

## MOUNTINOUS REGIONS AND AGRICULTURAL POLICY IN SLOVENIA

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### Abstract

*Due to varied natural conditions, a considerable share of agricultural land in Slovenia is situated in the less favoured areas (LFAs). From the spatial as well as social, agrarian and political points of view they are an essential segment of structural development. The long-term objective of the agricultural and social policy towards the LFAs areas is the preservation of functional ability of these areas. Compensatory allowances considerably contribute to income of farmers in specific areas. In connection with basic criteria of good farming practice, the measure contributes to preservation of agricultural land as well and therefore improves also the environmental functions of LFAs.*

*The prepared paper briefly outlines theoretical arguments for introducing of EU comparable LFAs policy and examines the implementation of accompanying measures in Slovenian agricultural policy. The paper is based on desk research drawing from responsible literature, legislation documents and available research studies*

**Key words:** *agriculture, less favoured areas, sustainability, compensatory allowances*

### Introduction

The fact is that LFAs are marginal, mostly removed from major economic centres and are characterised, due to their natural attributes, by more difficult living and economic conditions. From the spatial as well as social, agrarian and political points of view they are an essential segment of structural development. The long-term objective of the agricultural and social policy towards the LFAs areas must be the preservation of functional ability of these areas (MKGP, 2006). According to the principles of the eco-socially balanced development, the objectives of production-uncoupled compensatory allowances in the LFAs are the following:

- continuation and preservation of land use,
- maintenance of a viable rural community,

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- preservation of countryside,
- maintenance and promotion of sustainable farming systems,
- assurance of farming in areas with specific handicaps.

A difficult terrain, high altitude, unfavourable climatic and pedologic conditions, remoteness and difficulty of access are the most important factors that a considerable share of agricultural land in Slovenia is situated in the LFAs. While unfavourable conditions for production do not completely hinder farming, they are a cause of the lower production capacity of farms, the narrower selection of cultures and production orientations, and costlier production. Mountain farms are less competitive and, because of specific natural conditions reflected in the structure of agricultural land use, also less adaptable. Despite lower production potentials these areas nevertheless play a significant role in the preservation of the rural population and the cultural landscape, and in the maintenance of the ecological balance.

The main objectives of the presented paper are:

- to analyse the principles of current LFAs policy in Slovenia and to expose the crucial points of policy support in Slovenia and EU,
- to carry out critical assessment (evaluation) of current RDP measures with special emphasis on its consistency and reconciliation with identified needs, aims and means,
- to point on possible consequences – positive or negative – of reformed policy on economical, spatial and environmental structure in Slovenia.

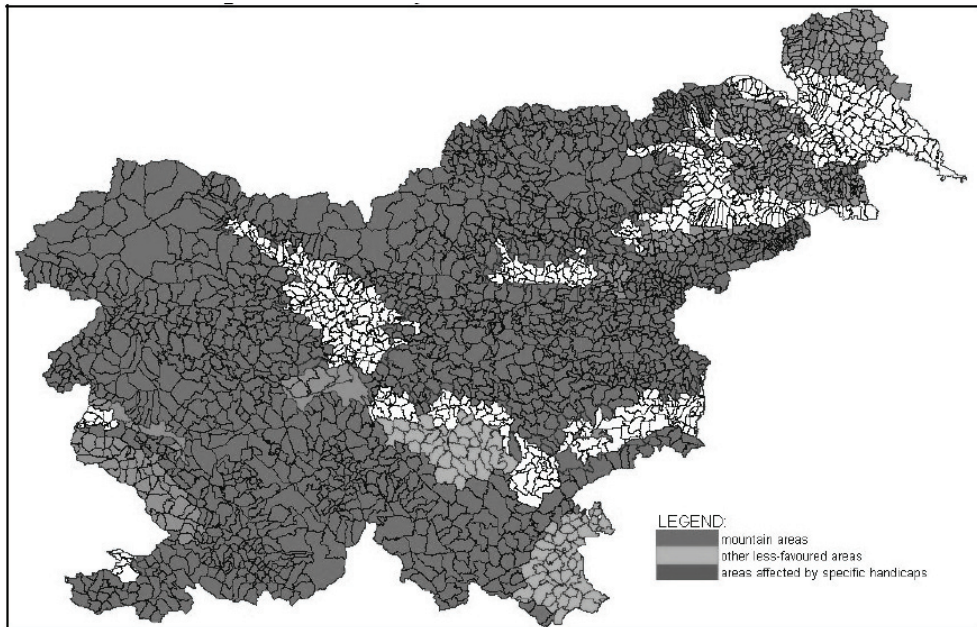
### **Delimitation of LFAs in Slovenia**

Difficult production conditions place Slovenia among countries with the most difficult production conditions in Europe. More than 70% of agricultural land in Slovenia is located in areas where production conditions are somehow limited, which has a significant influence on the competitiveness and adaptability of the Slovenian agriculture.

In terms of their natural, production and socio-economic conditions Slovenia classified the following LFAs (Cunder, 2007, 2):

- mountain area,
- other less favoured areas,
- areas affected by specific handicaps.

Basic territorial unit for delimitation of LFAs is the cadastral community. Cadastral communities for Slovenia are part of the cadastral system since the land cadastre was established. The whole territory of the Republic of Slovenia is covered by a total of ca 5,190,600 land parcels, forming 2,698 cadastral communities. Cadastral community is a basic unit for managing Land Cadastre, each is marked with official name and identity number and is also spatially identified. The smallest unit of the cadastral system is cadastral parcel, which is linked to the cadastral community. They have been continuously maintained through the whole period, nowadays managed by Geodetic Office of Slovenia and are representing one of the basic GIS data.

*Picture 1: Map of LFAs by cadastral communities in Slovenia*

*Source: Rural development plan for the republic of Slovenia 2007 - 2013*

In compliance with the European legislation, **mountainous areas** are areas with considerably limited possibilities for land use and expensive use of special mechanization. Because of high altitude the vegetation period is shortened and in combination with steep slopes in the mountain area prevents use of machinery and narrows the possibility of selection of suitable crops. At lower altitude, where steep slopes appear, the inclination prevents the use of normal machinery and requires the use of very expensive special equipment. The handicap at lower altitude is therefore equivalent to the limited land use possibilities on higher altitudes. The definition of the mountain areas respects both criteria for delimitation of these areas which are: high-altitude and inclination. For evaluation purpose the data of altitude and inclination from “digital elevation model for Slovenia” 25×25 m were used.

Mountain areas in Slovenia shall meet the criteria of:

- average altitude of at least 700 m or
- average slope of at least 20%; at least 50% of the evaluated area has to meet the criteria of the inclination (bigger water tables are excluded from evaluation)
- or
- simultaneously average altitude of at least 500 m and the average slope of at least 15%.

Mountain areas cover about 72% of the territory of Slovenia and include mountain range of Julian Alps, Kamniško-Savinjske Alps, Karavanke, Pohorje and additionally also slope hilly area in central Slovenia.

**Other LFAs** in Slovenia present the area which is in danger of land use abandonment and

where maintenance of agricultural activities is necessary for countryside conservation. These areas are homogenous in natural production conditions and combined with bad demographic criteria in comparison to national average. These areas are characterized as predominantly agricultural, but poor soil productivity prevents the land for intensive production or improved without excessive investment.

For the purpose of evaluation of other LFAs the following data were used: (1) data of categories on agricultural land, (2) data on cadastral income and (3) demographic data on population density, population growth, and share of agricultural population in total population.

Other LFAs cover about 4% of Slovenian territory and they are located mainly in 2 regions (Bela krajina and Suha krajina).

The **areas affected by specific handicaps** are geographically unified areas where farming should be continued to ensure conservation of the environment, maintain the countryside and preserve the tourist potential of the area. The total sum of all areas delimited in this group in Slovenia shall not exceed 10%. These natural handicaps are exceptional and make agricultural production extremely difficult in the areas extremely difficult of limited. In Slovenia the following specific handicaps are defined: frequent flooding, strong North wind (burja - bora), Ljubljana marsh, Karst and "soft erodible hills in central and eastern part of Slovenia".

All together the areas with specific handicaps, in which agriculture has to be preserved as the main activity for conservation of the landscape in Slovenia, cover 10% of total territory.

*Table 1 - Scope of LFAs in Slovenia according to the EU classification*

Type of area	Total land		Utilised agricultural area (UAA)	
	000 ha	%	000 ha	%
Mountain	1.467.240	72,3	328	54,2
Other LFAs	81.200	4,0	23	3,8
Areas with specific handicaps	202.480	10,0	98	16,2
Total LFAs	1.750.920	86,3	449	74,2
Outside LFAs	276.370	13,6	156	25,8
Total Slovenia	2.027.300	100,0	605	100,0

*Source: Rural development plan for the republic of Slovenia 2007 - 2013*

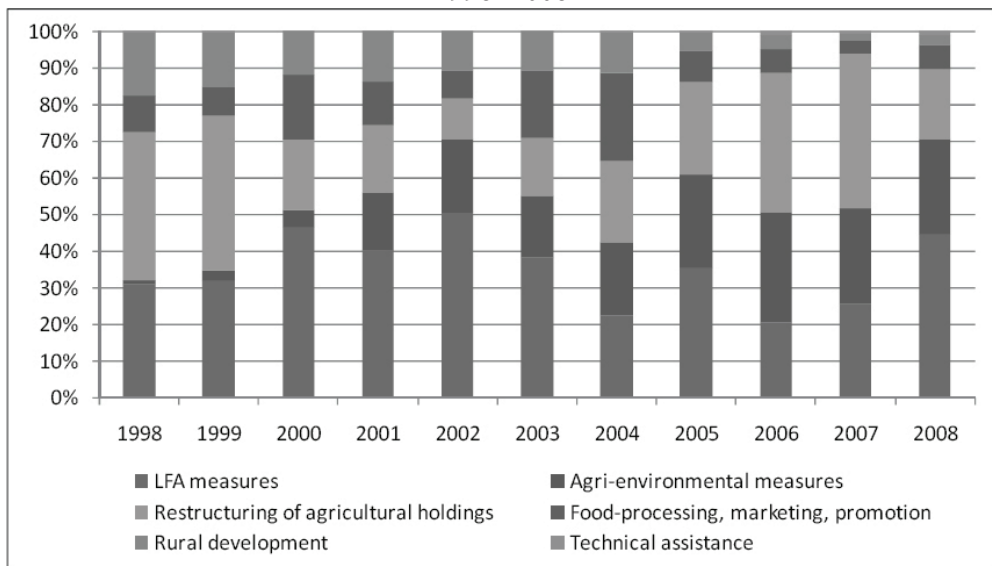
### Compensatory allowances

Compensatory allowances are an important part of the Common Agricultural Policy. These schemes play a particularly important role in the environment where the natural and structural attributes, for example in the Alpine regions, do not promote

competitive agricultural production. Agriculture, however, has other public functions. The programme of market neutral payments, which serve to the multifunctionality of agriculture and rural areas, promotes a suitable cultivation of agricultural land and environmentally sound technology. In this way, aspects of agriculture that are socially important services but are not measurable in terms of the market, such as the maintenance of the population density, cultural landscape and the environment have been recognized.

In 2003, Slovenia began to implement the EU comparable compensatory allowances scheme in LFAs in compliance with the EU and a national regulation. There was no essential difference between the general objectives of the Slovenian and the EU agrarian policy with regard to the promotion of the LFAs. In both cases, these areas are worse off than the flat areas; structural policy is adequately adapted and measures are intended above all to equalise the differences, which occur due to the different conditions for management of these areas.

*Picture 2: Share of expenditures for individual groups of RD measures in the period 1998 -2008*



*Source: MKGP, KIS, 2009*

Measures for strengthening the sustainable and multifunctional farming in LFAs are financed through public expenditure, where 80% of funds are co-financed from the European Funds, while other 20% are provided by the national budget. In the year 2008 around 44% of whole rural development fund was focused on the priority “Preservation of agricultural landscape in less favoured areas”.

For the areas referred to special delimitation, different amounts of compensatory allowances were introduced. The level of compensatory allowances depends on the classification of agricultural holdings into one of the classification categories with EP 2010 (57) SI – 2 (39-47)

regard to delimitation of LFAs and environmental characteristics of individual area. For the purpose of differentiations of payments, calculations were made by Agriculture Institute of Slovenia (Cunder, 2007, 3).

The difference in the costs of production “between sub-areas” within LFAs were calculated in the study entitled “Costs of agricultural production in different LFAs”. On this basis the actual level of compensatory allowances in LFAs are structured in greater detail.

The essentials of the study were:

- The level of the compensatory allowance per hectare for specific crops should provide that the own price of the product produced in less favourable conditions equals the own price of the product produced in favourable conditions.
- Differentiation of payments was defined in a simulation model with various production factors to determine the probable differences at the level of economic indicators.
- The analysis of production costs and the impact of different factors, which are typical for production in LFAs, on production costs has shown that the differences in costs for individual crops are substantiated enough if the following two indicators are used as criteria for different cultivation conditions: (1) intensity of production (yield quantity) and (2) the potential productivity of human and machinery work (possible use of machinery in production). The impact of these two factors on costs is significantly different for specific crops. The level of costs also depends on the type of agricultural land use.
- In the case of Slovenia, the level of necessary compensatory allowances for LFAs has been defined on the basis of a model matrix calculation. It has taken into account the current criteria for the definition of LFAs and the available data of agricultural land use. Agricultural land was classified under the individual elements of the matrix according to altitude (four classes) and inclination (six categories). Categories were identified on the basis of analysis of use in LFAs and analysis of trends of costs for specific products in difficult production conditions. Representative calculations of costs were made for different crops: potatoes, wheat and corn and for grassland - hay, silage and pasture.

The total levels of necessary refunds per hectare for specific areas were obtained by multiplying the average weightings for individual crop (weighting of difficulty level and land use) with initial costs.



*Table 2: Compensatory payments for LFAs in Slovenia; 2004 - 2008*

	EUR/ha		
	2004	2006	2008
Mountain areas	185,0	201,6	183,5
Alpine pastures	185,0	201,6	183,5
Steep slopes	158,1	172,4	156,8
Karst areas	158,1	172,4	156,8
Hilly areas	130,1	141,8	129,0
Different unfavourable conditions	63,8	69,5	63,3
Basic payment	25,6	25,3	25,0

*Source: Poročilo o stanju kmetijstva v RS (Agricultural report), 2009*

According to the data of Department for sustainable agriculture by Ministry of Agriculture, Forestry and Food 43.452 of agricultural holdings received compensatory allowances to cover production costs in the year 2008. They are representing 70 % of all in the payment scheme included farms in Slovenia. Of the total of 320.000 ha of agricultural land, which was claimed in subsidy applications, more than a third (35.3%) of the land is located in the mountainous/high-altitude area, which received most of the allowances (43.1%) (MKGP, 2007).

### **Expected economic, environmental and social impact and evaluation of current measures**

Slovenia prepared LFAs measures according to three basic strategic orientations recognised in EU: (1) competitiveness, (2) sustainability and (3) multifunctionality. Although the agricultural production itself has a decreasing role in Slovenian LFAs, the increasing importance of agriculture has to be stressed by its multifunctional character. The functions of agriculture extend from the narrowest function of food production to the socially important functions of landscape cultivation, opening of space and promoting its management in the context of the economy, strategy and ecology. The basic condition for this activity is the sufficient population density of the rural area.

*Table 3: Positive benefits of LFAs measures and comparison with agri-environmental measures*

	economic	spatial	social	environmental
LFA measures	++	+++	+++	++
Agri-environmental measures	++	++	+	+++

*Legend: High: +++; Medium: ++; Low: +*

Both, compensatory allowances and agri-environmental measures are expressed by their positive economic, spatial, social and environmental function in LFAs. They considerably contribute to income of farmers in specific areas. In connection with basic criteria of good farming practice, the measure contributes to preservation of agricultural land as well and therefore improves also the environmental functions of LFAs. The measures have a positive social impact on sustained presence of farmers in areas with lower population density.

Agri-environmental measures have definitely a positive impact on the environment, whether by decreasing the negative influence of agriculture or through maintaining the current state. They are aimed at long-term improvement of natural resources in Slovenia. Agri-environmental subsidies partly replace the costs of extra work for fulfilment of specific criteria of each measure. Agri-environmental measures have also a positive effect on improvement of skills and qualifications for the implementation of sustainable agricultural practices (Cunder, 2007, 1)

## Conclusions

A successful implementation of the LFA scheme in Slovenia in period 2007-2013 depends of many items including administrative structure, provision of information, monitoring of progress, integration with other policy objectives and the financial resources available. Scheme which is prepared under EU comparable regulations have multiple objectives regarding environment and landscape. However, it also has some economic and social objectives, which often bring competition between different policy interests. The rural development objectives might not be fully achieved in the case when measures are taken without sufficient coordination with other CAP measures. A careful monitoring effort - also by introducing rural development indicators, are needed to asses incentive payment schemes for their success in achieving of planning objectives and their effectiveness as policy instruments.

LFAs measures, involved in Slovenian rural development programme, could be effectively implemented only in the situation(s) where the following policy aspects can be ensured:

- further promotion of “non production” functions of agriculture in Slovene mountain areas,
- complete integration of agriculture inside the current political system, programmes and occurrences,
- assurance of quality-environment as a basis for sustainable economic development,
- adoption of long-run agricultural, social, regional and ecological policies.



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