Sustainable Rural Development in Environmentally Protected Areas of Hungary and Austria: The Role of CAP payments

Katona-Kovács J. [1] Dax T. [2]

[1] University of Debrecen/Department of Rural Development and Agricultural Economics, Debrecen, Hungary
[2] Federal Institute for Less-Favoured and Mountainous Areas, Vienna, Austria

Abstract— **Although there are steps in the direction that the application of Common Agricultural Policy (CAP) instruments in different regions has to take account of the territorial dimension, these have to be further improved. This aspect attains particular relevance in ecologically sensitive areas. The aim of the paper is to examine the role of CAP instruments in two National Parks from the aspect of sustainable rural development. The two selected National Parks are both very famous protected areas in Hungary and Austria, situated in very different landscapes and representing different types of national parks. The territorial distribution of the CAP Pillar 1 and Pillar 2 payments are analysed against the specific local role and the regional and national contexts. The comparison addresses the different policy background of the two countries with their different history and experience within the CAP system. It particularly discusses the regional expenditure structure with regard to the place-specific role of agri-environmental payments.**

Keywords— **National Parks, CAP, territorial dimension JEL Q20 Q01**

I. INTRODUCTION

In the development of rural areas, as well as other territories, there is a shift from a sectoral to a territorial approach [1,2]. As a consequence, the issue of the regional distribution of CAP expenditure and decentralisation of rural policy (CAP Pillar 2) is addressed in different papers [3,4,5,6]. Sustainability is a horizontal aim of development also in the case when the role of CAP instruments are analysed.

A. Protected areas in Hungary and the case study Hortobágy National Park

The first national park (NP) of Hungary, the Hortobágy NP (HNP), was created in 1972. The process of declaring protected status gained a new impetus in the early 1970s. During the six-year-long cycle of the first National Environmental Program (1997-2002) the proportion of the protected natural areas grew considerably. 9.2 % of the country's area was under protection by 2002. The area of the NPs has grown the most. Ten NPs (485,806 hectares), 36 landscape protection areas (324,035 hectares), 147 nature conservation/reserve areas (29,191 hectares) and one natural relict – all qualified as "Protected natural areas of national significance" protected by specific regulations – can currently be found in Hungary [7]. It is also important that according to the BIRD Directive and Flora-Fauna-Habitat Directive of the European Union, Hungary nominated 20% of the total national area (BIRD 14.6%, FFH 15.2%) as NATURA 2000 area. Funds behind the Natura 2000 programme are available from 2008.

In the case of the examined HNP region, situated in the North Great Plain Region (NUTS 2 region, code is HU 32), eastern part of Hungary there were big changes in the ownership and partly in the usage relations. The Directorate of the HNP extended its territories being in the ownership of Hungarian State but handled by the Directorate. As the biggest part of the HNP is situated in Hajdú-Bihar county (NUTS 3 region, code is HU321), the examination concentrates to this region.

B. Protected areas in Austria and the case study Hohe Tauern National Park

Valuable natural landscapes and clean environment are one of the most important national assets of Austria. Within the last few decades an increasing environmental awareness can be observed in the public which led to the implementation of nature protection laws. The orientation towards protection has developed further and nowadays the sustainable use of these specifically designed areas gains more

and more relevance [8]. We can realise these as a widespread trend in many countries where the concepts of nature protection has advanced to include other activities.

In Austria, about 25 % of the total surface is covered by one of the categories of area protection. The categories: 379 nature reserves (331,507 hectares), 267 landscape protection areas (1,327,696 hectares) and nature monuments can be found in all federal provinces whereas other categories are more restricted to specific areas. Six national parks (230,334 hectares), 31 nature parks (228,598 hectares), 338 protected parts of landscape (23,717 hectares), in total, 14 different categories of protected sites can be distinguished in Austria, with varying degrees of protection [9]. Usually agriculture and forestry, hunting and fishing are allowed to continue on a low intensity level, i.e. the same scale as land management used to be before assigning protection status, which sometimes leads to conflicts of interests. These conservation areas were also important in establishing the NATURA 2000 areas. According to the BIRD Directive and Flora-Fauna-Habitat Directive Austria nominated more than 16% of the total national area as NATURA 2000 area.

Our analysis here focused on the Salzburg area of the National Park Hohe Tauern (Pinzgau-Pongau NUTS 3 region, code AT 322) which accounts for half of the NP area and the majority of the core zone. This part has been officially declared as NP in 1984 and includes a great share of public land ownership (particularly land owned by state forests, about 35% of total area). It stretches for about 100km from East to West and is located in the mountain area of altitudes between 1000m and the summits, reaching the highest peak of Austria (3798m). Hohe Tauern (HT NP) has a long history of protection and serves as the most popular example, being the largest NP of Austria. It should provide a telling example on the linkages addressed by recent CAP measures. The low share of agricultural area within the conservation area points to the fact that like in many other mountain regions agricultural land use occupies only a minor share of total land. Production potential is rather limited and therefore almost all crop area disappeared over the last decades, and grassland with livestock production is the unique farming method (Table 1) to be found here.

Table 1 The area of the two NPs according to utilisation

	Area (ha) HNP	% in total HNP	Area (ha) HT NP	% in total HT NP
Arable land	5,782	7.0	(50)	0.0
Grassland	**48,352**	**58.8**	10,692	6.0
Pasture area	-	-	**74,382**	**41.5**
Reed	1,760	2.2	-	-
Fish-pond	4,199	5.1	1,956	1.1
Wood	2,440	3.0	**41,616**	**23.2**
Other	19,652	23.9	50,691	28.2
Total	82,185	100.0	179,387	100.0

Source: [10,11]

The Communication from the Commission to the Council [12] states that "*although growing number of EU rural areas will be influenced by factors outside agriculture, areas which are remote, depopulated or heavily dependent on farming will face particular challenges as regards economic and social sustainability".* This paper seeks to answer the question of how CAP instruments serve sustainable development in the examined rural areas, both characterised as "Predominantly Rural" according to the OECD definition [13], representing different types of national parks - one in the flatlands, the other in mountain areas.

When considering sustainable development, the available resources of rural areas have to be examined [14]. This paper concentrates on natural factors but seeks to get information on the others – human, social, financial, physical – as well. It attempts to follow the ideas raised in the Study on Employment in Rural Areas project [15] and examines the selected regions following the debate from Copus et al. [16] about *"the 'accumulation and depletion' typology".*

II. METHODOLOGY AND DATA

The paper collected already published data for the two examined areas. These data are related to rural development [13], agriculture [15,17] and environment protection [7,9].

In addition to the available database the authors collected data for different CAP payments. In the case of Hungary the Agricultural and Rural Development Office granted access to the database of SAPS payments and agri-environmental measures for 2005, and the National Development Agency to the database

of investments in agriculture, the work was supported by the János Bolyai Fellowship. The contribution for the Austrian part of the paper derives from the EU-funded project „Towards a Policy Model of Multifunctional Agriculture and Rural Development" (TOP-MARD, FP6 contract no. 501749) with collaborating partners in 11 countries.

On the basis of the data the selected case study areas were described and analysed. The application of CAP measures and their structure are calculated and presented. The examined CAP payments are related to the total territory of the given regions as they are examined from the aspect of regional development.

III. RESULTS

A. General introduction of the examined regions

Copus et al [16] call the attention that "*some labour market themes/indicators already provide some evidence of systematic differentiation between rural regions of the EU"*. Examining these indicators (patterns of demographic change; economic activity, employment and unemployment; sectoral/structural patterns and disparities in human capital endowment), the two examined areas can be distinguished. The AT 322 case study area belongs to "accumulation" group, while HU321 case study area belongs to the "depletion" group.

B. Main characteristics of agriculture in the examined regions

The introduction of the characteristic of agriculture in the case study area is based on the results of Forgács [18] and Wagner et al. [19]. Prevailing farming system is alpine grassland, mostly cattle breeding and family farms, strongly part time farmers dominate in AT 322. While heterogenous soils, mainly arable farming (livestock production which is labour intensive has been drastically reduced) and dualistic farm structure (77.7% of all holdings are smaller than 2 ha and cultivates 5.2 % of UAA, whereas only 0.6 % of holdings cultivate 51.7% of UAA) in HU 321. In AT 322 the farmers wife (Table 2) manages the farm and holidays chalet while the farmer works off the farm. The availability of off farm jobs and the differences between farm and non farm incomes would have been selected as the major drivers.

Table 2 Agricultural employment

	AT 322	HU 321
Share of employment %	5.3	9.2
Share in GVA %	2.3	7.2
Labour input in AWU/100 ha UAA	3.5	7.8
Share of family labour force in regular labour force (AWU) %	92.0	78.5
% women in regular labour force (AWU)	40.8	36.4

Source: [15] p.192

The indicator of total number of bed places shows the importance of tourism in the case of the AT322 region. The indicators from Eurostat [17] (Table 3) underlines the importance of tourism also in the case of agricultural holdings in AT.

Table 3 Other gainful activities of the agricultural holdings of at least 1 ESU

	EU-27	HU	AT
Tourism	1.3	0.3	8.3
Handicrafts	0.1	0.1	0.2
Processing of farm products	6.8	8.0	11.1
Wood processing	0.3	0.1	0.8
Aquaculture	0.2	0.2	0.2
Renewable energy production	0.4	5.8	1.6
Contractual work	2.1	0.0	7.4
Others	5.3	0.7	0.0
Total	13.3	13.3	24.7

Source: [17] p35

C. CAP application at regional level

In 2006 Pillar 2 payments arose to 24% of CAP support in Hungary and 61% in Austria.

The total amount of the selected CAP payments are similar in the two examined regions (HU 321 and AT 322), but their structure differs (Table 4). While in the case of HNP second pillar payments plays the same role as in other parts of the country, in the case of HT NP these payments have a higher importance.

There is no big difference in the percentage of SAPS payments from total examined payments on HU and Hortobágy NP level, it is 55% and 51% respectively. On the other hand there is a big difference in the case of Austria, because it is 39% on

AT level and 6% on AT 322 level. One reason for this is that in the Austrian case study area production potential is rather limited and therefore almost all crop area disappeared, while on the other hand in Hungary, as a result of SAPS payment system areas utilised as grassland are also financed.

Table 4 Different CAP payments on regional level 2004/2005

Payment (euro/hectare/year)	HU	HU 32	HU 321	AT	AT 32	AT 322
SAPS payments/total area of the region (euro/hectare) Direct payments in the case of AT	46	56	56	74	25	6
Investment in agriculture/ total area of the region (euro/hectare)	17	20	20	10	7	6
AEMs/total area of the region (euro/hectare)	19	20	20	73	65	44
LFA/total area of the region (euro/hectare)	1	2	4	32	38	38
Total	83	98	100	189	135	94

Source: own calculation

The specificity of the RDP is the horizontal application of measures across all regions of Austria. Analyzing the regional distribution of funds reveals that the use of the AEMs is not in the first place region specific, but more closely related to the variation of farming methods and production possibilities. As a result AEMs are, together with LFA payments, forest activities, diversification of farm households and off-farm work a major income contribution for mountain farming households [20]. The compensation level for the production difficulties could also be improved due to these two measures.

IV. CONCLUSIONS

With regard to Pillar 1 payments (Table 4), as SAPS payments are from the beginning "decoupled payments", the territorial difference is much lower than in AT. Although we notice a territorial equality in Hungary, because of the dualistic farm structure, a small percentage of farms receives a high percentage of payments. It means that to increase the cohesion impacts of the CAP in the future, the proposal of the Commission in July 2002 [21], related to modulation, should be followed and a ceiling of 300 000 euro should be placed on payments for each farm.

In Austria AEMs measures were particularly relevant for mountain farmers. In Hungary although these measures are also very important for farmers in restricted areas, the main part of these payments did not address these farms. In the New Hungarian Rural Development Plan (2007-2013) special attention has been paid to the fact that the share of zonal schemes with higher environmental performance should increase and a major part of Hungarian agri-environmental resources should be directed towards solving area specific problems [22].

As mentioned in the introduction, the orientation towards protection has developed further and nowadays the sustainable use of these specifically designed areas gains more and more relevance – also solving the problem of conflicts of interests (nature protection and farming) – and this is becoming a widespread trend in many countries where the concepts of nature protection has advanced to include other activities (e.g. tourism in AT). This is the case in the Austrian case study area, and probably this is one of the reasons why, although this region falls under predominantly rural area, it can be understood as an "accumulating" one according to the SERA typology, while in the case of the HNP other activities were missing. Hopefully as first steps in this direction are visible, there will be changes in the future in the Hortobágy NP too, but the solution for the problem of *"soft factors" such as social capital, institutional thickness, good governance, networks (social and transactional), or local 'capacity'* [16] in the region is very important.

Gáthy and Kuti [23] call the attention that "o*ngoing CAP reforms were prompted by market and financing problems associated with external and internal pressures. However, environmental and sustainability issues were only complementary"*. The results of this study also underline their view that "t*he reformed CAP determine EU agricultural priorities, but they can only partially substitute an overall agrarian strategy"*.

REFERENCES

1. High C, Nemes G (2006) Social learning in LEADER: Exogenous, endogenous and hybrid evaluation in rural development, paper presented at the conference Transition in Agriculture – Agricultural Economics in Transition III. Institute of Economics, Hungarian Academy of Sciences, Budapest, 10-11 November 2006
2. Balogh P (2008) Sertéstartó vállalkozások gazdálkodási kockázatának elemzése az Észak-Alföldi régióban. (Analyse of the economical risk of pig farms in the North-Plain region). XI. Nemzetközi Tudományos Napok Gyöngyös Vállalkozások ökonómiája I. pp. 6-13 ISBN 978-963-87831-1-0
3. Trouvé A, Berriet-Solliec M. (2005) Politiques agricoles de développement rural et régionalisation : une distribution plus équitable des aides ? 41ème colloque de l'ASRDLF, Dijon.
4. Osuch A (2005) The impact of the first and second pillars' aids from CAP on farm profits in France. Paper prepared for the XIth International Congress of the EAAE, Copenhagen, Denmark 2005
5. Vandermeulen V, Huylenbroeck I G (2006) Decentralised Rural Development Policies: Does it Make Sense? The Example of Diversification in Flanders. Poster prepared for IAAE Conference Australia 2006
6. Ángyán J (2005) Az Európai Unió mezőgazdasági és vidékfejlesztési politikájának jelenlegi helyzete, aktuális problémák és lehetőségek. (Az Európai Mezőgazdasági Vidékfejlesztési Alap) The Situation, Problems and Possibilities of the Current Agricultural and Rural Policy of the European Union. (The European Agricultural Fund for Rural Development).CEWEB conference, 2005 (Loading date 21 September 2007) http://www.nakp.hu/publi.htm.
7. KvVM (2006) Országos jelentőségű védett természeti területek. (Protected Areas of National Importance, State Secretariat for Nature and Environment Protection part of the Ministry for Environment and Water, (Loading date: 11 January 2008) http://www.termeszetvedelem.hu/index.php?pg=menu_2085
8. Mose I, Weixlbaumer N (2006) Vom Schützen zum Nützen – ein Paradigmenwechsel, in: RAUM, Österreichische Zeitschrift für Raumplanung und Regionalpolitik, 63, Wien 2006, p.20
9. Umweltbundesamt (2001) Umweltsituation in Österreich. Sechster Umweltkontrollbericht des Bundesministers für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft an den Nationalrat, Wien
10. Statistics Austria 2007
11. HNPD (without year) Foundation and territory items. http://www.hnp.hu/78-214.php (Loading date: 11 January 2008
12. EC (2007) Communication from the Commission to the Council and the European Parliament. Preparing for the "Health Check" of the CAP reform. COMM(2007) 722 final p.2
13. EC (2006) Rural Development in the European Union. Statistical and Economic Information. Report 2006. July 2006. European Commission Directorate-General for Agriculture and Rural Development. ISBN 92-79-02990-8 p.3
14. Harvey D R (2004) How Does Economics Fit the Social World? Journal of Agricultural Economics, Volume 55, Number 2, July 2004 pp 313-337
15. SERA (2006) Study on Employment in Rural Areas, Final Deliverable. Copus et al. Study commissioned by European Commission. (Loading date: 11 October 2007) http://ec.europa.eu/agriculture/publi/reports/ruralemployment/sera_report.pdf
16. Copus, A.K., Johansson, M., McQuaid, R.W. (2007): One Size Fits All? Regional Differentiation and Rural Development Policy. EuroChoices volume 6, number 3, 2007 13-21
17. EUROSTAT (2007): Agriculture. Main statistics 2005-2006. Eurostat Pocketbooks. ISBN 978-92-79-05698-7
18. Forgács Cs (2006): Case study report of Hajdú-Bihar in SERA. (Loading date: 11 October 2007)http://ec.europa.eu/agriculture/publi/reports/ruralemployment/sera_report.pdf
19. Wagner, K., Hambrusch, J., Kirner, L. (2006): Case study report of Pinzgau-Pongau in SERA. (Loading date: 11 October 2007) http://ec.europa.eu/agriculture/publi/reports/ruralemployment/sera_report.pdf
20. Dax, T. and Hovorka, G. (2004), Integrated rural development in mountain areas, in: Brouwer, F. (ed.), *Sustaining Agriculture and the Rural Environment: Governance, Policy and Multifunctionality*, chapter 7, Advances in Ecological Economics, Edward Elgar, Cheltenham, UK and Northampton, USA, ISBN 1-84376-256-0 p.124. 143
21. EC (2002): Communication from the Commission to the Council and the European Parliament of 10 July 2002 - Mid-term review of the common agricultural policy COM (2002) 394 - Not published in the Official Journal (Loading date 22 May 2007) http://europa.eu/scadplus/leg/en/lvb/l11062.h
22. NHRDP (2007): New Hungary Rural Development Programme 19th February 2007, Government of the Republic of Hungary pp. 235-236 (Loading date: 27 June 2007) http://www.fvm.hu/doc/upload/200702/nhrdp_070220.pdf
23. Gáthy, A., Kuti, I. (2007): The complexities of European strategy design – The case of agriculture. Studies in Agricultural Economics No. 106 p. 5-22. Research Institute of Agricultural Economics HU ISSN 1418 2106

- Authors: Judit Katona-Kovács / Thomas Dax
- Country: Hungary / Austria
- Email: katonaj@agr.unideb.hu / thomas.dax@babf.bmlfuw.gv.at