



**Natural
Resources
Institute**

Rural Non-farm Economy Project, Social Sciences Department
Central Avenue, Chatham Maritime, Kent ME4 4TB, United Kingdom
Tel: +44 (0)1634 880088; Fax: +44 (0)1634 883706 Email: b.j.oakenfull@greenwich.ac.uk
WWW: <http://www.nri.org>

The Rural Non-farm Economy in Central and Eastern Europe

Junior Davis and Douglas Pearce
Markets, Finance & Enterprise Group
Natural Resources Institute, UK

July 2000 Discussion Paper No. 2000/04

Abstract

This purpose of this paper is to identify and analyse the factors enhancing or impeding sustainable development of non-farm rural employment and income diversification for rural development in the Central and Eastern European Countries (CEEC). The paper focuses on two case studies in the Czech Republic and Romania. The paper aims to examine the extent to which the factors conditioning non-agricultural rural development are similar in the Luxembourg Group (*fast-track*) and Helsinki Group (*slow-track*) accession countries.

Acknowledgements

The authors gratefully acknowledge the support of the Department for International Development (DFID), Project No. L0100, and the World Bank in preparing this paper. The authors would like to thank Dr Sophia Davidova and Dr Simon Henderson for their comments on an earlier draft of this paper. Any remaining errors and omissions are solely the authors' responsibility. The views in this paper are solely those of the authors and not necessarily those of the DFID or World Bank.

| | |
|---|-----------|
| 1. INTRODUCTION | 3 |
| 2. KEY PROBLEMS FACED BY TRANSITION ECONOMIES IN RURAL AREAS | 5 |
| 2.1 NFRE TRANSITION AND RURAL DEVELOPMENT | 5 |
| 3. CHARACTERISTICS OF THE NON-FARM RURAL ECONOMY | 7 |
| 3.2 RNFE INCOME..... | 8 |
| 3.3 KEY RNFE FEATURES..... | 12 |
| 4. RURAL NON FARM ACTIVITY IN CENTRAL AND EASTERN EUROPE..... | 13 |
| 4.1. MACRO-FACTORS | 17 |
| 4.2 STRUCTURAL FACTORS..... | 18 |
| 4.3 INTERSECTORAL LABOUR MOBILITY | 19 |
| 5. RURAL NON-FARM DIVERSIFICATION IN THE CZECH REPUBLIC | 21 |
| 5.1 RNFE ACTIVITIES IN THE CZECH REPUBLIC | 21 |
| 6. RURAL NON-FARM DIVERSIFICATION IN ROMANIA | 27 |
| 6.1 RNFE ACTIVITIES IN ROMANIA | 27 |
| 7. POLICY OPTIONS FOR THE RNFE IN CENTRAL AND EASTERN EUROPE..... | 33 |
| 7.1 LESSONS LEARNED FROM <i>FAST</i> AND <i>SLOW</i> -TRACK ACCESSION STATES | 33 |
| 7.3 POLICY AND INSTITUTIONAL ENVIRONMENT CONDUCIVE TO RNFE DEVELOPMENT | 35 |
| 7.4 INFRASTRUCTURE AND SERVICES..... | 35 |
| 7.5 POLICIES THAT FOSTER POSITIVE LINKAGES WITH THE AGRICULTURAL SECTOR..... | 36 |
| 7.6 DECENTRALISATION ENABLING A POSITIVE AND ACTIVE ROLE FOR LOCAL GOVERNMENT | 36 |
| CONCLUSIONS | 37 |
| REFERENCES..... | 39 |

1. INTRODUCTION

In this paper the characteristics and importance of the rural non-farm economy (RNFE) in Central and Eastern European countries (CEECs) is examined and policy options for encouraging a healthy RNFE are outlined. 'Non-farm' is defined as being all those diverse activities associated with waged work or self-employment in work that is not agriculture but located in rural areas. Remittances from temporary or seasonal migration to urban areas, and transfer payments such as pensions, dividends, and interest payments, are also included in the definition of 'non-farm'. All activities that are non-farm are analysed, as a way of examining the extent of diversification in the economy. The paper focuses on two CEECs representing different stages of transition, Czech Republic and Romania, with each not only representing different economic and political experiences since 1990, but also cultural differences.

There is growing evidence that in CEECs, rural households commonly depend on non-farm sources for 30-50% of their income (see Davis and Gaburici, 1999; Greif, 1997; for non-CEEC countries see Ellis, 1999 and Lanjouw, 1999). The share of population involved in non-farm activities varies quite widely, ranging from around 7% in Poland (although this figure may well be an underestimation) to 65% in Slovenia.

Diverse income portfolios often include income from agriculture, migration, remittances, daily travel to nearby urban employment, local wage labour opportunities or self-employment in non-agricultural activities. Without these sources of income, a great part of the rural economy and society in the CEECs would not be viable. However, there is a lack of reliable income data, due to insufficiencies of the national statistical systems and because of a great deal of informal (hidden or illegal) activities as typical concomitant phenomena of transition economies.

Much of the rural non-farm economy literature highlights the role of the following determinants of capacity to engage in rural non-farm (RNF) employment¹:

- household composition (availability of surplus labour, gender constraints and patterns, decision-making responsibility)
- education and skills (appear to be a stronger determinant of higher income in the non-farm sector than in on-farm incomes);
- access to finance (closely linked to land ownership and farm size in rural areas in some but not all countries);
- infrastructure (helps create the conditions for growth – and also improves access to employment); and
- social capital, vertical and horizontal network issues and differential conditions of access due to socio-economic status.

However, much of the evidence on these factors is patchy and inconsistent. Most has been obtained from case studies or from detailed analysis of geographically limited data². Much of the RNFE literature suggests that the poorest groups (small subsistence farmers) tend to diversify into activities where wages are no higher than those in the agricultural sector, whilst higher income groups (larger farmers) also diversify, but into better paid sectors. Two processes are apparent: *demand-pull*, where rural people respond to new opportunities; and *distress-push*, where the poorest are driven to seek non-farm employment as a survival strategy. Sometimes these processes work together. The non-farm sector is, thus, important for rural employment and incomes in situations of both stagnant and buoyant agricultural sectors.

¹ These are discussed more fully in "Diversity in rural incomes: issues affecting access at household level" (paper presented by Ann Gordon, at a World Bank seminar on RNFE, 7 June 1999). Household *capacity* to engage in the RNFE is also discussed by Reardon *et al*, 1999, in "Rural Non-Farm Income in Developing Countries", Part III of *The state of food and agriculture, 1998*, Rome: FAO.

² Heidhues and Schreider (2000); Greif (1997); Heidhues, et al. (1998), Davis and Gaburici, (1999) and Breitshopf and Schreider (1999) have completed some preliminary work on these issues in a transition economy context.

In recent years there has been growing recognition of the role of the non-farm sector for employment and income in *rural* areas in the EU and CEECs. Given the importance of rural areas, the CEECs are keen to develop a better understanding of the actual situation, main driving forces and policies which could enable the rural population to improve their economic situation – be they in agriculture or the non-farm sector. Whilst there has been some analysis of income distribution, employment and growth in the agricultural sector, much less is known about the rural non-farm economy.

Much of the policy and intervention intended to improve the situation for the rural population has emphasised employment opportunities. In the CEECs employment opportunities have focused on *creating jobs* or *creating the conditions in which jobs are created* (e.g. economic liberalisation; provision of financial services; infrastructure development – particularly roads, electrification, ports, telephones; establishing small business parks; providing tax holidays etc). There has been relatively little focus on the factors that determine people's *capacity* to take advantage of these jobs. The factors affecting the rural population's access to non-farm rural employment in the CEECs are to be identified and analysed.

This paper incorporates an evaluation of country differences. It is assumed that there are potential lessons to be learned from the Czech Republic as a *fast-track*³ country in terms of economic development and preparation for EU accession. There should also be scope to learn lessons from Romania as one of the less advanced, or *slow-track* accession countries, to inform institutional development, policies and programmes to address the observed deficiencies in the current situation.

This paper aims to:

- develop a better understanding of the factors which condition the rural population's *capacity* to engage in non-farm rural employment;
- identify and categorise the types of RNFE activities undertaken by different categories of the rural population in the two case study countries;
- define the opportunities and constraints faced by different categories of the population in their access to sustainable RNF income opportunities; and
- assess the potential of policies to improve access to RNF opportunities and/or capacity and to remove any existing constraints.

To effectively complete these tasks primary data in Romania and secondary data in the Czech Republic has been collected, analysed and utilised.

³ Luxembourg Group (*fast track* countries selected for initial accession to the EU; Czech Republic, Hungary, Poland, Slovenia and Estonia). In the Helsinki Group (*slow track* CEECs; Bulgaria, Latvia, Lithuania, Romania, Slovakia).

2. KEY PROBLEMS FACED BY TRANSITION ECONOMIES IN RURAL AREAS

2.1 NFRE transition and rural development

During the central planning era, rural development in transition economies⁴ was frequently associated with agricultural development; recently opinion has begun to move away from this position. Arguments in favour of paying greater attention to the non-farm sector in the context of rural economic development centres around the sector's potential in absorbing excess labour from the agricultural sector and urban-rural migration (especially in transition countries), in contributing to income growth and in promoting a more equitable distribution of income. In most transition countries a sizeable part of the population still lives in rural areas.⁵

In some CEECs, urban-rural migration⁶ due to massive structural adjustments in the post-communist transition has contributed to increased pressure on agricultural productivity in the recently privatised sector [Davis, 1997]. Overall, agriculture's share of employment in some transition economies has increased since 1989 due to the voluntary return of discharged urban workers of rural origin and the agricultural sector's role as an employment buffer. As the privatised farm structure in various transition countries continues to face diseconomies of scale and specialisation and land property rights remain largely ill-defined (i.e. a lack of viable land markets), the private agricultural sector is being stretched to its limits [Davis, 1997a]. In a few transition economies, especially in the Balkans and the Commonwealth of Independent States (CIS), the agricultural sector is failing to provide a decent source of livelihood for its workforce, especially the poor. Given this situation, the rural labour force cannot be productively absorbed in the agricultural sector and poverty is growing.

At the beginning of the transformation process in transition countries, economic policies focused mainly on macroeconomic problems. The increasing income disparity between rural and urban regions was ignored. It is now known that the increasing inter-regional divergence in the transition economies is one of the major transformation problems. This is, among other reasons, why the World Bank, Organisation for Economic Co-operation and Development (see OECD, 1996) and the European Union (EU) have formulated special rural development strategies (see Davis and Pearce, 1999) which are discussed in section 6.2 below.

During the history of central planning, decisions about the regional distribution of economic enterprises, habitats, and educational and social infrastructure were made by a central administrative power. Local and regional administrative agencies did not have any competence (and usually limited influence) in this matter. In the main, agricultural enterprises and firms with backward and forward linkages were established in rural regions. Other industries were usually neglected. The implementation of rural development strategies, which emphasise decentralised administrative authorities, may address this issue. The following issues of rural development are specific to transition economies:

- In some countries, the development of rural infrastructure had a low priority. Therefore, rural infrastructure, such as roads, sewage, telecommunication and social systems in most transition economies is in a dilapidated state.

⁴ The term transition economies is used to describe the new political geography of the former CMEA, comprised of the CEFTA/ CEEC states (the Czech Republic, Hungary, Poland, Slovakia, Slovenia), the Balkans (Albania, Bulgaria, Romania) the Baltic States (Estonia, Latvia and Lithuania), the former Yugoslavia, and the Commonwealth of Independent States (Russia, Ukraine, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan).

⁵ In some CEECs, e.g., between 30 and 45% of the population still lived in rural areas in 1994, i.e. Bulgaria-30%, Czech Republic-35%, Hungary-36%, Poland-36%, Slovak Republic-42%, and Romania-45% (World Bank, 1996).

⁶ NB: There is also an increased dependence on rural sources of income for many urban workers which have resulted from the transition process and also places increased pressure on the agricultural sector.

- The transformation process caused severe unemployment in the heavy industry and agricultural sectors due to the former centrally planned misallocation of resources. In some countries the official rate of unemployment is around 13%, unofficially it is often significantly higher in rural areas.
- Industrial conglomerates were often strongly concentrated in certain regions and vertically integrated. In some regions the experience of structural adjustment was severe in particular sectors of the economy during the transition process due to their high degree of specialisation. Some hard-hit areas were unable to initiate the creation of other employment opportunities because the region's economic activities were too little diversified.
- Environmental protection was also largely unenforced. Therefore, on the one hand, agricultural production is no longer possible in many regions due to e.g., excessive leaching of the soil and water table pollution. Environmental problems, on the other hand, may interfere with alternative income sources, such as tourism.

The pre-transition problems listed above do not comprise a comprehensive survey of the depth, degree and breadth of rural development issues that have arisen from the central planning era. The above is only a summary of some of the key problems which relate to many of the issues discussed in this paper. In recent years, there have been a growing number of studies on the rural situation in the CEECs and CIS (Breitschopf and Schreider, 1999; Davies et al. 1997; Heidhues et al, 1998), and experience of pilot rural development projects. Although the degree of cultural and economic variation between the CEECs is quite wide, there are a number of factors which they share in common, though not to the same degree of intensity:

- there are many problems, in terms of unemployment, low incomes and lack of economic opportunity, direct or hidden;
- high levels of hidden- and under-employment
- levels of human capital, in terms of education and skills, are often significantly lower than in urban areas;
- demographically, there is in some countries a potential growth in the size of the rural labour force;
- health and other social services are not adequate;
- a whole range of infrastructure including roads, telecommunications, water and waste management are in need of upgrading;
- a lack of access to suitable rural finance and small to medium sized enterprise (SME) credit facilities; and
- there is very little support for business in the form of information and mutual organisation.

All of the above contribute to a sense of alienation and a lack of rural entrepreneurship. These problems are intensified the further east one travels on continental Europe where agriculture involves a large part of the rural labour force, and where labour productivity is lower than in CEECs even when adjustments are made for the part-time nature of employment.

3. CHARACTERISTICS OF THE NON-FARM RURAL ECONOMY

3.1 Characterising the NFRE

Lanjouw (1999) defines the rural non-farm economy as being all those activities associated with waged work or self-employment in income generating activities that are not agricultural but are located in rural areas. Thus, non-farm activities might include manufacturing (i.e. agro-processing) and be accumulative (e.g. setting-up a small business), adaptive, switching from cash crop cultivation to commodity trading (perhaps in response to drought), coping (e.g. non-agricultural wage labour or sale of household assets as an immediate response to a shock), or be a survival strategy as a response to livelihood shock. The rural non-farm economy cannot be considered homogeneous; rather it is characterised by its heterogeneity, incorporating self-employment, micro and small-medium sized enterprises (MSMEs) and traders. The sector incorporates jobs, which require significant access to assets, whether education or access to credit, and self-employed activities such as roadside “hawking” of commodities which has low, or no barriers to entry and low asset requirements.

There are also important spatial and locational aspects of the RNFE that should be noted. Barrett and Reardon (2000) highlight the difficulty in defining the RNFE from a spatial perspective. They note that activities can be “local, with two sub-categories (a) at-home (on-farm); (b) local away from home, with sub-categories of (i) countryside or strictly rural, (ii) nearby rural town, and (iii) intermediate city.” The authors also recognise that the distance from the home can involve migration within the country and abroad. Barrett and Reardon (2000) suggest that these distinctions are important, in particular with respect to the extent to which the household is dependent on the local economy. The authors further highlight the complexity and often arbitrary nature, of using such classifications. For example, “local” is an arbitrary concept that will be situation-specific.

An increased focus on the RNFE has led to a more holistic view of rural development and reflects the reality of growing economic diversification amongst rural households. Thus it could be said that understanding the non-farm sector in context implies the use of broad methods useful in understanding rural societies in general, and the complex inter-relationship between different factors – social, cultural, economic and environmental, for example – which cause people to act as they do.

The expansion of the RNFE and diversification of income are desirable policy objectives because they give individuals and households more options to improve their livelihood security and to improve their own living standards. Economic theory suggests that risk-neutral farmers will divide their labour supply between on-farm and non-farm employment opportunities such that the expected marginal returns to all activities are equal. If farmers are risk averse, as is the norm in transition economies, either less time will be allocated to the more risky jobs if the expected returns to each sector are the same, or alternatively the farmer will be willing to accept lower wages in the less-risky environment (risk premium). Off-farm labour can be used by farmers to reduce the total variance of their income, that is, the overall risk, or to increase the total returns to labour. However, this does not necessarily mean that risks associated with off-farm opportunities are lower than on-farm, independent of or inversely related to on-farm risks, it is more the case that on-farm opportunities are often very limited.

In poor rural areas some households will make a positive choice to take advantage of opportunities in the non-farm rural sector, taking into consideration the wage differential between the two sectors and the riskiness of each type of employment. Rising incomes and opportunities on-farm should reduce the supply of labour off-farm (although this is often a dynamic process due to inter-regional migration etc). However, other households are pushed into the non-farm sector due to a lack of opportunities on-farm, for example, as a result of drought or small landholdings⁷. For policy makers it is important to understand why an individual is entering the non-farm rural market, whether the entry is part of an upward or downward *livelihood trajectory*⁸ [Swift, 1998]. Hence one of the key areas of

⁷ See Davis, Robinson and Marsland (2000) for a full survey of the literature concerning the economics of participation of the poor in the rural non-farm economy.

⁸ When thinking about non-farm income generation, it is important to realise that different social units are constantly engaged in a dynamic process of livelihood adaptation. Taking the unit of the household: households operating

discussion in the literature is to understand whether individuals respond to new opportunities in the RNFE – *demand-pull* – or are driven to seek non-farm employment because there are no opportunities on-farm – *distress-push* (see for example, Islam, 1997). The key features of *distress-push* and *demand-pull* diversification are outlined below in Table 1:

Table 1 The “push” and “pull” factors of RNFE diversification

| “Push factors” | “Pull factors” |
|---|---|
| <ul style="list-style-type: none"> • Population growth • Increasing scarcity of arable land and decreasing access to fertile land • Declining farm productivity • Declining returns to farming • Lack of access to farm input markets • Decline of the natural resource base • Temporary events and shocks • Absence or lack of access to rural financial markets | <ul style="list-style-type: none"> • Higher return on labour in the RNFE • Higher return on investments in the RNFE • Lower risk of RNFE compared to on-farm activities • Generation of cash in order to meet household objectives • Economic opportunities, often associated with social advantages, offered in urban centres and outside of the region or country. • Appeal of urban life, in particular to younger people. |

Reardon et al (1999) suggest that when relative returns are higher in the RNFE than in farming, and returns to farming are relatively more risky, “pull” factors are at work. Conversely, when farm output is inadequate and opportunities for consumption smoothing, such as credit and crop insurance, are missing, or when input markets are absent or fail and the household needs cash to pay for farm inputs, “push” factors are at work. Islam (1997) suggests that factors that lead to *demand-pull* include the increased income of lower and middle-income households and increased demand from urban areas for rural products. He identifies successive droughts that depress income and hence increase the need for alternative income opportunities offering low-skilled, low-wage employment as a *distress-push* factor. As evidence of *distress-push*, wages or incomes are likely to be lower in the rural non-farm economy. It is important that policy-makers make this distinction between *distress-push* or *demand-pull* because each may require different policy responses. The former may require policymakers to develop appropriate social safety-net and interventionist policies to mitigate the short-run negative effects that sometimes accompany this type of diversification (e.g. over rapid urbanisation placing tremendous pressure on urban centres, negative environmental impacts etc.). Where *demand-pull* factors are driving the process of diversification, policy-makers might seek to provide a suitable “enabling environment” to support the development of the RNFE and sustainable rural livelihoods.

3.2 RNFE Income⁹

Hussein and Nelson (1998) define livelihood diversification to include on and off-farm activities which are undertaken to generate extra income via the formation of agricultural and non-agricultural products, the sale of waged labour or self employment in small firms, and other strategies to spread risk (including radical migration strategies). It includes consideration of attempts by individuals and households to find new ways to raise incomes and reduce environmental risk, which differ sharply by the degree of freedom of choice (to diversify or not) and the

within a particular livelihood system may be on any of a number of different livelihood trajectories. These may be “downward”, in the sense that there is a process of disaccumulation of assets; “upward” in which case there will be asset accumulation; or more or less constant in the sense that the household asset base is neither expanding nor contracting. In each of these different scenarios, the role and importance of non-farm strategies takes on a different meaning.

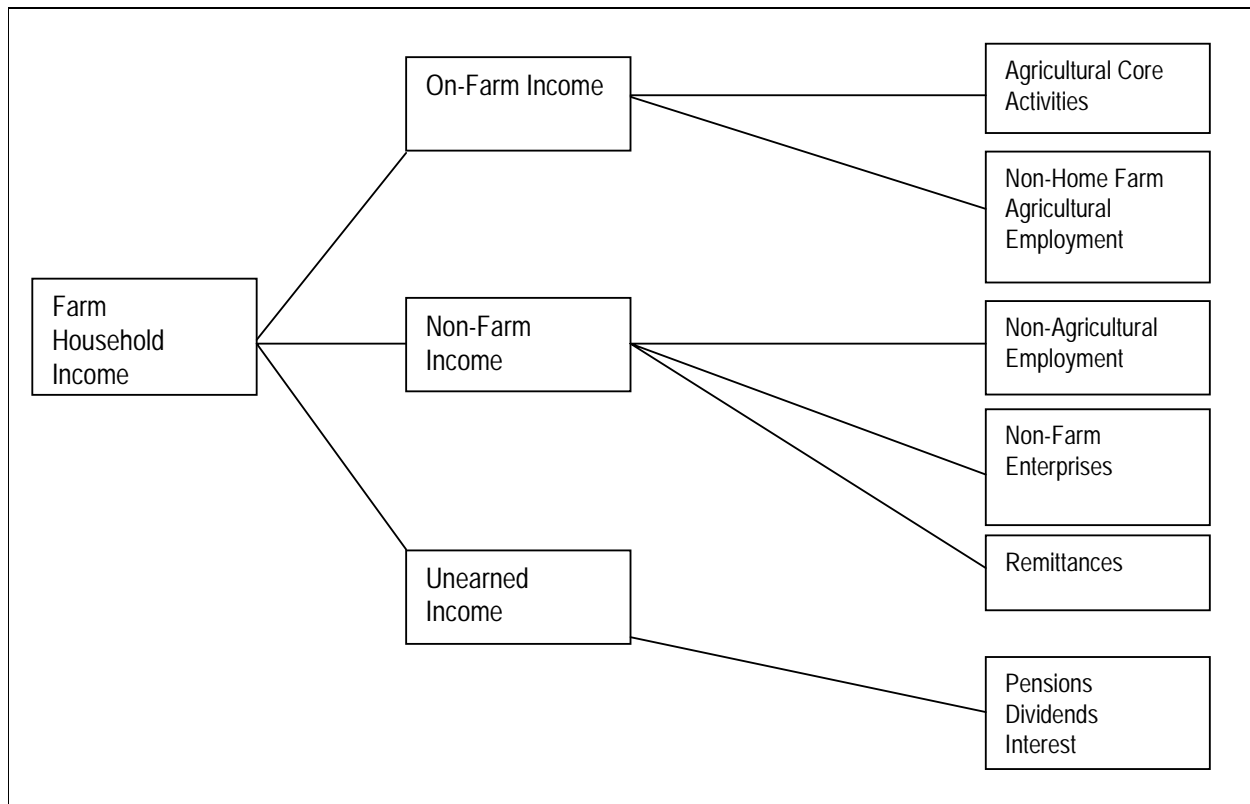
⁹ The authors note that this section has drawn on some of our preliminary work being conducted in collaboration with Wye College (University of London).

reversibility of the outcome. There are many sources of income. For example, Islam (1997) identifies five distinct sources of non-farm income: (i) non-agricultural activities within the household; (ii) activities in small rural towns; (iii) work in large cities (involving commuting); (iv) remittances from household members in cities; and (v) remittances from household members overseas.

In reviewing the level of RNFE diversification in CEECs it is important to consider the potential sources of income available to each farm or rural household. The traditional and main component has been income from agricultural core activities. With reference to Figure 1, *agricultural core* activities may be defined as those enterprises taking place on predominantly agricultural proprietorial units which are based on the primary production of food or fibre.

In defining RNFE income, diversification and other gainful activities of farmers and rural dwellers two central problems emerge: (i) recognising and ordering the multifarious nature of income sources and, (ii) capturing the appropriate unit for income analysis.

Figure 1. Potential Sources of Farm Household Income



A plethora of terms to capture the RNF activities of farmers have emerged: (pluriactivity, diversified, multiple job-holding)¹⁰, leading to a series of binary classifications: between full and part-time farms, pluriactive and non-pluriactive farmers and diversified and non-diversified occupiers. However these single dichotomies are unable to capture the absolute and relatively diverse nature of income sources.

To deal with this issue, one approach is to study the components of potential sources of income. On-farm income can come from both agricultural core activities and diversified enterprises operating from the farm. Potential sources of non-farm income can be divided into three components: income from *non-farm enterprises*, *non-agricultural employment* and *non-home farm agricultural employment* (Figure 1). As such, one can distinguish between *enterprise* and *income diversification*. Enterprise diversification activity embraces both on-farm and non-farm business creation outside of agricultural core activities. Income diversification will embrace these two components plus any movement towards non-home farm employment (whether agriculturally based or not). Finally, a third source of revenue is *unearned income* (such as pensions, dividends and interest), which while usually ignored, can be very substantial in certain cases and decisions made in this sphere may have an important bearing on such crucial choices as time of retirement and intensity of farming.

Potential sources of income are therefore disparate, likely to vary substantially in importance between farmers, and exhibit wide variations in their attractiveness as sources of pecuniary gain. These variations between components of income are therefore likely to have a major effect on the decision making of farmers and there is a need to

¹⁰Pluriactivity may be defined as the phenomenon of farming in conjunction with another gainful activity, whether on or off-farm (MacKinnon *et al.*, 1991). This section of the paper on RNFE income has benefited from on-going work and collaboration with Davidova and Gorton, 2000.

understand the importance of each rather than subsuming them all into binary classifications such as the part/full-time dichotomy¹¹. Moreover, there is thus no reason why RNFE income diversification has to include setting up new enterprises or be farm based at all - for many, other options may prove more fruitful or promising. The implications of not recognising the diversity of potential sources of non-farm income by policy-makers could be quite serious. For example, it might lead to the development of inappropriate sectoral policies, which support commercially viable activities at the expense of others, which although much less remunerative, may be of vital importance to the livelihoods of more vulnerable groups in society (see Davis and Gaburici, 1999).

¹¹ See Mishra and Goodwin (1997) who address farm income variability and how this affects the supply of off-farm labour. They also attempt to test whether spouses make joint decisions in terms of their off-farm employment activity. Of course, their paper assumes that markets function efficiently, again not always the case in rural CEEC economies. However, utilising an econometric approach, the authors found that the off-farm labour supply of farmers is positively correlated with the riskiness of farm incomes; that farmers and their spouses with more farming experience are less likely to work off-farm; and that off-farm labour supply is correlated with off-farm experience.

3.3 Key RNFE features

In most reviews of the available RNFE literature, the prevailing conception is that RNFE activities have close links with the agricultural sector (Heidhues et. al., 1998; and Davis and Gaburici, 1999 provide evidence of this in Romania). The nature of these links and the performance of agriculture also influence the growth of the RNFE. With increasing diversification, the links to agriculture tend to decrease. In many developing countries, with increased diversification the seasonal character of the RNFE is inclined to decrease and show a trend towards more constancy [Barrett and Reardon, 2000].

However, the interdependence between cause and effect is complex and has to be analysed case by case, before discerning patterns and clusters. Recent RNFE research has also shown a positive correlation between a higher diversification of non-farm activities and income and:

- The level of education;
- Quality and access to infrastructure;
- Quality, objectives and organisation of services;
- Opportunities created through local, regional and national government policies; and
- Access to credit and financial services.

We will return to some of these issues in the case studies on the Czech Republic and Romania later in the paper.

4. RURAL NON FARM ACTIVITY IN CENTRAL AND EASTERN EUROPE

There is growing evidence that in CEECs rural households commonly depend on non-farm sources for 30-50% of their income (see Davis and Gaburici, 1999; Greif, 1997), which is a similar proportion to those found by Ellis (1999) in southern Africa (on average 40%) and in South Asia and Latin America where rural households are around 60% dependent on non-farm income (Lanjouw, 1999; Reardon et al., 1999). The share of population involved in non-farm activities varies quite widely, ranging from around 7% in Poland to 65% in Slovenia. In the CEECs the share of enterprises with supplementary activities is highest in regions with large-scale agriculture (15-20%). In countries with scattered rural structures the demand for additional employment is extremely high (e.g. Bulgaria, Poland, Romania and FYR Macedonia), however opportunities are less numerous. Creating more opportunities for non-farm work in the CEECs has become a formidable task for policymakers when the high levels of rural unemployed and depth of poverty in the CEECs is compared to that of the EU [Milanovic, 1999]. In the CEECs the agricultural sector is failing to provide a decent source of income for its workforce, especially the poor. Given this situation, the rural labour force cannot be productively absorbed in the agricultural sector and poverty is growing. For example, in Bulgaria and Romania despite steady GDP growth in 1993 and 1994, the poverty gap as a percentage of GDP rose to a level of nearly three times what it had been at the beginning of the transition.¹² For the rural population, this is where the rural non-farm sector has the potential to play an important role in poverty alleviation.

Arguments in favour of paying greater attention to the non-farm sector in the context of rural economic development in the CEECs centre around: the sector's potential to absorb excess labour from the agricultural sector and urban-rural migration; the importance of the sector in contributing to income growth and in promoting a more equitable distribution of income; and the need to promote enterprise activity in rural towns and villages as part of the transition and (in the former Yugoslavia) reconstruction process.¹³ In the CEECs a sizeable part of the population still lives in rural areas (see Table 2). Although rural development policies and interventions have tended to focus on the agricultural sector, the rural population derives its income from multiple sources – even where the national economies may be relatively undiversified. Income derived from non-farm activities is used to increase or smooth income, reduce risk (through diversification) or improve future employment prospects (by acquiring skills or capital). These livelihoods may exist in rural areas, or require daily travel to rural towns, or may involve migration and remittances.

¹² The poverty gap describes the average 'distance' of the poor below the poverty line, the greater the gap the deeper the poverty (Heinrich, 1998).

¹³ Refer to Pearce and Davis (2000) for a fuller analysis of the RNFE in the context of the transition and reconstruction process in the Balkans.

Table 2: Population in rural areas (% of total population)

| | 1997 |
|---------------------------|------|
| <i>Faster-track CEECs</i> | |
| Slovakia | 40.3 |
| Slovenia | 48.2 |
| Czech Republic | 35.9 |
| <i>Slower-track CEECs</i> | |
| Albania | 62 |
| Bulgaria | 31 |
| Croatia | 43.4 |
| Romania | 43.2 |

Source: OECD (1999) *Agricultural Policies in Emerging and Transition Economies*, Vols. I and II.

A large proportion of the non-farm activities undertaken is livelihood-oriented, and is often neither a source of innovation nor a provider of significant economic returns as enterprises in their own right, as distinct from a means of maximising returns to available household labour. These activities play a key role as diversified income sources within the livelihood strategies of rural households, a role which has become increasingly important in the context of a declining formal sector and the inability of the state to provide similar levels of social security support that were provided pre-transition. By providing an alternative or complementary source of income and employment to agriculture, non-farm activities may help sustain the viability of the rural economy, and in so doing reduce rural-urban migration which results in excessive or over-rapid urbanisation.

As previously noted, diverse income portfolios often include income from agriculture, migration, remittances, daily travel to nearby urban employment, local wage labour opportunities or self-employment in trade, agro-processing, tailoring or services (see Table 4).

Whilst labour allocation to non-farm activities has decreased on large-scale farms with the spinning-off of these activities during the transition period, part time farming and non-agricultural activities appear to have grown in importance for small-scale farms. For example, Poland and Slovenia – two *fast-track* countries with a dominance of small-scale private agriculture under the communist regime – have a large share of part-time farmers. In 1996, farming in Poland was the main source of income for only 38% of agricultural families. For the other farm families the main source of income was non-farm employment (22%) and social benefits (21%)¹⁴ [OECD, 1999]. Similarly, Davis and Gaburici (1999) found that a number of small farmers in their survey of the development of rural financial markets and private farming in Romania have obtained non-farm income through non-farm wages and pensions¹⁵. Those farms having close links to the urban and tourist markets mainly earned incomes greater than the average.

The non-farm income component of family income was also prominent because only half the household members reported full-time employment on the family farm. Most of the others devoted the rest of their working time to off-farm occupations. Davis and Gaburici (1999) found that on average 35% of the sample earned non-agricultural incomes. Moreover, 57% of their non-farm income respondents were wage earners. In 1996 around 23% of the

¹⁴ GUS (1997) estimates of non-farm income in small-scale family farms in Poland accounted for around 43% of total household income.

¹⁵ Their research was based largely on two detailed surveys of the development of rural financial markets and private farming in Romania conducted during 1996-1997. The analysis focused on the private farm and its relation to the financial market. Based on land title differences and organisational form of the farm, three private farm management types were identified for the Brasov, Dolj and Timis regions of Romania. The survey covered a sample of 220 private farms in nine villages (see Heidhues, Davis and Schreider, 1998; Davis and Gaburici, 1999).

farms surveyed had at least one pensioner, 18% two and 5% three. Table 3 shows that the value of pension income is around 10% of monthly off-farm earnings. Davis and Gaburici (1999) have ranked the primary and secondary sources of income according to their importance for total farm income in Romania in Table 3. Clearly, on-farm incomes are of prime importance to the financial viability of private farms, but off-farm wages (26.8%) are also an important primary source of income. Regarding secondary income sources the former trend is replicated, with the exception that small businesses (primarily the sale or trading of farm products and inputs, usually locally) at 15.5% are an important source of secondary income. Davis and Gaburici (1999) found that off-farm income accounted for as much as 45% of total farm income in Romania. However, agriculture remains the single most important source of income and is also important as a secondary source of subsistence for those whose primary activities is non-farm (e.g. small business).

Table 3: Primary and Secondary Income Sources in Romania - 1997

| | Primary income source | | Secondary income source | |
|-----------------------------|-----------------------|-------|-------------------------|------|
| | N | % | N | % |
| Sale of vegetable products | 68 | 30.9 | 76 | 34.5 |
| Sale of animal products | 56 | 25.5 | 61 | 27.7 |
| Small business (Trade etc.) | 29 | 13.2 | 34 | 15.5 |
| Wages | 59 | 26.8 | 22 | 10.0 |
| Pensions | 8 | 3.6 | 12 | 5.5 |
| Others | | | 2 | 0.9 |
| Total | 220 | 100.0 | 207 | 94.1 |

Source: Davis and Gaburici (1999) - Romania: Rural finance survey 1997/98.

Results from Davis and Gaburici's (2000) logistic regression model of the determinants of farmer access to rural finance suggest that the existence of off-farm sources of income from e.g. a small business (excluding the sale of agricultural products) would increase the probability of obtaining credit by 2.7 times. Access to sources of non-farm income in the form of wages and/ or a pension is of great importance to small private farmers in gaining access to rural finance. Romanian banks appear to prefer lending to these farmers because they consider them to be less of a risk, as they are not wholly dependent on farming as the sole source of income. Therefore the development of additional rural industries and an adequate national rural development programme will be essential to the financial viability of small private farming in Romania¹⁶ and other *slow-track* accession states. Table 4 indicates the importance of different RNFE activities for rural households in CEECs that form the main sources of additional income.

Table 4: Main sources of non-farm and additional incomes

| Country | Percentage share of farms involved | | | | |
|----------------|------------------------------------|-------------------|-----------------|------------|---------------------|
| | Second jobs | | Self employment | | Agricultural Sector |
| | A. Commuting | B. Construction** | C. Business | D. Tourism | |
| Czech Republic | - | 26 | 21 | (3) | - |
| Slovakia | - | (25) | (25) | (3) | - |

¹⁶ The development of projects such as the "Romanian-German: Establishment of a Farmers' Producer Association (FAMD)" during 1993 in Vatra Dornei, Eastern Carpathian mountains promoting rural development, small private farmers self help organisations, the purchasing, sale and use of farm inputs should be greatly encouraged. Perhaps the most well received aspect of the project has been a program for local women to encourage non-farm income generation, which began in 1995. This was promoted through the sale, design and improved marketing of traditional wool products, dress making and green houses for home food supply. Although the project is small, this type of activity has proved both financially successful and a useful tool for fighting rural poverty [FAMD, 1998].

| | | | | | |
|----------|-----|------|------|-----|--------|
| Hungary | < 1 | 30 | (50) | (2) | (2-10) |
| Slovenia | | 14 | | 17 | (50) |
| Poland | - | 38 | 26 | (3) | 7 |
| Romania | - | (20) | (10) | - | (2-5) |
| Latvia | - | (20) | (10) | - | (5) |

Source: Greif, F. (1997) *Off-farm income sources and uses in Transition Economies*, FAO/REU mimeo.

Notes:

A Commuting to work places in local industries or abroad

B Work in construction

C Business (Trade)

D Rural tourism

E Processing and/or direct marketing of agricultural products

* Figures in brackets are rough estimates: Selected items in percent of farms involved

** To a high extent these activities consist of illicit work.

Clearly a wide variety of activities are undertaken from which the rural population derive income (bed & breakfast, hotels, industrial work, social work, handicrafts, direct marketing services etc.), however due to a lack of data it is difficult to measure the rate of growth of these activities in a rural context during transition. As previously noted, another important source of RNFE income is remittances. In Albania, which is dominated by small-scale private agriculture, non-agricultural incomes are very important and include mainly service activities and remittance payments to rural households from post-1991 emigrants primarily working in Greece and Italy [Pearce and Davis, 2000]. The proximity of some countries to the EU (e.g. Poland, Czech Republic, Hungary and Slovakia) enables daily or weekly commuting from these countries to work in construction and services in west European countries. This makes remittance payments an important source of RNF income for rural households.

Greif (1997) notes that incomes that originate in up- and downstream activities vary according to farm type, and many large firms are also located in urban centres. The scale of technologies employed in these activities is also quite wide ranging, however generally Greif (1997) found that infrastructural conditions in rural areas constrained RNFE opportunities. In most CEECs between 5 and 20% of family farms participate in non-farm activities, although this varies widely (see Table 5).

Table 5: Participation in non-farm activities (1996-1997, estimated)

| Country | Rural population | Persons engaged in agric. | No. of farms & plots | Farms on subsistence level | Performing additional & subsidiary activities | | | Rural unemployed |
|----------|------------------|---------------------------|----------------------|----------------------------|---|----------|---------|------------------|
| | (1000) | (1000) | (total) | (%) | farms | % | persons | % |
| Czech R. | 3,610 | 760 | 26,900 | * | 4,170 | 15 | 120,000 | (5) |
| Slovakia | 2,255 | 580 | 8,900 | * | 1,800 | (20) | 115,000 | 15 |
| Hungary | 3,690 | 1,900 | 1,200,000 | 80** | 107,000 | 9 | 250,000 | 14 |
| Slovenia | 736 | 350 | 156,700 | 10 | 100,000 | 65 | 180,000 | 8 |
| Poland | 14,700 | 8,800 | 2,048,000 | 60 | 162,000 | 5-7 (43) | 480,000 | 40 |
| Romania | 9,490 | 2,750 | 3,190,000 | 75-90 | 320,000 | 10 (41) | 275,000 | 35 |
| Latvia | - | - | - | * | - | - | - | (35) |

Source: Greif, F. (1997) *Off-farm income sources and uses in Transition Economies*, FAO/REU mimeo.

Notes:

* Realistic data about small and private holdings or plots not published.

** About 1,100,000 "mini producers" normally produce for self-supply but are mainly a secondary activity of the non-agricultural population. This or a similar situation may be observed throughout most of CEECs and NIS but is not clearly registered. Figures in brackets are estimates.

As previously noted, the share of the rural population involved in non-farm activities varies quite widely, ranging from around 7% in Poland (probably an underestimate of the true level of activity) to 65% in Slovenia. In those

rural regions where the share of non-farm income in total farm household income is more than half, it mainly concerns those households where one partner has a full-time job in industry, construction or services and this income is complemented by farming activities, often for household use only. In the CEECs the share of enterprises with supplementary activities is lowest in regions with large-scale agriculture (20%).

The issue as to how many farms or rural dwellers as a proportion of the rural population actually have the capacity or opportunity to earn non-farm incomes is much more difficult to assess and can only really be evaluated on a country by country basis. Thus, our case study on Romania may provide some guidance on this issue. However, Greif (1997) shows that in the CEECs the main utilisation of non-farm incomes are, according to their relative importance, as follows:

- consumption and improvement of living standards;
- investment into non-farm business in rural areas;
- investment into up- and downstream activities; and
- investment (or expansion) of farm business.

Recent studies by Jehle (1998), Davis and Gaburici (1999), Brietschopf and Schreider (1999) and Horská and Spešná, (2000) show that there remains a lack of non-farm employment opportunities in the rural economy and that the Government needs to develop a coherent set of policies to promote local private activities downstream and upstream of agriculture, such as agro-processing, inputs and mechanical services. This requires an adequate macroeconomic environment and institutional support in terms of credit, training, advisory services, information technologies and the simplification of administrative and bureaucratic procedures. Both Jehle (1998) and Brietschopf and Schreider (1999) show that business creation and development largely depends on the availability of credit and development of human capital (particularly educational levels). In the CEECs the main issue of education is to foster employment and business on a regional basis. In Romania, current World Bank (National Training Board) and Government initiatives are focused on developing a new programme of rural secondary and vocational education which emphasises agricultural education (farm management, production technology, food processing), craft education (craft techniques, management, information technology, consulting), and services (marketing, accounting and business management) (see Chirca and Tesliuc, 1999).

The key factors driving these non-farm employment changes are the impact of the macroeconomic environment and structural reforms on labour adjustment in agriculture. These factors in turn, depend upon how the reforms affect demand for labour in agriculture; how they affect the opportunity costs for farm labour (including the demand for labour outside agriculture and access to social benefits); and how difficult it is for farm labour to move to other sectors, either rural or urban (OECD, 1999).

4.1. Macro-factors

The initial effect of abandoning central planning and liberalising prices, cuts in sectoral subsidies, trade and production during the period 1990-1992 was that economic activity and employment declined sharply. In the agricultural sector, the pattern of resource allocation matched neither the real costs of production nor the preferences of consumers. The impact of liberalisation on labour adjustment in agriculture not only depends upon how output prices changed vis-à-vis average input prices, but also on how they affect the opportunity costs for farm labour relative to other inputs. For example, between 1989-1994, agricultural wages relative to other inputs declined in all CEECs particularly in Romania (-82%) than in the Czech Republic (-34%) [Macours and Swinnen, 1998]. This should encourage farmers to utilise more labour intensive farming technologies, especially in Romania, Poland (-60%) and Bulgaria (-46%).

In theory, in a farm household economy, *ceteris paribus*, labour is allocated between farm and non-farm activities such that the marginal value of farm labour equals the wage rates of non-farm activities. Thus, individuals are willing to participate in non-farm work when the marginal value of farm labour (reservation wage) is less than the non-farm wage rate they command. In theory, this implies that poorer households have a greater incentive to diversify their income sources into non-farm activities because the marginal value of labour in poorer households is lower.

However, barriers to entry in the non-farm labour market may limit the capacity of poorer households to diversify their income sources into non-farm activities. Liquidity and credit constraints may place more affluent households at a comparative advantage in being able to diversify their activities. If there is rationing in the labour market, a farm household may not participate in the non-farm labour market even if the marginal value of labour (reservation wage) is lower than the marginal value of non-farm labour. Thus the actual participation of a household in the RNFE depends on the incentive to participate and the capacity to participate.

The farm household's decision-making and ultimate choice may be viewed as a 2-stage process. A farm household is subject to demand factors e.g. if the reservation wage is lower than the prevailing market non-farm wage rate net of commuting costs, a household will have an incentive to participate in non-farm activities. However, participation in non-farm employment may be constrained if there is rationing or relatively high transaction costs in the labour market (e.g. in credit markets). (See de Janvry *et al.*, 1991, for a discussion of failure in rural labour markets).

If the reservation wage rate is less than the prevailing non-farm wage rate, a farm household may choose among the available non-farm activities depending on their relative wage rates. This decision and hence the type of RNFE activity "chosen" may be affected by, for example, risk aversion and credit availability. (E.g. a risk-averse household may adopt RNFE activities whose income is negatively correlated with agricultural income [Newbery and Stiglitz, 1981]. Poorly paid but guaranteed employment may be preferred to higher paid less reliable activities. Similarly, households that face significant credit constraints will tend to adopt RNFE activities that require less initial capital). Variables that raise the reservation wage will reduce the probability and level of participation in non-farm work, in contrast to variables that raise the non-farm wage rate and increase participation.

Decision-making at the household level is also determined by a number of other factors – which may facilitate or constrain access to non-farm employment. Such factors relate to the composition of the household and include: the availability of labour; the existing organisation of production, consumption and (re)distribution at inter- and intra-household levels; and the extent to which households and their members are associated with a variety of formal and informal social networks and social capital.

4.2 Structural factors

In some CEECs where the social welfare systems were not well developed, access to land and the possibility of ensuring food security at the farm level made subsistence farming a way of securing their livelihoods during transition. Initially, this limited the outflow of labour from agriculture and in some countries e.g. Romania and Armenia there was an inflow of labour. A related factor concerns the level of social benefits for the unemployed and pensioners. In many countries the level of unemployment benefit and pensions has been low, which has encouraged rural dwellers to maintain some subsistence (or part-time) farming activity to sustain a reasonable standard of living. For example, in Romania around 25% of the agricultural labour force is comprised of part-time farmers with no second job [OECD, 1999].

Subsistence farming as a means of smoothing consumption and providing livelihood security, is only viable to the extent that extensive land reforms have been implemented. In Romania and Albania where the share of rural population is much larger than in most other CEECs, rural households acquired access to land through land reforms which contributed to their food and livelihood security during the transition.

Farm restructuring is also an important structural factor, which drives non-farm employment changes. The decline in agricultural labour has been most evident in countries characterised by large-sale farming (Hungary, Estonia, Czech Republic and Slovakia). Those countries with more scattered small-scale family farming structures (Poland, Romania and Slovenia) have experienced a different pattern of farm labour adjustment. The former group has been able to restructure by sacking workers and have reduced their labour input more effectively than small-scale family farms¹⁷. Reductions of labour input on these farms have mainly been through part-time shifts to NFRE activities.

¹⁷ Since the marginal productivity of labour is probably higher on individual farms due to better labour governance than on small-scale-farms, the incentive to replace labour by other inputs is probably weaker. Individual farm labour is usually family based and family labour mobility is typically lower.

Within countries a similar divergence in labour adjustments may be observed (e.g. as between western Poland with its large-scale farming structure and the rest of the country characterised by small private plots where family farms have absorbed inflows of sacked family labour). Superficial restructuring changes on large-scale farms in some countries have produced weak adjustments in labour use.

4.3 Intersectoral labour mobility

Similarly, incentives to adopt NFRE opportunities may be affected by the ability of farm labour to adapt to the NFRE and by the costs of intersectoral mobility. Since 1994 most CEECs have experienced growth which has led to increased demand for labour [EBRD, 1999]. However, this demand for labour has in most cases been met by supply from non-agricultural sectors of the economy. It could be argued that the flow of labour from rural areas has been impeded by discrepancies between the requirements of the new labour market and the structure of agricultural labour offered, however this varies between countries. For example, in Romania rural –urban migration and non-farm MSME start-up has been highly selective with the watershed traditionally being entry into secondary education. Davis & Gaburici, (1999) found that the rural population is in general disadvantaged in this respect. Compared to the educational levels of the sample, 66% of whom were educated to high-school (secondary) standards, only 55% of the heads of private farm households were educated to a similar level (see Davis & Gaburici, 1999). Fewer heads of the household have similar levels of educational attainment because they are in general older than farm enterprise employees or other members of the family¹⁸. Around 34.3% of the household farms' surveyed had members educated to a high Gymnasium or Technical School level. Technical schools typically provide a practical education in the technological aspects of agricultural production. Nonetheless, those who manage to pass secondary education entrance exams typically move to and remain in urban areas. Remaining in the village is often the consequence of a failure to advance beyond primary education.

Mobility to other sectors has often been impeded by a combination of poor physical and educational infrastructure, housing problems, and in some cases government-imposed costs or administrative restrictions [OECD, 1999]. As previously noted, poor infrastructure (i.e. roads, transport facilities, telecoms) is a key constraint in accessing NFRE employment opportunities. Under these circumstances the regional concentration of industry, and geography will have an important impact on labour mobility. Mobility costs are increased where non-farm employment opportunities are located in distant geographical locations and physical infrastructure is poor. Moreover, limited access to housing at reasonable prices also makes labour less mobile. Similarly the lack of educational infrastructure, for example retraining or vocational training programmes, for people who have been de-skilled (low or not demanded skills) to move to other job opportunities. During the centrally planned era, in rural areas there were few employment opportunities outside of the agricultural sector, which absorbed a large amount of low-skilled labour. With the post-transition changes in the agricultural sector (a decline in profitability following liberalisation) this labour has been displaced and these people have insufficient qualifications to adopt NFR employment opportunities. Government restrictions may also impede labour adjustment, as in Belarus where there are high registration fees for people moving to urban areas.

In many CEECs the decline in on-farm profitability following liberalisation and the resulting reduced demand for farm labour, together with the poor performance of the economy (particularly in the Balkans see Pearce and Davis, 2000) has made NFR employment opportunities scarce. This has also reduced the opportunities for further migration of the agricultural unemployed due to high urban housing costs, high levels of urban unemployment, high transport costs and the lack of qualifications of the rural populace for non-farm work. In Romania, Bulgaria, Albania, Lithuania and Latvia agriculture provided a “buffer role” by absorbing unemployed labour from other parts of the economy. This has also been observed in eastern Poland. However, this role varies between countries and regions. In general the buffer role of agriculture temporarily diminishes social problems in urban areas by easing access to basic necessities for a large part of society, but in the longer run impedes farm restructuring, preserves subsistence farming, and causes substantial hidden unemployment in rural areas.

¹⁸ In Romania, the farming population is not young: in two-thirds of the households the average age of the adults is over 50, and in one-third over 65 years. The average age of Davis and Gaburici's (1999) sample was 45, and the average age of the head of the family was 54 years.

5. RURAL NON-FARM DIVERSIFICATION IN THE CZECH REPUBLIC

5.1 RNFE activities in the Czech Republic

Despite the importance of the agricultural sector in the Czech economy, it has been declining since 1989 due to transformation processes [VUZE, 1999]. As shown in Table 6 per capita GDP in rural areas is only 58% of that in urban areas and rural wages are much lower. The share of the agricultural workforce in total employment in the Czech economy is lower (down from 9.8% in 1989 to 4.2% in 1998). The creation of new jobs is central to the National Development Plan of the Czech Republic (2000-2006) as rural unemployment is 12% higher than in urban areas, and employment growth is much slower [VUZE, 1999]. Clearly, Table 6 suggests that there is a need to develop rural areas by encouraging the development and creation of jobs, both in agriculture as well as the NFRE (MSMEs, development of crafts and rural services, significant development of recreational activities and tourism). The agricultural use of rural areas, as well as the diversification of employment opportunities in agricultural production remains (as in many EU countries) an important factor for maintaining the quality of life and the socioeconomic stability of the countryside. This is especially true in areas with a traditionally high share of the agricultural sector in the economic structure. In connection with the socioeconomic transformation, the rural entrepreneurial structure is also changing. The disrupted tradition of farmers themselves farming (rather than co-operatives) has been renewed, and this tradition differs from other forms of agricultural enterprise in its proprietary relationship to land and to agricultural property, and in the differing internal structure of private business conditions.

Table 6 Regional differences in GDP, average wages and unemployment in the Czech Republic

| <i>Indicator</i> | <i>Territorial unit</i> | | |
|--|-------------------------|----------------|--------------|
| | <i>Czech Republic</i> | <i>Regions</i> | |
| | | <i>Rural</i> | <i>Urban</i> |
| Regional differences in GDP | | | |
| Per capita GDP in 1996 (EUR): | 3627 | 3219 | 4899 |
| Relative to EU (%) | 58.7 | 52.1 | 89.3 |
| Relative to CR (%) | 100.0 | 88.8 | 152.2 |
| Average wage in 1996 (EUR) | 269 | 253 | 312 |
| Relative to CR (%) | 100.0 | 94.2 | 123.2 |
| Unemployment as of 12/1998 (% of labour) | 7.5 | 7.7 | 6.9 |
| Relative to CR (%) | 100.0 | 102.7 | 89.3 |
| Development of employment in the period 1989-1996, in absolute terms: | | | |
| Difference in employment 1989-1996, in absolute terms: | -226,211 | -300,705 | 74,494 |
| As % of initial situation | -4.3 | -6.7 | 9.8 |
| Difference in agricultural employment 1989-1996, in absolute terms: | -393,397 | -373,349 | -20,048 |
| As % of initial situation | -57.3 | -56.5 | -76.0 |

Source: Comparison of Czech and European indicators and rural development policies, Terplan a.s., 1999, quoted in VUZE 1999.

During the central planning era, it was a requirement for large farms to perform many other activities beyond basic agricultural production. The development of diversified activities (termed subsidiary gainful occupation) was characterised by either encouraging or discouraging political support. The most radical changes took place after 1989, with large numbers of co-operative workers leaving agriculture (mainly from construction groups, transport and handicrafts). Many of these people are now part-time farmers, as they own land producing food for both self-consumption and the retail trade. Their farms are considered SMEs earning 51% of their income from agriculture. This proportion enables them to have access to agricultural support subsidies. A significant expansion in subsidiary gainful occupations occurred in 1997 with the introduction of a new law on the agricultural co-operative system,

which allowed the choice of a broad range of entrepreneurial activities for co-operatives. At present, subsidiary gainful occupations as defined in the agro-census comprise: services to agriculture (crop spraying, sheep shearing etc), meat, fruit and vegetable processing, milling, baking, dairy services, soft drinks and wine production, construction, tourism, business development and transport services.

Czech agriculture retains an unsettled business structure. The existence of a substantial number of agricultural enterprises is threatened due to their excessive indebtedness, over-employment, low liquidity, unprofitability and relatively poor economic performance (around 50% of firms have been operating at a loss with 70% on the brink of bankruptcy) [VUZE, 1999]. Barriers on the input market persist which prevent a faster restructuring process (particularly in the land market where the privatisation of state land is incomplete). However, surplus capacity exists in most sectors of the processing industry, which still lacks investment and new technology. Problems with meeting the EU food safety standards in the processing industry (only 10% of Czech firms are certified according to EU standards) constrain the potential development of new job opportunities in the NFRE. As previously noted, the question as to how many farms have the possibility to generate NFRE incomes is difficult to accurately estimate. Table 7 shows the proportion of firms with subsidiary gainful (non-farm) occupations in selected regions as at September 1995.

Table 7 Enterprises with “subsidiary gainful” occupations in the Czech Republic, 1995

| Region | No. | % | According to the main other gainful occupations | | | | | |
|-----------------|-------|------|---|-------|-------|-------|-------|-----|
| | | | I | | II | | III | |
| | | | Code* | No. | Code* | No. | Code* | No. |
| Central Bohemia | 592 | 13.8 | 014 | 250 | 500 | 154 | 600 | 129 |
| South Bohemia | 466 | 12.8 | 014 | 178 | 500 | 130 | 600 | 92 |
| West Bohemia | 296 | 14.2 | 014 | 121 | 500 | 104 | 600 | 67 |
| North Bohemia | 273 | 12.8 | 014 | 111 | 500 | 90 | 600 | 63 |
| East Bohemia | 747 | 15.9 | 014 | 268 | 500 | 206 | 600 | 162 |
| South Moravia | 1,296 | 21.2 | 014 | 423 | 159 | 263 | 500 | 233 |
| North Moravia | 464 | 12.0 | 014 | 186 | 500 | 130 | 600 | 109 |
| Prague | 18 | 19.1 | 600 | 10 | 014 | 7 | 600 | 2 |
| Czech Republic | 4,152 | 15.4 | 014 | 1,544 | 500 | 1,057 | 600 | 805 |

Source: Agrocensus, VUZE (1995); and Greif, F. (1997) *Off-farm income sources and uses in Transition Economies*, FAO/REU mimeo.

Notes: Shaded areas denote a region in which the agricultural sector is of greater significance than the national average, in terms of gross agricultural production. CSO (1996)

Key:

- 014 Services to agriculture.
- 159 Production of wine, soft drinks.
- 500 Other business.
- 600 Transport.

In the Czech Republic 4,152 (15%) of all 26,904 agricultural entrepreneurs were occupied with agriculture as a main activity with subsidiary activities. Of these, 3,536 (85%) agricultural companies and co-operatives represent the most numerous group [Greif, 1997]. Around 59% of joint stock companies and 58% of co-operatives carry out subsidiary activities. The proportion of non-farm activities of individuals (mainly small private farmers) is considerably lower; around 10% of firms (however for enterprises with over 100 ha of agricultural land this amounts to 24%). These non-farm activities include agricultural services (26% of large firms, 4% for small private farmers), non-farm business (21% of large firms, 2% for small private farmers), followed by transport (20% and 1% respectively) and construction (4% and 0.4% respectively).

Each of the regions shown in Table 7 has distinct differences. The first area (column I) is represented by districts in less favoured areas (LFA), mostly mountain and sub-mountain areas where there are a number of complimentary services to agriculture, as well as transport and other business. Column II, represents a group of districts in Southern Moravia where subsidiary non-farm activities focus on the production of wine and soft drinks. Mining districts in which activities in transport form the third area (column III) and other businesses predominate. In the Czech Republic, besides the traditional subsidiary occupations shown in Table 7 some new activities have appeared. Agrotourism is growing, particularly in mountainous regions where incomes from agricultural production (including forestry) are low and insufficient for most needs. These regions could have a high potential for tourism development.

Table 8 Employment activities in rural CR by gender 1998 (%)

| Activity | Male | Female |
|-------------------|------|--------|
| Active population | - | 73 |
| Agriculture | 58.6 | 12.8 |
| Services | 24 | 41.6 |
| Industry | 23.9 | 37 |

| | | |
|--------------|------|------|
| Construction | 12.4 | 4.7 |
| Banking | 3.9 | 3.9 |
| Others | - | 10.4 |

Source: Horská and Spešná (2000).

Men are still mainly employed in agricultural on-farm activities, whilst women are more involved in RNFE activities. Table 8 summarises the main employment activities of the rural population according to gender. In the Czech Republic, Horská and Spešná (2000) when examining women's employment from the viewpoint of the legal category of the business they worked in, found that most (more than half) employed rural women work in retail trade companies¹⁹: 29% work in joint-stock companies, 16% in limited companies and 6.1% in other firms. 15.7% of rural women work in state and public services, 14.4% of rural women work in state companies, 8.8% in co-operatives, and 8.2% in firms owned by physical persons (the rest, 1.8%, work in other uncategorised forms of non-farm employment). Regarding the rate of employment according to type of ownership, more than half of the rural women sampled work in private firms and almost a third in state firms. Jehle's (1998) study shows that women have on average lower skills and fewer training opportunities than men.

The net wages of agricultural workers were 8,207 CZK (a disparity index of agricultural wages towards the average in the national economy of around 80.4%) and the net wages of agricultural women were 7,173 CZK (the index of wage disparity agricultural women towards women in the overall national economy was 84.5%) (see Horská and Spešná, 2000 for more detail). It is clear that the rural population as a whole is, from the point of view of wages, considerably worse off than their urban neighbours, but also in terms of the gender dimension, rural women are worse off than men.

The EU's Special Accession Programme for Agriculture and Rural Development (SAPARD) programme identifies 22 Czech districts where farmers' incomes are below 80% of the national average. There remains a paucity of data on the financial and employment position of the rural population (particularly differentiated according to gender) in the Czech Republic.²⁰

Jehle (1998) in his survey of 255 rural SMEs found that the main motivation in Prachatice for establishing a firm was the desire for independence and the hope of improving their personal financial situation. In Bruntál, most enterprises were more market oriented and maintained entry was based on a good idea and having identified a good market opportunity (*demand-pull* diversification). The survey identified a lack of money for further investment (particularly small firms regarding poor access to credit) whilst for former co-operatives the most often reported problem was the distance to markets. The firm's location to local and regional markets, the quality of public transportation, and the quality of access to education and housing were also found to be important factors in the location of the firm and its development. Again, the level of education and access to it is important as it appears to be correlated with entry to non-farm SME activity. Jehle (1998) maintains that the Czech education system does not really reflect the business needs of its rural firms and needs to encourage the dissemination of business (management and accounting) skills and also crafts. The Government also needs to place greater policy emphasis on raising the skill levels of its rural population.

One of the main barriers to entry to MSME development in the Czech Republic is the lack of access to finance in rural areas. Zecchini (1997) notes that although financial services and stock exchange boards have developed quite quickly in Prague, they are virtually unavailable for SMEs in rural areas. The financial density of banks in the Czech Republic is also low and there is evidence of risk aversion vis-à-vis rural SME clients due to a lack of information about them or experience in dealing with them. In Jehle's (1998) study, he found that 11% of his respondents encountered significant financial problems (largely liquidity constraints), 25% felt that they could no longer survive due to financial problems, only 10% of the sample maintained that they encountered no financial problems. Around 41% of the Bruntál enterprise sample had acquired credit, whilst only 10% of the Prachatice sample had acquired

¹⁹ The major owner of some trade companies may be the state.

²⁰ The authors found no data on unemployment trends in rural areas, i.e. villages of up to 2000 inhabitants.

credit. The reasons for this are that most of the sample felt that interest rates were too high or they lacked sufficient collateral to access credit.

SME support in transition economies is generally designed according to different underlying concepts in SME promotion; governments and donors tend to follow either a more direct or indirect approach [Jehle, 1998]. In the Czech Republic much of the assistance is targeted through a direct approach, due to a preference for solving the individual businesses financial problems rather than implementing appropriate policies to strengthen the banking system - which would be an indirect approach – by for example introducing special credit lines for SMEs. While the indirect support is seen as being more effective for the long term, the companies may benefit more from the short-term assistance.

Jehle (1998) notes that the Czech Republic has emphasised broad support for enterprise development, instead of focusing on economic development in regional terms. The government established an institutionalised form of assistance. Programmes were established which covered financial assistance, business advisory services and certain types of industrial parks. The government has concentrated most of its NFR enterprise creation efforts on financial support, including grants, guarantees and subsidies. They cover support, ranging from grants to loan guarantees and foster new investment projects in enterprises whose business plan fulfils certain profitability criteria.

The programmes are available nation-wide and target particular sectors or promote particular activities. There are two main programmes (REGION and ROZVOI) focusing on problem regions. The REGION and ROZVOI programmes became a core element of the government's efforts to combat unemployment through the creation of small business.²¹ Most of the respondents to Jehle's (1998) survey did not know of the existence of either of these institutions. Overall it could be argued that the network of assistance is reasonably well developed for industry but is patchier for rural SMEs.

In terms of benefits accruing to individual firms and households from programmes promoting new entrepreneurial activity, as a subsidiary gainful occupation there may be a positive impact through increased or more stable household incomes. The Czech Republic has taken important steps forward in establishing NFRE SME supportive programmes and guidelines, however there remains some doubt as to whether the necessary "enabling environment" exists.

In many parts of the Czech Republic, basic problems with infrastructure, poor utility services and low skill levels militate against the successful development of the sector. The quality of the road infrastructure is difficult to assess, but it is clear that the network of roads of class II and III and virtually the total network of local roads have been neglected and require costly repairs and reconstruction [VUZE, 1999].

Rural areas in the Czech Republic have a marked disadvantage in terms of the level of rural infrastructure, with telecommunications and gas supply being the types of infrastructure in which rural areas are most notably deficient (see Table 9). Municipalities in the Czech Republic are comparatively well financed relative to slower-track economies, having enjoyed access to long-term credit since 1993 [World Bank, 1999], which should indicate improved levels of financing for infrastructure and services. However, Czech municipalities face a lack of revenue autonomy, and the share of non-commercial credit versus commercial credit in total municipal borrowings since 1994 has increased (ibid.). This situation, combined with the definition of 'rural' in official Czech statistics - which as 'settlements with less than 2,000 people' leads to relatively more favoured rural towns being excluded - may go some way to explain the rural-urban differences highlighted in Table 9.

²¹ There is support for initiatives to establish local credit guarantees for venture capital programs in regions undergoing serious problems of unemployment and restructuring.

Table 9 Infrastructure in Rural and Urban Areas of the Czech Republic 1998

| <i>Indicator</i> | <i>Territorial unit</i> | | |
|---------------------------------------|-------------------------|----------------|--------------|
| | <i>Czech Republic</i> | <i>Regions</i> | |
| | | <i>Rural</i> | <i>Urban</i> |
| No. of Municipalities in 1998 | 6244 | 5943 | 301 |
| Share of permanently used flats with: | | | |
| - water supply system | 89% | 98% | 99.5% |
| - sewerage | 68% | 63% | 82% |
| - gas | 50% | 43% | 70% |
| - telephone | 30% | 23% | 50% |
| Share of municipalities in 1998 with: | | | |
| - water supply system | 76% | 75% | 92% |
| - sewerage system | 26% | 25% | 38% |
| - gas | 31% | 30% | 63% |

Source: Comparison of Czech and European indicators and rural development policies, Terplan a.s., 1999, quoted in VUZE 1999.

Clearly sewerage and gas supply deficiencies in rural areas need to be addressed. The expansion of the gas supply and thus the consequent reduction in electrical energy and fossil fuel consumption for domestic heating should provide important environmental benefits and assist compliance with EU directives on pollution. Transport accessibility is also an important factor in the development of viable NFRE opportunities, labour mobility, the development of local health services and rural industries. The state of the rural road network is difficult to assess, as most regions have requested road repair funds (see VUZE, 1999). However, discussions with key stakeholders (ministries, academics, rural dwellers etc) suggests that there is an urgent need to improve the neglected network of rural roads in the Czech Republic. Most repairs and upgrading has been neglected due to the high costs of these investments. As part of the EU's Instrument for Structural Policies for Pre-Accession (ISPA) programme for the Czech Republic, long distance transport is to be addressed, and the programme recommends that the construction and repairs of rural roads (particularly those linking villages) is given national priority to meet rural needs. Although telephone density in the rural areas of the Czech Republic is quite low, and the quality of service provision and technological infrastructure is in need of upgrading (construction of digital cable and transmission networks) it is not a national priority. However, the development of improved telecommunications infrastructure will be important for rural areas in developing NFRE opportunities (particularly SME development) and is thus an important regional priority.

One of the most important determinants of whether farm households continue in, or take-up subsistence farming rather than shifting to NFRE activities, is the extent to which retirement and unemployment benefits meet the cost of living. In the Czech Republic, large-farm restructuring preceded enterprise restructuring in other sectors of the economy, which eased the outflow of labour from agriculture. However, delayed restructuring of the non-agricultural enterprises combined with cuts on redundant labour may put agriculture under pressure to absorb part of the labour or, at least, slow down further rationalisation of labour input on large farms.

6. RURAL NON-FARM DIVERSIFICATION IN ROMANIA

6.1 RNFE activities in Romania

This section of the paper is largely based on data collected during 1996-1998, of which the Romanian non-farm sector was a component of a comprehensive survey conducted as part of an EU PHARE-ACE research project on the Romanian Rural Financial Market Development for the Small Private Farm Sector²². Overall, 72 rural micro and small-medium sized enterprises (MSMEs) in the counties of Brasov and Dolj were interviewed using a questionnaire that consisted of several modules: socio-economic, financial performance, financial services, infrastructure and problem modules. The MSMEs interviewed comprised processing and production activities as well as retail, trade, repair, equipment shops and bakeries. It is clear that the non-farm MSME sector is very heterogeneous, comprising activities with a wide range of labour and capital productivities. The MSME size with respect to labour-force ranges from 1 to 210 employees (the average was 11) and with respect to equity capital varied between 4.2 million to Lei 1,060 million (7,168 Lei=1US\$ in 1997 = US\$ 585 to US\$ 147,879).

Unemployment in Romania is increasing, with the rate rising from 6.6% to 8.8% during the period 1996-1997. Among the regions in our survey, the largest increase was observed in Brasov, where unemployment rose from 4.1% in 1996 to 8.6% in 1997. Whilst employment levels fell by 25% between 1990 – 1995, the private agricultural sector experienced a growth in its labour force. By 1997 agricultural sector employment was 108.7% of its 1990 level (the equivalent figure for the industrial sector was 60.4%) (see Table 10). During the same period agricultural production increased by around 5.6%, however the agricultural labour-force grew at 8.7% [NCS, 1998]. Similarly, in 1997 Romanian agriculture accounted for around 37% of the total labour-force, but the sector only contributed 18.8% to GDP [EBRD, 1998]. Therefore, agricultural productivity in Romania is declining. Although there has been a small net outward migration from rural to urban centres the current employment situation is forcing the agricultural sector to assume the role of buffer, which is resulting in widespread and increasing (hidden) underemployment. The increase in the supply of rural labour shows large regional variations with peri-urban areas being most affected.

²² EU PHARE-ACE research grant P95-2170-R Romania: Rural Financial Market Development for the Small Private Farm Sector. . Brasov is a mountainous region located at the heart of Romania with primarily small private individual farmers. Dolj is a flat dry area in the south-west of Romania with many family farm associations with a legal classification (i.e. usually co-operatives that have emerged from state farms). See Davis and Gaburici (1999) for a full description of the survey methodology.

Table 10 Number of employed persons ('000.)

| | 1990 | 1997 | Level of employment in 1997 compared to 1990 in % |
|----------------|----------|---------|---|
| Romania | | | |
| Total | 10,840.0 | 9,022.7 | 83.2 |
| Agriculture | 3,055.0 | 3,322.1 | 108.7 |
| Industry | 4,055.0 | 2,450.0 | 60.4 |
| Timis | | | |
| Agriculture | 90.7 | 101.1 | 111.5 |
| Industry | 148.7 | 85.6 | 57.6 |
| Dolj | | | |
| Agriculture | 155.6 | 144.7 | 93.0 |
| Industry | 105.0 | 61.0 | 58.1 |
| Brasov | | | |
| Agriculture | 43.9 | 42.1 | 95.9 |
| Industry | 173.7 | 126.7 | 72.9 |

Source: National Commission for Statistics (1996 & 1998).

In Romania, the active rural population is around 4.6 million (45% of the total rural and urban population) most of whom work in the agricultural sector. In most regions, the remaining rural population consists mainly of elderly people, the demographic balance having been altered due to out-migration. The worst affected villages are mainly located in mountainous regions (e.g. Brasov) but also in distinct plains areas (e.g. Timis and Dolj). In Romania, the farming population is not young: in two-thirds of the households the average age of the adults is over 50, and in one-third over 65 years. In 1996, the number of elderly people living in rural areas was 2.3 million, approximately 66% of the elderly in Romania.

As previously noted, one of the most important determinants of whether farm households continue in, or take-up subsistence farming rather than shifting to RNFE activities, is the extent to which retirement and unemployment benefits meet the cost of living. In Romania, pensions have been falling faster than wages, making it necessary for households to complement their retirement benefits with incomes from household plots, small farm and increasingly non-farm activities. In contrast, in Hungary, a country characterised by a strong outflow of labour from agriculture, generous early retirement schemes encouraged older workers to leave on-farm employment.

*Table 11 Employment activities in rural Romania 1998 (Brasov, Dolj, Timis)*²³

| <i>Activity</i> | <i>Male</i> | <i>Female</i> | <i>Total</i> | <i>% of Active Population.</i> |
|---|--------------|---------------|--------------|--------------------------------|
| Total Population | 25,758 | 27,728 | 53,486 | - |
| Active population | 9,304 | 9,601 | 18,905 | - |
| Agriculture (farmers) | 6,396 | 6,800 | 13,196 | 69.8 |
| Trade (Merchants) | 233 | 245 | 478 | 2.5 |
| Teachers | 208 | 299 | 507 | 2.7 |
| Engineers & technicians | 220 | 121 | 341 | 1.8 |
| Medical Profession | 32 | 30 | 62 | 0.3 |
| Veterinarians | 15 | 9 | 24 | 0.1 |
| Sanitary personnel | 53 | 105 | 158 | 0.8 |
| Pharmacists | 4 | 16 | 20 | 0.1 |
| Public servants | 210 | 172 | 382 | 2.0 |
| Private employees | 125 | 118 | 243 | 1.3 |
| Handicraftsmen (Guild). | 542 | 180 | 722 | 3.8 |
| Seasonal labour (unqualified) | 845 | 545 | 1,390 | 7.4 |
| Other employment activities | 1,966 | 1,523 | 3,489 | 18.5 |
| Non-farm rural employment | 4,453 | 3,363 | 7,816 | - |
| Non-farm rural employment % of active population | 48% | 35% | 41% | - |

Source: Romania: Rural finance survey 1997/98; Own data.

The basis of the rural economy is agriculture as there are few alternative significant sources of income, although RNFE activities accounted for around 41% of the active population's activities in our survey of employment activities in rural Romania (1998) based on three counties (see Table 11). Around 41% of the sample had some RNFE full-time or secondary employment (farming as a primary and RNFE secondary activity 10% and RNFE only 31%). These include seasonal/ temporary (unqualified), handicraftsmen, public sector and trading activities (see Table 11).

As previously noted, rural – urban migration has been highly selective with the watershed traditionally being entry into secondary education. Among the interviewed non-agricultural enterprises in Brasov and Dolj the education and vocational training level of the entrepreneurs clearly lies above the average level for the counties, as the figures in Table 12 reveal. These figures support the importance of education and vocational training for entrepreneurial economic activities. Compared to the national average, non-farm entrepreneurs more often have a high school degree and/or a university degree. Thus for the establishment, development and promotion of non-farm MSMEs in rural areas, the general and vocational education levels play an important role.

²³ The data presented in Table 7 is taken from a community level survey of 7,816 respondents in Brasov, Dolj and Timis conducted in 1997 as part of an EU PHARE-ACE research grant P95-2170-R Romania: Rural Financial Market Development for the Small Private Farm Sector project (see Heidhues et. al 1998a).

Table 12 Level of education per county, 1997 (%)

| | Secondary school | High school | Vocational training | Higher education |
|--|------------------|-------------|---------------------|------------------|
| Counties 1997 | | | | |
| Timis | 40 | 32 | 10 | 17 |
| Dolj | 42 | 33 | 7 | 18 |
| Brasov | 35 | 25 | 7 | 33 |
| Interviewed non-farm entrepreneurs 1997 | | | | |
| Timis | 22 | 37 | 22 | 20 |
| Dolj | 5 | 62 | 19 | 14 |
| Brasov | 7 | 61 | 7 | 25 |

Source: National Commission for Statistics (1998); Own data

Note: Vocational training normally follows the secondary school degree.
The figures may not add up to 100 due to rounding.

In our non-farm MSME survey there are two clearly identifiable groups of non-farm activities:

- (i) low labour productivity activities serving as a residual source of employment (e.g. trading and handicrafts activities); and
- (ii) high labour productivity activities (processing, manufacturing etc.).

Table 13 lists the main non-farm rural enterprise activities (by gender) in Brasov and Dolj (1997/1998) as identified by respondents to our non-farm MSME survey. Most activities are concentrated in direct trading (stores, public houses, soft drinks) and retail trade (bakeries, confectioners, restaurants), which comprise 63% of all non-farm MSME activities. Most of these activities have relatively low barriers to entry. The gender dimension of these activities is often very important both for total household income and intra-household labour allocation. The number of female entrepreneurs involved in RNFE activities may be under-reported because, as can be seen in Table 11, women play a significant role in the sector, but may not be either interviewed or not be recognised as the manager of the enterprise (for social reasons) despite being central to the MSME's operation. Men may be more likely to be the named manager of an enterprise.

Table 13 Non-farm rural enterprise activities (by gender) in Brasov and Dolj (1997/1998)

| | Brasov | | Dolj | | Entrepreneurs | | Total (%*) |
|----------------------------|-----------------------|-------|-----------------------|-------|---------------|--------|---------------|
| | Enterprise activities | | Enterprise activities | | Male | Female | |
| | Nos. | % | Nos. | % | Nos. | Nos. | Nos. |
| Trade (incl. agro-tourism) | 12 | 41.4 | 21 | 46.7 | 25 | 7 | 32 (44%) |
| Agricultural services | 1 | 3.4 | 2 | 4.4 | 3 | - | 3 (4%) |
| Retail trade | 5 | 17.2 | 9 | 20.0 | 13 | 1 | 14 (19%) |
| Manufacturing | 1 | 3.4 | 3 | 6.7 | 4 | - | 4 (5%) |
| Non-agricultural services | 1 | 3.4 | 7 | 15.6 | 7 | 1 | 8 (11%) |
| Agri-processing | 3 | 10.3 | 1 | 2.2 | 3 | 1 | 4 (5%) |
| Industrial processing | 3 | 10.3 | 2 | 4.4 | 4 | 1 | 5 (7%) |
| Handicrafts | 2 | 6.9 | | | 2 | - | 2 (3%) |
| Others | 1 | 3.4 | | | 1 | - | 1 (1%) |
| Total | 29 | 100.0 | 45 | 100.0 | 62 | 11 | 73 (100%) |

Source: Romania: Rural finance survey 1997/98; Own data.

Key: (%*) Percentage of RNFE enterprise activities of MSME survey sample total.

Most firms in the survey (69%) employed fewer than 5 persons and many depend on family labour (see Table 14). Most firms in this group are involved in low labour productivity activities serving as a residual source of employment. Lanjouw and Lanjouw (1997) maintain that RNFE MSMEs should contribute to rural employment because they are generally more labour intensive, and face lower labour and higher capital prices which correspond more closely to the true relative scarcities of inputs in rural areas. As the relative factor proportions are more “appropriate” the development and start-ups of MSMEs in rural areas should be encouraged [Lanjouw and Lanjouw, 1997]. We found some evidence of this among our surveyed respondents in Romania.

Table 14 Firm size and family labour use

| | Firms | | Nos. Employing Family Members | | |
|--------------------|-------|-------|-------------------------------|-----|-------|
| | Nos. | % | 1 to 2 | 3-6 | Total |
| Firm size (<5) | 51 | 68.9 | 12 | 3 | 15 |
| Firm size (6-10) | 12 | 16.2 | 3 | 5 | 8 |
| Firm size (11-30) | 4 | 5.4 | 1 | 1 | 2 |
| Firm size (31-100) | 2 | 2.7 | 1 | - | 1 |
| Firm size (>101) | 5 | 6.8 | 1 | - | 1 |
| Total | 74 | 100.0 | 18 | 9 | 27 |

Source: Romania: Rural finance survey 1997/98; Own data.

The main reasons for starting a RNFE enterprise in our sample were:

- a desire to utilise a potential opportunity to diversify to preserve the financial security of the individual or their family; and
- the identification of a favourable economic environment locally or regionally for the particular service or product identified by the entrepreneur (namely *demand-pull* factors).

A lack of capital, family tradition or unemployment (a *distress-push* factor) seem to be minor factors in determining entry to RNF enterprise start-up.²⁴ However, the survey only captures those entrepreneurs that have successfully

²⁴ The authors conducted statistical tests of significance relating factors motivating RNFE enterprise development to human, physical and financial capital indicators. These proved to be statistically insignificant and are therefore not presented.

diversified. It does not consider non-diversifiers or the reasons that underlie their behaviour e.g. social capital issues, risk aversion, barriers to entry or those who diversified and failed (MSME exit).

Previous work by Heidhues, Davis and Schreider (1998) on small private farmers in Romania found that significant access constraints to credit existed and affected the financial viability of farms and their potential to diversify into non-farm activities. Similarly, in the survey of RNFE MSMEs it was found that access to finance is an important issue to the development of non-farm MSMEs. 50% of the MSMEs interviewed in Timis had access to formal loans, however only around one-fifth of the MSMEs in Brasov and Dolj sample had access to loans. It was found that access to finance and the level of the managers' education (i.e. human capital factors) are key elements of successful non-farm diversification, MSME development and entrepreneurship.²⁵

Breitschopf and Schreider (1999) in their study of rural development in Romania (utilising the Brasov and Dolj sample of the same dataset) found that inputs, institutions, infrastructure, and innovation²⁶ have an enormous influence on MSME incentives (measured as capital productivity and revenues). The findings of their regression analysis were:

1. That capital is not yet the constraining factor for MSMEs in rural areas. As their marginal return of capital is low, the MSMEs operate either inefficiently, or they have to deal with other constraints such as lack of raw materials. Further, the MSMEs might face an inefficient factor allocation.
2. That a high capital efficiency leads to sufficient liquidity and not vice-versa.
3. The combined positive impact of labour input and employee training on capital efficiency as well as the high level of education of MSME managers reveals the major bottleneck, namely the need for qualified education and vocational training.
4. Neither infrastructure (although the quality was positively evaluated by the majority of the respondents) nor contacts with institutions show significant values.

Besides development obstacles that may be associated with access constraints due to a lack of financial, social and human capital, our survey respondents identified other bottlenecks. For example, insufficient road, communication and market infrastructure, and widening gaps in the relative prices. Apart from these bottlenecks, deficient price information systems, and a lack of extension and other consulting services offering technical expertise, represent impediments for potential entrepreneurs and existing MSMEs.

As most of the new rural MSMEs in Romania are in their infancy, the government is currently considering a number of potential interventions: investment grants for rural entrepreneurs starting or developing a business; and the subsidisation of start-up activities provided by small business development centres or business incubators for the benefit of rural MSMEs (see Chirca and Tesliuc, 1999). In Romania, but also most of the other CEECs, some of the social problems related to agricultural reform, such as over-manning or high hidden unemployment, an ageing rural demographic structure, low incomes and rural depopulation need to be addressed by an effective "job creating" rural development strategy which helps retain and usefully employ the younger rural population.

²⁵ The authors also found some evidence of minor statistical correlation between education and access to credit.

²⁶ Innovations in Breitschopf and Schreider's model is defined as the training of employees and utilised as an indicator of access to information on innovations, as a dummy variable.

7. POLICY OPTIONS FOR THE RNFE IN CENTRAL AND EASTERN EUROPE

7.1 Lessons Learned From *Fast* and *Slow-Track* Accession States

To date for most multilateral donors, the single most promising way of achieving greater RNFE improvements (particularly in income and equity) has been to put emphasis on employment and on promotion of MSMEs. Many donors and non-governmental organisations (NGOs) have placed great emphasis on MSME promotion and credit provision to MSMEs as the core of their non-farm rural employment interventions in both transition economies. In rural areas disguised unemployment in the agricultural sector due to declining productivity should lead to a shift into the non-farm rural sector. However, market failure in transition countries has often led to the misallocation of production factors resulting in excessive rural labour market stress because of:

- the slow expansion of the private sector which could absorb the excess labour (from disguised unemployment in the private agricultural sector)
- low formal qualifications and high average age of the agricultural labour force
- high market transaction costs for goods, services and production factors
- mobility constraints, which are augmented by shortages on the housing market

The case studies in the Czech Republic and Romania show that education and the lack of working capital are key elements for non-farm MSME development and entrepreneurship. Besides development obstacles that may be associated with access constraints due to a lack of financial, social and human capital, there are other infrastructural, communication and institutional bottlenecks. Even in a fast-track accession country such as the Czech Republic, the level of rural infrastructure is significantly lower in rural areas than in urban areas (Davis and Pearce, 2000). This may have a detrimental effect on the competitiveness of rural firms (including farms) and on the opportunities for income diversification into non-farm activities.

In the Czech Republic, despite some progress with the development of a number of business assistance programmes, there has been a piecemeal approach to the development of an integrated rural development strategy and a lack of awareness of the potential role of MSMEs in promoting economic development (see Davis and Pearce, 2000 for a fuller discussion). In both the Czech Republic and Romania, technical assistance in terms of adequate extension and consulting services which support MSME development and diversified (income generating) non-farm activities both regionally and nationally need to be developed. It is hoped that some of the policies and institutions being established in the Czech Republic as part of the SAPARD programme (e.g. training courses for SAPARD, rural business development and training consultants nation-wide) will be adopted by Romanian authorities. The Czech Republic has a more developed regional advisory and information service centre network than Romania, but this can still be improved. The Czech Republic has quite significant regional differences and has probably made more progress than Romania in addressing this from a regional development perspective.

In both countries, entrepreneurs would appear to have been motivated to enter the non-farm sector for similar, mainly *demand-pull* reasons. Unemployment among other *distress-push* factors seems to play a lesser role in determining entry to RNF enterprise start-up. However, there has been very little empirical investigation of these issues. Moreover, the informal enterprise sector is generally overlooked or under-represented in official data and surveys, due to many informal enterprises being unregistered, based in the household or in temporarily rented space, or not reported during surveys due to their small size or their unofficial nature. Reasons for temporary migration to find paid employment may also be relatively hidden, as remittances are likely to be under-reported due to their unofficial nature and due to poorly developed or unreliable banking systems for effecting international transfers of funds.

In both Romania and the Czech Republic, the lack of available skilled labour (particularly in “traditional” rural areas), as well as capital appears to be a constraint on RNFE entrepreneurial activities (see Davis and Pearce, 2000). Those RNF activities that may have a good chance of commercial survival include agro-tourism, (increasingly) trade and retail, and the tendering out of public utility services (as many of these remain municipally owned).

There is a scarce availability of data on diversification in the CEECs and inconsistent statistical classification of these activities across the region. More data and information needs to be generated about the nature of CEEC non-farm activities, part-time farming, side-line activities and non-farm income across the agricultural sector. This will inform the development of appropriate rural development objectives and planning measures for both on-farm and non-farm enterprises and households.

7.3 Policy and Institutional Environment Conducive to RNFE Development

Governments have a key role to play in supporting the development of RNF enterprise activity. Key means through which the government can support rural enterprise development are ensuring that the legal and judicial system supports low-cost contract enforcement, and ensuring that the policy 'playing field' is level in terms of ease of registration, taxes, and investment incentives for small as well as large enterprises [Levitsky, 2000]. The government can also play an important role in promoting a socio-cultural context that values entrepreneurship. In this context a more open and positive attitude towards the informal enterprise sector needs to replace a more prevalent negative attitude that tends towards over-regulation and control rather than measures to support such enterprises and to assist them in joining the formal sector.

It is important that biases at the economic policy level be removed (e.g. distortions in capital markets caused by government intervention in interest rates and socially-owned agricultural land). Effectively functioning markets will provide the correct signals to encourage investment and specialism in areas of comparative advantage, will promote the development of the private farm and non-farm sectors, and will encourage the efficient and realistic allocation of financial resources. Incentive-distorting measures that have been implemented to support the rural economy should be removed, except perhaps where it can be shown to be compensating for past deficiencies that have impeded growth in key economic areas. With respect to the remoter rural areas, policy reforms are needed to encourage mobility, promote deeper and less fragmented rural markets, and better target social assistance.

Factors acting as a constraint to the development of the private farm sector, such as poorly developed or inefficiently functioning financial markets, and lack of market information, should be recognised as also affecting the growth of the non-farm sector. Rural financial service provision is key to both the farm and non-farm sector, and it may be that a healthy non-farm sector attracts financial service providers who would otherwise have been put off by the increased risks and complications of agricultural credit. The World Bank is now shifting from lines of credit through banks toward the creation of interim sustainable non-bank intermediaries and toward addressing the reasons why private banks do not lend to rural areas (World Bank, 2000). Appropriate non-bank intermediaries can include finance companies, savings and credit associations, and even NGOs (depending on the legal and regulatory framework of each country). Measures to address the lack of rural financial institutional structure include: reforms to the legal framework to recognise non-mortgage collateral, strengthening of the court system to speed up default and debt collection proceedings, development of leasing laws, revisions of the financial sector regulations, and strengthening of banking supervisory agencies.

Institutional reconstruction is needed to mitigate market and government failures and to complement opportunities offered by the market. However it should be noted that institutional change takes time and cannot be implemented in an abrupt way, with more direct interventions needed in the meantime. RNFE development strategies should not only provide incentives for the rural population to engage in profitable non-farm rural employment activities but should also be based on a consensus among interest groups involved in or by the reform process. Consensus and credibility help form a strong base for successful reforms.

7.4 Infrastructure and Services

A minimum level of efficiently functioning infrastructure is necessary to enable non-farm activities in rural areas to develop and thrive. Transport accessibility plays an important role in the development of local industries as well as agriculture. Improved access in rural areas opens up potential new markets, improves the viability of rural service activities, and introduces higher levels of competition. While this can lead to a stronger and more productive enterprise sector, the pressure to specialise and consolidate in order to compete beyond the local area will lead to some firms thriving while many others fare less well.

The lack of adequate social safety nets, infrastructure, and suitable education opportunities in remote rural areas are clearly areas in which increased investment and attention is needed. This will help promote the development of the RNFE and the private sector, and over time redress the imbalance between urban and rural areas. Also, attention should be paid to the type of employment creation being promoted in the rural non-farm sector, i.e. low-skilled and relatively poorly paid, or more highly-skilled and specialised jobs.

The provision of public services and infrastructure to rural areas is key to attracting investment and promoting MSME development. Population centres in rural areas can constitute key growth points. Enterprise support measures may include: business incubators, phased financial assistance to start-ups, advisory and networking centres, and training and consultancy services for MSMEs. The needs of MSMEs and small farms could also receive priority in publicly funded agricultural research and extension. However the accepted role of government in the provision of enterprise support services is changing, with the ideas of *subsidiarity* and *core competence* gaining prominence. In this context these concepts essentially translate as 'who can do what best', meaning that responsibility is delegated to the lowest possible level and that government should focus on its own unique role (rather than getting involved where private sector markets should operate) [Gibson, 2000]. Governments need to shift from a model of direct service provision, through such mechanisms as chambers of commerce and state-run business centres, to more innovative models of service provision in partnership with the private sector (consultancy firms, marketing firms etc) and with civil associations (NGOs, entrepreneur associations etc). Business centres, for example, can be run on a commercial basis, with flexible and demand-responsive services offered and (affordable) pricing structures introduced. In remoter rural areas and economically depressed rural settlements the government may have to play a more active role due to a lack of interest and presence of the private sector and due to low levels of demand for services, but civil associations could still play a key role.

Emerging trends in the provision of rural infrastructure with relevance to policy are: (i) private contractors and local communities taking key roles as implementers and managers of infrastructure at a local level, and (ii) employing labour-intensive methods in infrastructure projects, in recognition of the important stimulus to the economy of rural areas that such employment may provide. Solving the issue of financing for rural municipalities in poorer CEECs or in economically depressed regions is a difficult issue. Where rural social services and infrastructure have been transferred to the municipalities in the context of decentralisation processes, the question of financing is in many cases not fully resolved. In the faster-track accession countries effective fiscal and administrative decentralisation processes, private sector activity, and a decline in unemployment has led to improved ability of rural areas to provide social services and infrastructure. However in the slower-track accession countries rural infrastructure, such as roads, sewage, telecommunication and social services, remains in a dilapidated state. While the development of municipal debt markets is important in providing municipalities with commercial sources of credit, central government transfers and external donor support may have to play a role in less favoured rural municipalities.

Barriers to entry to employment in the RNFE need to be addressed. Vocational training improvements should be utilised to assist those within agriculture to shift to other jobs or in the case of children from farms to have sufficient skills to avoid having to enter the agricultural sector. Job clubs can provide local-level mechanisms for facilitating access to relevant vocational training.

Equity considerations logically imply the full participation of poorer people in rural policy formulation processes. They need to be consulted on the priorities for public investments from which they are expected to benefit or through taxation help finance. It is therefore important that methods are used or developed whereby this participation is facilitated both prior to a rural non-farm development project or intervention and through subsequent evaluations of it.

7.5 Policies that foster positive linkages with the agricultural sector

In order to foster the positive linkages between the farm and non-farm sectors that have been outlined in this paper the following general policy recommendations relate to agricultural support policies:

- the removal of distortions to rural markets (including the land markets, produce markets, financial markets, and so on) resulting from government policies or subsidies
- concerning the agro-processing sector, privatisation would promote competition within sectors, and should at the same time encourage investment
- policies that favour the farm sector at the expense of the non-farm sector may be detrimental to the development of the rural economy and the livelihoods of those dependent on it.

7.6 Decentralisation Enabling A Positive and Active Role For Local Government

Decentralisation of government functions to the district level is key to facilitating responsiveness in decision-making to specific local conditions, and thereby helping ensure better distributional characteristics. Decentralised decision-making may indeed be necessary due to the heterogeneity of the rural non-farm sector providing little scope for general broad policy descriptions (see Lanjouw, 1999). However, this process must be accompanied by capacity building of local government, local-level democratisation, and the transfer of fund-raising powers from the centre.

In a comprehensive study of decentralisation policies made by Bardhan and Mookerjee (1998), they found that decentralisation is more effective in providing services if the following four conditions are satisfied:

1. local governments are not vulnerable to capture
2. local governments have access to adequate local financing sources
3. there are no inter-jurisdictional externalities in service provision, and
4. local governments have all the bargaining power and access to relevant cost information vis-à-vis public enterprise managers.

If any of these conditions is absent, then decentralisation may actually perform worse than a centralised system.

CONCLUSIONS

The RNFE in the CEECs has an important role to play in promoting the transition to a market-led rural economy, accession to the EU and the development of rural areas. The non-farm sector has the potential to absorb excess labour from the agricultural sector and urban-rural migration; contribute to income growth and promote a more equitable distribution of income; and enhance the economic viability of rural towns and villages. The relationship between the farm and non-farm sectors takes many forms, but on the whole is a beneficial one, with positive income and expenditure multiplier effects promoting a more viable rural economy. The RNFE also enables rural households to diversify income sources, smooth income streams, and more effectively manage risks.

From the country case studies it can be implied that RNFE activities in accession countries in the region are usually market-based and trade-driven. Therefore, appropriate rural development strategies and policies should be market biased, e.g. oriented towards small-scale agro-industries, agro-processing, business services, marketing, trade and financial services. Enterprise support services to promote RNFE activities should be based on marketing principles, responding in a low-cost and flexible way to identified needs and demands for services by MSMEs. Government and donors should seek to promote the role of the private and civil sectors in providing enterprise support services, acting as a facilitator rather than as a service provider where feasible. In both fast and slow track countries effective support of the RNFE requires co-ordination between sectors through established mechanisms and linkages. Therefore, the development of the RNFE:

- requires operational links between institutions (e.g. ministries) and organisations (e.g. development banks, commercial service providers); and
- requires that Government play an enabling role creating linkages between partners, not separating them and locking them into “sectors” and “departments”.

There are both considerable challenges and considerable opportunities for rural areas in the CEECs in the context of the EU accession process. Enterprises face the opportunity of potential new markets and the challenges of increased external competition and compliance with EU import grades and standards. In order to adapt successfully a minimum level of rural infrastructure and the provision of enterprise advisory and support services are needed. Investment in education, the elimination of market distortions, and continued privatisation and demonopolisation is needed for economic growth in the non-farm sector to be equitable and to benefit the rural poor. Opportunities to earn remittances from employment in the EU should increase, and the banking sector needs to develop internal payments transfer mechanisms and to improve their attractiveness to depositors in order for these funds to indirectly benefit the rural economy through increased bank lending and a strengthened rural banking sector. Investment in property and

land for leisure use in those countries bordering the EU will increase, dependent on personal and investor security being assured, transport infrastructure ensuring accessibility, and utilities such as telecommunications and electricity being sufficiently well developed. Key policy issues for CEECs in the context of EU accession include the financing of necessary investments in less favoured rural areas, building an institutional environment conducive to enterprise growth and poverty reduction, and ensuring positive results from decentralisation processes.

REFERENCES

- Barrett, C., and Reardon, T. (2000) *Asset, activity and income diversification among African agriculturalists: some practical issues*, (unpublished mimeo).
- Breitschopf, B and Schrieder, G. (1999) Rural development in transition economies – The case of two counties in Romania, *48th International Atlantic Economic Conference*, Montreal, October 7-10, 1999.
- Chirca, C., and Tesliuc, E (eds.) (1999) *From rural poverty to rural development*, World Bank and National Commission of Statistics.
- CSO. (1996) Regional Portraits. Series 24. *Regional Statistics*. Czech Statistical Office.
- Davies, A.S., Slee, W. and Tisenhopfs, T. (1997), *Social and Economic Conditions in Rural Latvia* - a Report for the Government of Latvia and the World Bank.
- Davis, J. R. (1996) From Informal to Formal Markets, What Does This Really Mean? *The Journal of Comparative Economic Studies*, Spring Issue, vol. XXXVIII, 1996.
- Davis, J. R. (1997) Understanding the Process of Decollectivization and Agricultural Privatization in Transition Economies: The Distribution of Collective and State Farm Assets in Latvia and Lithuania, *Europe-Asia Studies*, vol. 49, no. 8, December 1997.
- Davis, J. R. (1997a) Agricultural Reform During Transition: A synopsis of recent developments and future prospects, *MOCT-MOST: Economic Policy in Transitional Economies*, Vol.7. No.4, 1997.
- Davis, J. R. and Gaburici, A (2000) The Determinants of Private Farmers' Access to Credit in Romania. (unpublished mimeo).
- Davis, J. R. and Gaburici, A., (1999). The economic activity of private farms in Romania during transition, *Europe-Asia Studies*, Vol. 51, No. 5, 1999 pp.843-869.
- Davis, J. R. and Pearce D. (1999). *The rural non-farm sector in transition economies*, background report, NRI unpublished mimeo 1999.
- Davis, J. R. and Pearce D. (2000). *The Rural Non-farm Economy in Central and Eastern Europe: Characteristics, Importance and Policies*, forthcoming NRI Socio-economic Policy Series Discussion paper.
- Davis, J. R., Robinson, E., and Marsland, N. (2000) *Participation of the poor in the Rural Non-Farm Economy: Conceptual and Practical Considerations*, forthcoming NRI Socio-economic Policy Series Discussion paper.
- de Janvry, A., Fafchamps M., and Sadoulet, E., (1991), Peasant Household Behaviour with missing markets: some paradoxes explained. *Economic Journal*. 101, 1400: 1417.
- EBRD. (1998/1999) *Transition report update*. London, UK: European Bank for Reconstruction and Development.
- EC (1997) Situation and outlook - Rural developments. CAP 2000 Working Documents. Brussels, B: European Commission (EC), DG VI.
- Ellis, F., (1999), *Rural livelihood diversity in developing countries: evidence and policy implications*. Natural Resource Perspectives, Number 40 (April). London: Overseas Development Institute.

- Erjavec, E., and Juvancic, L. (1998). *Policy reform and labour adjustment: the case of Slovenia*. OECD Meeting of the expert group on agricultural policies in non-member countries, Paris 1998. (mimeo).
- EU and Government of Romania. (1999). Rural development in Romania. Green Paper. Brussels, B and Bucharest, Ro: European Union (EU), Phare Program and Government of Romania, Ministry of Agriculture and Food.
- Gibson A. (2000). *Business Development Services Market Development: A Guide for Agencies*, Springfield Centre, UK, Draft.
- Gordon A. (1999). *Non-Farm Rural Livelihoods*, Policy Series 4, 1999, Natural Resources Institute, University of Greenwich.
- Greif, F. (1997) Off-farm income sources and uses in Transition Economies, FAO/REU unpublished mimeo.
- Greif, F. (1997) Rural development policy in CEECs and NIS – A status report. *Zemledska Ekonomika* 43 (3): 146-152.
- GUS (1997) *Rocznik Statystyczny 1997*, Warsaw.
- Hazell, P. (1998). Agricultural Growth, Poverty, and the Environment: an Introduction. *Agricultural Economics*, Vol. 19, September 1998, pp. ix-xii.
- Heidhues, F., Davis, J. R., and Schrieder G. (1998) Agricultural transformation and implications for designing rural financial policies in Romania, *the European Review of Agricultural Economics*, vol. 25, Issue No. 3, 1998.
- Heidhues, F., Schrieder G., Hare, P.G., Davis, J.R., & Gaburici, A. (1998a) *Empirical Research on the Financial Market in Romanian Private farm Sector*, Romanian Economic Research Observer, Nos. 3-4 1998. Pub. Romanian Academy the National Institute of Economic Research.
- Heinrich, G. (1998) Changing times, testing times: A bootstrap analysis of poverty and inequality using the PACO data base, *CERT Discussion Paper No. 98/2*, Department of Economics, Heriot-Watt University UK.
- Horská, H., and Spešná, D. (2000). *The Socioeconomic Standing of Rural Women*, The Research Institute of Agricultural Economy (VUZE) in Prague.
- Hussein, K., and Nelson, J. (1998) *Sustainable livelihoods and livelihood diversification*, IDS Working paper 69.
- Islam, N., (1997), *The non-farm sector and rural development – review of issues and evidence*. Food, Agriculture and the Environment Discussion Paper 22. Washington DC: IFPRI.
- Ivanova, N., Lingard, J., Buckwell., A., Burrell, A. (1995) Impact of changes in agricultural policy on the agro-food chain in Bulgaria. *European Review of Agricultural Economics*, 22 (1995): 354-371.
- Jehle, R. (1998). *Bottlenecks of SME in services and craft enterprises and their elimination in Rural Areas of the Czech Republic. A trial to use traditional regional economic measures*. 38th Congress of the European Regional Science Association. 28 August - 1 September 1998, Vienna, Europe quo vadis? - Regional Questions at the turn of the Century.
- Jehle, R. (1999). Formation of SME in Rural Areas of transition countries - the influence of education. Paper presented at the International Conference on "Societies expectations on European Agriculture: The catalytic Role of Agriculture education". September, 21st - 23rd, 1998 at the Timiryazev Agriculture Academy Moscow, Russia.

- Lanjouw, J., and Lanjouw, P. (1997) The rural non-farm sector: An update (unpublished mimeo).
- Lanjouw, P. (1999) *The Rural Non-Farm Sector: A Note on Policy Options*, Feb 1999 (mimeo).
- Levitsky, J. (ed.) (2000) *Business Development Services. A Review of International Experience*. Intermediate Technology Publications, 2000.
- Macours, K and Swinnen, J. (1998) Agricultural labour adjustment during transition in CEE, *Policy Research Group Working Paper 16*, Dept. of Agricultural Economics, Katholieke Universiteit Leuven.
- Milanovic, M. (1998) *Income, Inequality, and Poverty during the Transition from Planned to Market Economy*, World Bank Regional and Sectoral Studies, 1998.
- Mishra and Goodwin (1997), Farm income variability and the supply of off-farm labour, *American Journal of Agricultural Economics* 79: 880-887)
- National Commission of Statistics (1996: 141 & 1998: 118).
- OECD (1999). *Agricultural Policies in Emerging and Transition Economies*, Vols I and II. Organisation for Economic Cooperation and Development (OECD).
- OECD. (1996) Better policies for rural development. Paris, F: Organisation for Economic Cooperation and Development (OECD).
- Pearce, D., and Davis, J. R.. (2000). The Role of the Non-Farm Rural Sector in the Reconstruction of the Balkans, forthcoming in a special edition of *MOST-MOCT: Economic Policy in Transition Economies*
- Pouliquen. L., (1999), Rural Infrastructure from a World Bank Perspective. A Knowledge Management Framework. ESSD, World Bank.
- Reardon, T et al, (1999). *Rural Non-Farm Income in Developing Countries*, Part III of The state of food and agriculture, 1998, Rome: FAO
- Schrieder, G., and Heidhues F (1998) Transformation and Rural Finance, Discussion Paper September 1998, Department of Economics, Heriot-Watt University UK.
- Swift, J. (1998) Factors influencing the dynamics of livelihood diversification and rural non-farm employment in time and space. (unpublished mimeo).
- Swinnen, J.F. and Gow. H.R. (1997) *Agricultural Credit problems and Policies during the transition to a market economy in central and eastern Europe*, Policy Research Group Working paper No.6., Department of Agricultural Economics, Katholieke Universiteit Leuven.
- VUZE (1995) *Agro-census*, The Research Institute of Agricultural Economy (VUZE) in Prague.
- VUZE (1999) *Czech Republic - Agriculture and rural development plan for the period 2000-2006*, (unpublished mimeo). The Research Institute of Agricultural Economy (VUZE) in Prague.
- World Bank (1996) *From Plan to Market. World Development Report 1996*. New York, NY, USA: Oxford University Press.
- World Bank (1997) Annual Report 1997.
- World Bank (1997) Rural Development: From Vision to Action. A Sector Strategy, Environmentally and Socially Sustainable Development Studies and Monographs Series 12.
- World Bank (1998) Annual Report 1998.

- World Bank (1999) Czech Republic: Toward EU Accession. Main Report. World Bank Country Study
- World Bank (2000) Rural Development Strategy: Europe and Central Asia Region. *Draft*. May 15, 2000.
- Zecchini, S. (1997): *Transition Approaches in Retrospective*. In: Zecchini, S. (Ed.); Lessons from the Economic Transition. Central and Eastern Europe in the 1990s. Dordrecht, p.26.