, either to more developed EU Members States (Dachin, 2008), (c) educational disadvantage, in particular participation in education and educational attainment are significantly lower in rural areas as compared to urban areas (Mursa G, Parachiv R, 2008; UNICEF, 2014). The aging of the population is a trend significantly affecting the structure of rural employment and rural population with adverse effect on productivity and rural economy diversification. Low educational attainment has immediate adverse effects on the rural development: almost 60% of the business owners in rural areas has, at primary or secondary education (Mursa G, Paraschiv R. 2008) which explains the main features of economic activities in rural areas, in particular, the dominance of agriculture, low productivity, poor management and low economic efficiency, low concern for environment friendly technologies and sustainability. Educational attainment in rural areas is significantly impacting on rural development and competitiveness considering that: (a) sustainable and competitive agriculture in rural areas is dependent on the availability, in rural areas, of specific competences and knowledge and (b) the diversification of the rural economy is highly dependent on rural population educational attainment and continuous acquisition of relevant competences and skills through participation in lifelong learning.- Statistics indicate that educational attainment remains a key challenge for rural development and competitiveness in Romania and should be considered a key area of investments under both rural development and cohesion policies. Available data indicate that more than 71% of the poor population in Romania lives in rural areas (UNICEF, 2014); this factor is explaining the educational attainment in rural areas

which remains very low. Poor economic environment, poverty and high costs associated to upper levels of education are limiting the access of rural population to upper to upper educational attainment, in particular upper secondary and tertiary education. Data published by National Institute for Statistics in 2014 (also data presented in Angheluta & Ciobotaru V, 2014) indicates that, in 2012, about 68% of the rural population had not completed only lower secondary education and did not graduated upper secondary education as compared to 33% rate for urban areas. The gap existing between urban and rural areas in terms of educational attainment is significant - in 2011-2012, only around 27% of the rural population had completed at least upper secondary education as compared to 63% in urban areas. The incidence of illiteracy is 2.5-3 times higher in rural areas as compared to urban areas (about 2% of the rural population had no schooling as compared to 0.5-0.71% in urban areas) (National Institute for Statistics 2014 and Angheluta & Ciobotaru V, 2014). Early school leaving is another explaining factor of the low quality of human capital. Early school leaving is also influencing factor limiting access and opportunities to complete upper levels of formal education. In Romania, the educational attainment is significantly influenced by the high incidence of early school leaving; early school leaving is also limiting the rural population possibilities for completing upper secondary and tertiary education. Early school leaving (share of 18-24 age group population leaving school before completing upper secondary education, not in further education or training) was of 17.5% in Romania as compared to EU -27 average of 13.5% in 2011 (Burja&Burja, 2011, UNICEF, 2014), while in 2014 the early school leaving reached and 18.1% in Romania, as compared to an average rate of 12.1% in EU-28 (Eurostat, 2015). Romania is the 5th worst performing with respect of early school leaving in EU-28. The ascendant trend of early school leaving in Romania after 2010-2011 and its higher incidence in rural areas is a matter of great concern since it limits the qualification possibilities of rural population for non-agricultural business and is very much challenging the aim for shifting the pattern of rural economy form agriculture based economy to an increasing contribution of services and industry to local GDP. Since most early school leavers come from rural areas due to poor economic conditions, we could already conclude that the poor quality of the human capital, in particular poor educational attainment of rural population, remains the main explaining variable affecting the achievement of rural development goals in Romania. The target to increase the educational attainment, in particular tertiary educational attainment, as a tool for supporting economic development of both urban and rural areas, is very much challenged since official data are positioning Romania as the second worst performing EU member state in terms of tertiary educational attainment of the population in 30-34 age group: in 2014, the share of the population with tertiary educational attainment in 30-34 age group was 24.9% as compared to 37.9% the EU-28 average indicator (Eurostat, 2015). The diversification of rural economies and consequently, the rural development are also dependent on increasing the number of graduates of agricultural and veterinary medicine upper secondary and university education. This scenario is less probable to materialize if the decrease by 19% of the graduates of agriculture and veterinary upper secondary education within 2006-2011 is taken into consideration. The share of university graduates in agriculture and veterinary medicine in total university graduates in Romania represented 2%, close to the 1.6% average value for EU-28 (Eurostat, 2014). If the relative importance of agriculture in rural economy and low productivity in agriculture for Romania are considered, the increase of the number of graduates in university education fields relevant for rural development and efficient sustainable agriculture should be considered a priority to address the objective of quality human capital for rural areas. The aim of reducing rural areas dependency on agriculture through diversification of rural economy may be also achieved through measures

encouraging increased participation of rural population to continuous vocational training and further education and acquisition of qualifications relevant for non-agricultural industries. Official data (Eurostat, 2015) indicates that in 2011-2012, in rural areas, participation of population to lifelong learning was very low - 0.9% of the population in age group 25-64 year, 7.5 times lower than the 6.8% rate of the EU-27 average participation of rural population to lifelong learning. The motivation of students from rural areas to participate to education and for higher educational attainment remains low due to rural context (UNICEF, 2014), namely "underdeveloped economic environment, professional insertion and quasi inexistent job opportunities in rural communities". Thus, participation to secondary education, in particular upper secondary education, and to university education is very low in case of rural population, due to high costs associated to education and poverty. The quality of education in rural areas is lower as compared to urban areas since "external evaluation scores of schools in urban areas are 10.8% higher that average score of rural areas" (ARACIP Report 2012 quoted in UNICEF, 2014). Thus, rural population is facing limited opportunities for higher educational attainment and employment. This explains the existing pattern of employment in agriculture, and consequently the pattern of employment in rural economies: "agriculture attracts mainly medium and low skilled education population" (UNICEF, 2014); persistence of this pattern will significantly jeopardize the diversification and competitiveness of agriculture and consequently the competitiveness and sustainable development of rural areas.

During 2007-2013 period, both the Human Resource Development OP (HRD OP) and the National Plan for Rural Development (NPRD) have provided EU funding to the projects for the development of human capital in rural areas. NPRD allocations for Romania represented 8.4% of total EU-27 EAFRD budget, while HRD OP allocations represented 3.76% of EU-27 ESF budget (Marinas L, Prioteasa E, 2015, European Commission, 2015).

Under HRD OP, a EUR 0.2 bills ESF allocation was aimed to fund human capital development projects under priority Axis 5 "Promoting active employment measures", the key area of intervention (KAI) 5.2. "Promoting long term sustainability in rural areas for human resource development and employment". Under this KAI, since 2007 until 31st December 2014, the ESF support funded training for 165,049 persons in rural areas (HRD OP Annual Implementation Report, 2015). Specific projects under KAI 5.2 addressed the entrepreneurship and training needs of the rural population for non-agricultural occupations; for 86,624 persons employed in subsistence agriculture and 21,160 managers and employees in rural economy (HRD OP Annual Implementation Report, 2015). Additionally to this, 97,062 persons in rural areas benefit also for integrated support programs under active employment measures funded under KAI 5.1. "Promoting active employment measures", under priority axis 5 of HRD OP (KAI5.1 had a ESF allocation of EUR 0.258 bill). Another weakness of rural areas addressed by EU funded under HRD OP covered the low educational attainment and early school leaving. HRD OP funded under KAI 2.2. projects for "Preventing and reducing early school leaving" (KAI2.2 had a ESF allocation of EUR of 0.282 bill) which benefited, until 31st December 2014, 82,590 persons facing the risk of early school leaving, 3,063 early school leavers, 1,193 persons with low educational attainment (lower than primary education)and 42,600 parents of potential early school leavers (HRD OP Annual Implementation Report, 2015). Low educational attainment in rural areas is due to poor leaving conditions, lower educational backgrounds of rural population and to lower quality of education delivered in rural areas. Consequently, HRD OP funded projects under HRD OP Priority axis 1 "Education and training in support for economic growth and competitiveness" for: (a) quality assurance, respectively teacher training and support provided to school units for quality management and accreditation and (b) measures for increased access to education and acquisition of key competences for all. Consequently, by 31<sup>st</sup> December 2014, the ESF support under HRD OP may be quantified by the following indicators: 3,921 schools received support for quality assurance and accreditation, 187,650 teachers and trainers were trained. Although official reports do not provide exact breakdown by area of residence, they also contain references that most of these beneficiaries are located in rural areas; thus, HRD OP significantly contribute to reducing educational gap between rural and urban areas in Romania.

The measures under priority axis 1 of NPRD 2007-2013 aimed at further modernization of production by improving human potential, while the measures under priority axis 3 addressed the aim to improve the quality of living in rural areas, through improved access to basic services, contributing to generating new employment opportunities, particularly for young people and women, as well as facilitating the access to up-to-date information and communication technologies. Allocations for priority axis 1 was of EUR 3.2 billion (43.95% of NPRD budget), while allocations for priority axis 3 were EUR 2 billion (27.4% of NPRD allocations). Under NPRD 2007-2013, the measures funded by EAFRD aimed to improve the competences and skills for agricultural activities and related, including farm and entrepreneurial skills and management. Investments for human capital development in rural areas were funded, in particular under priority axis 1 – measures 111 "Professional training, information and knowledge transfer". The indicative allocation for improving the skills and management capacity of farmers and other persons involved in the agri-food and forestry sectors through support for vocational training and the provision of farm advisory and extension services represented only 2.8% the total allocations under NPRD. Under this measure, by 31st December 2014, there were trained 30,700 farmers, in particular young farmers and from subsistence farms (of a total target of 115,000 persons) of which 30,698 also certifies for more modern and effective farm management (NPRD Annual Report, 2015). Also, under measure 112 "Installation of young farmers" encouraged entrepreneurship in agriculture and provided support and assistance for 12,979 young farmers (against a NPRD target of 13,631 young farmers) to open and manage agricultural exploitation (NPRD Annul Report, 2015). Under measure 143 "Counseling and consultancy services for farmers", 15,715 farmers (against a target of 50,000 farmers) received counseling and expertise for sustainable farm management, of which 60% were young farmers (age group 30-39 year) with low educational attainment (over 63% of the beneficiaries had lower or upper secondary education) (NPRD Annul Report, 2015); low educational attainment and low entrepreneurial skills reduced the effectiveness of the projects funded under measure 143; the negative impact could be measured by the 50% rate of refuse of the beneficiaries to continue the farming activities after the project completion.

The demographic trends, in particular, the accelerated aging of the rural population is negatively affects the return on investing in education and training for rural population under both HRD and NPRD since the "aging population in the Romanian agriculture increases the risk not to renew the future workforce and have a low degree of openness to innovation, to requalification" (Aceleanu& all, 2013). The absorption rate for EAFRD is over 82% (end of March 2015, source: APIA, 2015). This relatively good performance of EAFRD is important, but it still gives little indication about the effectiveness of the resources spent for human capital development in rural areas. According to official data the absorption rate of EU funds under cohesion policy (for Convergence Objective), at 30th September 2015, is 52.74% (Ministry of European Funds, 2015), the lowest absorption rate in EU – 27. The absorption rate for ESF under HRD OP was, at the same date, only 33% (the worst performing OP) (Marinas L, Prioteasa E, 2015, Marinas L, Prioteasa E, 2016). This poor performance of absorbing EU funds, in particular ESF allocation, indicated inefficient use of available

funding to support the development of human capital (Marinas L, Prioteasa E, 2015, Marinas L, Prioteasa E, 2016) and rural areas, contributing, thus, to lagging development of rural areas and rural economies. Consequently the contribution of the EU funds to the development of human capital in rural areas is lower than expected. Apart of the absorption rate of EU funds, other factors should also be taken into consideration when analyzing the contribution of EU funds under cohesion and rural development policies (Marinas L, Prioteasa E, 2015, Marinas L, Prioteasa E, 2016). Annual Implementation Reports for HRD OP and NPRD are measuring progress achieved against targets, but the qualitative analysis are missing and effectiveness of EU funds for the development of human capital in rural areas is not assessed. Thus, despite good performance for teachers training, quality assurance measures in pre-university education or for reducing early school leaving, there is no breakdown by area of residence; therefore it is difficult to measure the effectiveness of ESF measures to improve educational attainment in rural areas. Also, indicators under HRD OP measuring the training and retraining of employed and job seekers provides very limited breakdown by area of residence and there is no breakdown by areas of training or sectors which makes impossible the any assessment of further contribution of ESF funding to diversification of rural economy; similar reporting pattern for active employment measures: there is no indication about industries in which job creation produces and/or unemployed persons from rural areas find employment which makes difficult any evaluation of ESF measures in support for increasing employment of rural population in service or manufacturing.

#### Conclusions

Most studies show consensus on the idea that education and human capital investments are the key drivers for sustainable economic development and growth since they have actually sustained medium term growth in the European Union while support for agriculture, rural infrastructure and support for rural business proved to be less effective. The development and competitiveness of rural areas in European Union are underpinned by the assumption that the quality of the human capital has a major effect on productivity and so on economic development; consequently, the cohesion and rural policies should invest more effectively in human capital development, in particular in rural areas, so that to support more the shift of the patterns of the rural economy to the service based economy and to better exploit new opportunities as the market evolves. Investing in human capital is a necessary condition for promoting rural development, but it is not sufficient: this measure need to be accompanied by other measures to support rural development, the human capital development cannot solely support development, but it significantly contributes to rural development (Marinas L, Prioteasa E, 2015, Marinas L, Prioteasa E, 2016). Investments in human capital in rural areas should be consisted with and complemented by, under various EU policies, investments in rural infrastructure, in particular increased access to ICT and new technologies, so that to provide grounds for more effective contribution of EU funds to rural development. To this end, interventions funded under EARDF for rural development are coordinated with interventions funded under cohesion policy, in particular with ESF operations so that to ensure human capital development, promotion of social inclusion poverty reduction and economic development of rural areas. Within European Union, Romania is a particular case defined by: employment rates in agriculture 6 times higher as compared to EU average, very low educational attainment, low productivity, high dependence of rural economies on agriculture. The very priorities of EU funded OPs for Romania remain: (a) human capital development to stimulate local job growth and (b) improving the absorption rate with a particular focus on effectiveness of the absorption (effective results and impact for human capital and rural development) and not the nominal absorption rate (focus on the level of the absorption but not on the EU impact on development).

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