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**RURAL DEVELOPMENT UNDER THE EUROPEAN CAP:  
THE ROLE OF DIVERSITY**

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**Abstract**

Achieving optimal diversity at community level is a key in solving the rural development problem. In this essay rural development at community level and the impact of Common Agricultural Policy (CAP) reforms are analyzed in the framework of privately provided public goods models. It is shown that CAP support redistribution inducing diversification of community activities across households can potentially have important positive impact on rural development and household welfare.

**Key words:** CAP, rural, development, diversity, households, community

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# **RURAL DEVELOPMENT UNDER THE EUROPEAN CAP: THE ROLE OF DIVERSITY**

## **1 Introduction**

Rural development policy in the context of the present European Common Agricultural Policy (CAP) is closely linked to two concepts: diversity (multifunctionality) and sustainability as the former is a precondition of the latter.<sup>1</sup> In this essay we condition rural development on multifunctionality, defined as optimal diversity at community level in the spirit of Weitzman (1992). Specifically, we define the optimal diversity of rural community functions as a pure, non-excludable and non-rival public good (Rizov, 2004). We consider a general form of function in order to examine, in a private provision of public goods framework, what is the overall impact on community development of the redistribution of resources across two distinct groups of rural households.

It is demonstrated that CAP support redistribution leading to effective income transfers can importantly impact community development and welfare conditional on households' technology (opportunity costs) of contributing to development, their current levels of contribution, and the characteristics of community development function. Thus, present commercial farmers do not necessarily suffer from deterioration of welfare as a consequence of the shift of financial support to non-commercial farmers. Rather, it is possible that commercial farmers benefit from improvement in community development as a result of such income redistribution.<sup>2</sup>

The rest of the essay is organized as follows. In the next section 2 we provide an insight into CAP evolution as rural development policy. The analytical framework based on concepts of rural development as optimal diversity at community level and as privately provided public good is introduced in section 3. Analysis of the effect of the CAP support redistribution promoting optimal diversity, on community development and household welfare is presented in section 4. Section 5 concludes.

## **2 An insight into the CAP as rural development policy**

Since the inception of the CAP, “productivism” has been underlying ideology, which bolstered specialization and commercialization of EU agriculture (Cummins, 1990; Ward, 1993). In the mid-1980s considering that only 25 per cent of EU (then EC) farmers accounted for over 80 per cent of total production it was recognized that more farmers existed than were necessary for the EU’s food needs. Thus, the definition of the uses of the countryside had to be broadened accordingly (e.g., Bonanno, 1990; O’Hara, 1986). Rural areas became ‘diversified space’, with competing demands being placed upon it (e.g., Crowley, 1998; Curtin et al., 1996). This change of emphasis served as the cultural-political context for the CAP reform as more tangible factors calling for reform were the burden of the high costs of storing food surpluses, political dissatisfaction with the high consumer costs for food, and the international political tension that resulted from the EU’s financial support of its exports (Cummins, 1990).

In designing the 1992 CAP reform, a key feature was the “environmentalisation” of agricultural policy (Buttel, 1994). A concrete result of this was that funding had to be cut for production, and simultaneously an alternative source of income had to be provided for those who could not compete in an increasingly deregulated market, in order to preserve the “fabric of rural society”. Cummins (1990) asserts that a pattern of land use has been established throughout the EU, whereby a category of productive farmers co-exists with a growing proportion of holdings that must be “allocated other roles” as “resource managers” in the rural economy. Deverre (1995) distinguishes an extended set of actors such as peasants or small farmers, wealthy farming class, and counter-urban former city-dwellers, who began to place new demands on an increasingly diverse countryside.

From the perspective of transforming CAP, from a sectoral policy of farm commodity support into an integrated policy for rural development and environmental enhancement, the most significant feature of the current Agenda 2000 reforms is the Rural Development Regulation (RDR) 1257/99 (Lowe et al., 2002). Although a novel departure, RDR incorporates several existing CAP measures, including: structural adjustment of the farming sector, support for farming in less favorable areas, remuneration for agro-environmental activities, support for investments in processing and marketing, and forestry measures. The distinctly new set of measures is that promoting “the adaptation and

development of rural areas” (Article 33). This extends both the scope of and the eligibility for CAP support to make them of wider benefit, including the prospect of non-farmers and non-agricultural activities having access to the central part of the CAP budget (Lowe and Ward, 1998). Effectively, the intention of these reforms has been to shift resources from large commercial farmers to smaller non-commercial farmers and rural non-farm households in general.

### **3 Analytical framework: concepts and hypotheses**

#### **3.1 The concept of diversity and rural development**

The economy of a community grows when local businesses sell goods and services of value to buyers elsewhere and thus, bring new money into the community. Such businesses are part of the “economic base” or “traded sector” of the community (Shaffer, 1989; Rizov, 2005a). Not every business in the community works this way, however. Some, the grocer, the dry cleaner, the car-repair shop, simply provide services inside the community. These “local market businesses” are important; after all they employ people, attract tourists, pay taxes, and provide many of the essential things that make life both possible and pleasant. Furthermore, by the co-existence of a variety of enterprises a beneficial “agglomeration” effect can be created.

Rural communities, however, have small, specialized economies that only produce a fraction of the goods and services their residents want to consume. Small size means they cannot produce everything and the requirements of the market to produce efficiently mean that any rural area tends to be pretty specialized in the goods and services it is able to produce and sell. This makes rural economies vulnerable to trade shocks (Krugman, 1991; Barkley, 1995).

Clearly the trade off between diversification and specialization is a key in the rural development problem. Following Heal (1998) and Weitzman (2003), it is argued here that rural development can be enhanced, by achieving optimal diversity of economic activities in the rural communities. Weitzman (1992) provides a definition (value-of-diversity function) and framework for policy analysis.<sup>3</sup> Diversity is viewed as a measure of distinctiveness or collective dissimilarity that combines in a complementary, value enhancing way with direct benefits such as use value, existence value etc. In rural development context examples are maintaining the specific amenity of countryside,

making the rural community more attractive for living and for tourists by providing variety of services locally, developing new enterprises according to the local comparative advantage, etc.

Agriculture traditionally is an important sector in rural areas. Nowadays, besides, the usually large, profitable commercial farms, a spectrum of smaller, extensive and non-viable as production units, rural holdings, exist (Rizov, 2005a). An optimal solution for them is to specialize in something else than farming while contributing towards the diversity of the rural community. Furthermore, farming is not quite like any other industry, where workers can simply be entreated to seek alternative work outside of an unprofitable sector. This is only an option for those with ready access to training and/or employment (e.g., Rizov, 2005b). An alternative is for the majority of rural population to use their land for the production of “environmental goods”, and let the most intensive and efficient large farmers produce the “food goods” at lower cost.

### **3.2 The concept of public goods and rural development**

Diversity at the level of rural community as characterized above has the features of privately provided, pure, non-excludable public good.<sup>4</sup> The community benefits from diversity are, e.g., reduced vulnerability to adverse trade shocks, positive agglomeration effect, and improved quality of life, all adding up to higher incomes and welfare. The private costs of achieving diversity are search and other transaction costs for rural households to switch from one private income-generating activity to another, thus enhancing diversity at community level.

Naturally, costs vary across households. Most models of public goods, however, are highly abstract and usually assume very simple cost structure for providing a public good. In fact the public good is a set of institutional arrangements and incentives involving cooperative or non-cooperative actions at community level. If the government must impose an austerity program enhancing rural development, then one potential media is the redistribution of financial support to farmers. Thus it is important to analyze the economic effect of an institutional reform, which can alter the cost of providing the public good.

Since Warr (1983) provocative paper, a considerable body of literature has evolved on the neutrality result that equilibrium is unaffected by a redistribution of income when public goods are

privately provided. However, it is now well known that fiscal transfer policy will not be completely neutral in some important cases. First, as Bergstrom et al. (1986) show, the neutrality result will not apply if some agents withdraw from making contribution. Second, as Andreoni (1989) shows, if altruism is not “pure”, in the sense that agents get some benefits from their contribution *per se*, then the neutrality will not hold. Third, Ihuri (1992) shows that, in the case of an impure public good, the consequences of transfers on utility are non-orthodox. Finally, papers by Buchholtz and Konrad (1995) and Ihuri (1996) incorporate productivity differentials into the model of private provision of public goods to show that low-productivity agents will gain by making a transfer.

#### **4 Results: Is promoting diversity rural development enhancing?**

For our analysis we assume that there are two (groups of) rural households, each producing only private goods, consumed at the time of production. There is also a public good defined as diversity at community level consumed by both households. Each household determines its resource allocation between production of private goods and contribution to the public good (e.g., decision to undertake diversifying activity). The utility of each household depends on the amount of private goods consumed and the level of the public good that in turn depends on the contributions by both households.<sup>5</sup>

In many studies the global level of the public good, which affects agents’ level of welfare, is determined as a simple sum of the contributions by each agent. Thus, contributing to community development by one household always does just as much good as the contribution by another household. It then follows that if a household has a superior “technology” (i.e., lower opportunity costs) of contributing to community development, transferring resources to such household would be efficient in enhancing development at community level. On the other hand, if a household has more efficient technology of contributing to community development, a transfer of resources from this household to a less efficient household would deteriorate the level of development. In such case, contributions by both households are perfect substitutes and efficient resource allocation may well indicate a corner solution, implying that all the resources should be transferred to the household with the most efficient technology of contributing to community development.

However, there may be situations in which no matter how much the contribution to development by one household is community development is difficult to improve unless the contribution by the other household is involved. Specifically, in the case of community diversity, the contributions by both households are important. In other words, the marginal rate of technical substitution between the contributions to community development by the two households is diminishing. Thus, it is appropriate to specify community development as a more general concave function. In such general case, redistributing resources across households would be necessary for enhancing development at community level, regardless of the relative household efficiency of contributing to development.

Following the developments in CAP, an income transfer is assumed to take place from commercial farm households (CF) to non-commercial farm households (NF). Because CF are more efficient in producing private goods than NF are, the opportunity costs of CF to undertake diversifying activity would be correspondingly higher than those of NF. Thus, NF can be considered more efficient in contributing to the public good - the diversity at community level.

When community development function is defined as a simple sum of households' contributions, the marginal rate of technical substitution is always equal to one. Then, income transfer to (group of) households with more efficient technology of contributing to development, i.e., NF always improves community development and the welfare of not only the recipient households (NF) but also the welfare of the donor households (CF) improves as a result.

In the more realistic case, where the marginal rate of technical substitution is diminishing, the relative efficiency of the technology of contributing to development is not the only factor in determining whether an income transfer from CF to NF improves community development. The current levels of contribution by the two (groups of) households also play an important role. Thus, a transfer of resources to households whose contribution is currently low, i.e., NF would improve community development and benefit not only the recipient but also the donor households. As the development contribution by the recipient households increases as a result of the income transfer, there may be a point at which the income transfer no longer improves community development. Hence, an interior solution for the amount of the income transfer from CF to NF that maximizes



community development may exist.

## **5 Conclusion**

The European CAP has been evolving from a sectoral policy of farm commodity support into an integrated policy for rural development and environmental enhancement. Important effect of CAP reforms has been support redistribution from large commercial farmers to smaller non-commercial farmers and rural non-farm households in general. Rural development policy in the context of present CAP is closely linked to two concepts: diversity (multifunctionality) and sustainability, as achieving optimal diversity at community level is a key in the rural development problem. Furthermore, diversity at the level of rural community has the features of privately provided, pure, non-excludable public good.

Within an analytical framework combining features of private provision of public goods models with the concept of optimal diversity as rural development strategy we show that promoting diversification at community level, through CAP support redistribution, can be rural development and welfare enhancing. Specifically, the analysis indicates that whether a transfer of resources improves rural community development or not depends on the marginal rate of technical substitution of the development contributions by donor and recipient households, the weights of the contributions by each group of households to community development, and the efficiency of the technology of contributing to development by the recipient households relative to that by the donor households.

## Notes

<sup>1</sup> Stavins et al. (2003) provide a broader economic definition of sustainability where economy is sustainable if and only if it is dynamically efficient and the resulting stream of total welfare functions is non-declining over time. This definition of “potential Pareto improvement”, in Kaldor-Hicks sense implies that the world is viewed as being made better off if the magnitude of gains and the magnitude of losses are such that the gainers can fully compensate the losers for their losses and still be better off themselves.

<sup>2</sup> Here, it is not assumed that the transferred resources are tied for their use only to contributions to community development. It is assumed that recipient households allocate the transferred resources between consumption goods and contribution to community development in any way they like.

<sup>3</sup> There is important literature related to the concept of joint production. Baumol et al. (1981) rely on the concept of jointness in production to explain the existence of multi-product firms. Leathers (1991) demonstrates that jointness gives rise to cost complementarities, often referred to as “economies of scope”, among outputs. Boisvert (2001a,b) provides detailed characterization of multifunctionality of agriculture in terms of joint production.

<sup>4</sup> Diversity and rural development are inextricably linked in accord with the Goldsmith-McKinnon-Shaw view of economic development. Our primary interest, however, is in using the framework of private provision of public goods for analyzing the effects of CAP support redistribution on rural development rather than concentrating on analysis of how diversity is achieved. Petersen et al. (2002) and Vatn (2002) provide some answers to these questions within a joint production framework with transaction costs.

<sup>5</sup> Household welfare effects of the CAP support redistribution under various conditions are formalized and analyzed in more detail in Rizov (2004).

## References

- Andreoni, J. (1989). Giving with impure altruism: Application to charity and Ricardian equivalence. *Journal of Political Economy*, 97(6), 1447-1459.
- Barkley, D. (1995). The economics of change in rural America. *American Journal of Agricultural Economics*, 77(5), 1252-1258.
- Baumol, W., Panzar, J., and Willig, R. (1981). *Contestable Markets and the Theory of Market Structure*. Harcourt, Brace and Jovanovich: New York.
- Bergstrom, T., Blume, L., and Varian H. (1986). On the private provision of public goods. *Journal of Public Economics*, 29(1), 25-49.
- Boisvert, R. (2001a). A note on the concept of jointness in production. In *Multifunctionality: Towards an Analytical Framework*, Annex 1. OECD: Paris.
- Boisvert, R. (2001b). Joint production in four outputs: Two commodities and positive and negative externalities. In *Multifunctionality: Towards an Analytical Framework*, Annex 2. OECD: Paris.
- Bonanno, A. (1990). Social and economic consequences of the EC agricultural policy. In A. Bonanno (Ed.), *Agrarian Policies and Agricultural Systems*. Westview Press: Boulder.
- Buchholtz, W. and Konrad, K. (1995). Strategic transfers and private provision of public goods. *Journal of Public Economics*, 57(3), 489-505.
- Buttel, F. (1994). Agricultural change, rural society and the state in the late twentieth century – Some theoretical observations. In D. Symes and A. Jensen (Eds.), *Agricultural Restructuring and Rural Change in Europe*. Agricultural University: Wageningen.
- Crowley, E. (1998). Review article – Sustainable development and rural poverty in the Republic of Ireland. *Economic and Social Review*, 29(1), 73-86.
- Cummins, P. (1990). Restructuring agriculture in advanced societies: Transformation, crisis and responses. In T. Marsden, P. Lowe and S. Whatmore (Eds.), *Rural Restructuring: Global Processes and their Responses*. David Fulton Publishers: London.
- Curtin, C., Haase, T., and Tovey, H. (Eds.). (1996). *Poverty in Rural Ireland: A Political Economy Perspective*. Oak Tree Press with Combat Poverty Agency: Dublin.

- Deverre, C. (1995). Social implications of agro-environmental policy in France and Europe. *Sociologia Ruralis*, 35(2), 227-247.
- Heal, G. (1998). *Valuing the Future: Economic Theory and Sustainability*. Columbia University Press: New York.
- Ihori, T. (1992). Impure public goods and transfers in a three-agent model. *Journal of Public Economics*, 48(3), 385-401.
- Ihori, T. (1996). International public goods and contribution productivity differentials. *Journal of Public Economics*, 61(1), 139-154.
- Krugman, P. (1991). *Geography and Trade*. MIT Press: Cambridge, MA.
- Leathers, J. (1991). Allocable fixed inputs as a cause of joint production: A cost function approach. *American Journal of Agricultural Economics*, 73(5), 1083-1090.
- Lowe, P. and Ward, N. (1998). A “second pillar” for the CAP? The European rural development regulation and its implications for the UK. Center for Rural Economy Working Paper No 36, University of Newcastle upon Tyne.
- Lowe, P., Buller, H., and Ward, N. (2002). Setting the next agenda? British and French approaches to the second pillar of the Common Agricultural Policy. *Journal of Rural Studies*, 18(1), 1-17.
- O’Hara, P. (1986). CAP structural policy – a new approach to an old problem? In *The Changing CAP and its Implications*. Economics and Rural Welfare Research Centre, Dublin.
- Peterson, J., Boisvert, R., and de Gorter, H. (2002). Environmental policies for a multifunctional agricultural sector in open economies. *European Review of Agricultural Economics*, 29(4), 423-443.
- Rizov, M. (2004). Rural development and welfare implications of CAP reforms. *Journal of Policy Modeling*, 26(2), 209-222.
- Rizov, M. (2005a). Rural development perspectives in enlarging Europe: The implications of CAP reforms and agricultural transition in accession countries. *European Planning Studies*, forthcoming.
- Rizov, M. (2005b). Pull and push: Individual farming in Hungary. *Food Policy*, 30(1), 43-62.
- Shaffer, R. (1989). *Community Economics*. Iowa State University Press: Ames, IA.

- Stavins, R., Wagner, A., and Wagner, G. (2003). Interpreting sustainability in economic terms: Dynamic efficiency plus intergenerational equity. *Economics Letters*, 79(3), 339-343.
- Vatn, A. (2002). Multifunctional agriculture – some consequences for international trade regimes. *European Review of Agricultural Economics*, 29(3), 309-327.
- Weitzman, M. (1992). On diversity. *Quarterly Journal of Economics*, 107(2), 363-405.
- Weitzman, M. (2003). *Income, Capital, and the Maximum Principle*. Harvard University Press: Cambridge, MA.
- Ward, N. (1993). The agricultural treadmill and the rural environment in the post-productivist era. *Sociologia Ruralis*, 33(3/4), 348-364.
- Warr, P.G. (1983). The private provision of a public good is independent of the distribution of income. *Economics Letters*, 13(2/3), 207-211.