



**„DIMITAR A. TSENOV” ACADEMY OF ECONOMICS Faculty
of Industry and Commerce
Department of Agricultural Economics**

ROSEN KOSTADINOV KOTSEV

**FLUCTUATIONS OF THE DEVELOPMENT OF RURAL AREAS
IN BULGARIA**

ABSTRACT

of a Dissertation Work for the Award of “Doctor” Academic and Scientific Degree
under a Doctoral Programme “Economics and Management”
(Agricultural Economics)

Scientific Supervisors:

Assoc. Prof. Marina Nikolova, Ph.D.

Assoc. Prof. Marusya Linkova, Ph.D.

SVISHTOV

2021

The dissertation work was discussed and proposed for defense under the provisions of the Law on the Development of Academic Staff in the Republic of Bulgaria by the Department of Agricultural Economics at “Dimitar A. Tsenov” Academy of Economics – Svishtov.

The dissertation consists of 177 pages, including 4 appendices. Structurally, it is composed of an introduction, an exposition in three chapters and a conclusion, it covers 26 figures and 24 tables. 76 literature sources are used, of which 44 are in Bulgarian (Cyrillic) and 32 are in Latin; 22 normative sources and 16 internet sources are used.

The dissertation defense will take place on the 11.02.2022 at 14.00 in the Rectorate Meeting Hall of “Dimitar A. Tsenov” Academy of Economics – Svishtov.

I. GENERAL CHARACTERISTICS OF THE DISSERTATION

1. Relevance and Significance of the Dissertation Topic

The relevance and importance of the topic result from the importance of the development of rural areas through the use of tools and mechanisms to overcome and control fluctuations in them.

The existence of inequalities within and between these areas is a signal to focus both on state regional policy and on the programmes for development of rural areas, on overcoming fluctuations as a significant problem and factor negatively affecting regional development. This is a topical problem, still not well developed and not well studied in its depth and permanence.

2. Object and Subject of Research

The *object* of research and analysis in the dissertation are the rural areas themselves with their specificities, differences, fluctuations and particular results reflecting the implementation of the different measures of the Rural Development Programme.

The *subject* of studies of the dissertation are the manifested and emerging fluctuations in the rural areas of the Republic of Bulgaria under the influence of various factors, including in the context of the implementation and impact of the Rural Development Programme with the relevant measures and axes on the development of rural areas, the stimulation of this development, the expansion of the scope of beneficiary subjects and the rational use of funding means in order to achieve optimal results both in the development of rural areas and in the development of agrarian sectors and planning regions.

3. Objective and Tasks of Dissertation

Given the research on the problem studied, the *main objective* of the dissertation is to analyse the state and potential for rural development in the context of overcoming the fluctuations within the rural areas.

In order to achieve this objective, the following main tasks have been set:

1. To derive the theoretical foundations of the concept of "rural areas" and to conduct a comparative analysis of the concept of "rural area" in different EU countries;
2. To analyse the characteristics and general situation of rural areas and on this basis to identify the main problems to be solved;
3. To characterize the EU CAP and to analyse the specificities of its implementation in our country;
4. To analyse the implementation and results of applying the measures of the Rural Development Programme (RDP) in the country.

4. Research Thesis

The *main thesis of the study* is, on the basis of the identified differences in the development and socio-economic status of rural areas in the Republic of Bulgaria, illustrated by specific data, to justify the role of the Common Agricultural Policy, respectively of the European funds, in overcoming the fluctuations between and within rural areas and to analyse their role as a factor for the development of rural areas as a whole.

5. Research Methodology

The following methods have been used to support the thesis of dissertation and to develop the hypotheses in the process of exposition:

- a/ statistical method;

b/ mathematical methods;

c/ analytical method;

d/ other methods such as: demographic analysis method, comparative analysis method, etc.

For the purposes of the research and the tasks to be solved in the dissertation, up-to-date data from "Agriculture" State Fund, the Ministry of Agriculture, Food and Forestry, including agrarian reports of the said ministry, data from EUMIS - the Information System for Management and Monitoring of EU Funds in Bulgaria 2020, data from the National Statistical Institute (NSI) and the dissertation author's own calculations were used.

A number of publications by representatives of the academic community working in this field have also been studied and cited.

6. Research Limiting Conditions

The limiting parameters of the research in the thesis are primarily related to the limitation of some reporting data from the EUMIS system and also to the horizon of analysis by the author, which determines the research in the general case depending on the time horizon of the last rural development programme.

Another limitation is the national parameters of the study with some regional nuances as well.

7. Approval

The dissertation was discussed and scheduled for defense before a scientific jury of the Department of Agricultural Economics with the Faculty of Industry and Commerce at "Dimitar A. Tsenov" Academy of Economics – Svishtov.

Parts of it have been published in specialised scientific journals. The author's main ideas have been presented at doctoral sessions and conferences with national and international participation.

II. DISSERTATION STRUCTURE

The structure of the dissertation follows the research approach adopted by the author and is subordinated to the defined aim and objectives of the research.

The content of the study has the following structural form:

Introduction

CHAPTER ONE State and Development Potential of Rural Areas

- 1.1. Theoretical and institutional foundations for delimitation of rural areas
- 1.2. General characteristics and problems of development of rural areas in Bulgaria
- 1.3. The RDP as a CAP instrument for development of rural areas

CHAPTER TWO Preconditions for the Occurrence of Fluctuations in Rural Areas

- 2.1. Problems related to the selection of beneficiaries, axes and support measures
- 2.2. Problems related to the implementation and execution of RDP measures in the first programming period 2007-2013.
- 2.3. Problems related to the implementation and execution of RDP measures in the second programming period 2014-2020.

CHAPTER THREE Opportunities to Overcome Fluctuations in the Development of Rural Areas

- 3.1. Analysis of the implementation of the implemented RDP admissions
- 3.2. Optimisation of activities in rural areas development by types of beneficiaries and programme effects on rural areas
- 3.3. Using the capacity of regional analysis to assess the effects of public support to avoid fluctuations in the development of rural areas in Bulgaria

Conclusion

Sources Used

Appendices

II. SYNTHESISED STATEMENT OF THE DISSERTATION WORK

INTRODUCTION

In the introduction the relevance of the work is justified, and the practical significance of the research is outlined. The object, the subject and the research thesis of the dissertation are defined, the objective is formulated and the specific tasks for implementation are set.

The methodology and limiting conditions of the study are outlined.

CHAPTER ONE. STATE AND DEVELOPMENT POTENTIAL OF RURAL AREAS

Chapter one of the dissertation is theoretical in nature and aims at putting the foundation for the dissertation research.

1.1. Theoretical and institutional foundations for delimitation of rural areas

There is still no single definition of a rural area in European law and practice. Research on rural areas in many countries has been ongoing for decades, yet there is still no universal definition.

The main reasons thereof are given as:

- there is no consensus on exactly what the characteristics of rural areas are (whether natural resources, or economic environment, or branch structure, etc.);
- it is sometimes necessary to apply different instruments depending on the purpose of the conducted survey (territorial coverage, unemployment, production, etc .);

- insufficient information on statistics for all administrative units, especially for small ones.

At an international level, one of the most commonly used approaches is the one proposed by the Organisation for Economic Co-operation and Development (OECD). As early as 1994, the OECD defined at a local level (municipalities NUTS 5) as rural those which have a population density of less than 150 people per sq.km.

It proposes a regional typology according to which each region can be classified as Predominantly Rural, Intermediate and Predominantly Urban.

This typology is based on a series of steps:

- First, it defines rural areas as communities according to population density;
- second, it estimates the percentage of a region's population living in rural communities;
- third, it takes into account the presence of major urban centres in that region.

In 2007, the European Commission (EC), in an analytical report issued by the JCR, introduced two criteria for separating rural and urban areas - accessibility (peripherality) and the percentage of territory occupied by natural areas.

In 1993, the Maastricht Treaty gave even greater importance to rural areas. They became a key priority in the European Union's support policy for economic and social cohesion.

The most important highlights are: development of small and medium-sized businesses, improvement of new technologies, organic farming and development of cultural and rural tourism.

In 2011 Eurostat proposed a new modified definition of rural area using so-called grid cells of 1 km².

This way there is no distortion of the data when a method using territorial units of different area is applied.

According to Eurostat, whether a region can be classified as rural or not depends on its degree of urbanisation.

The absolute number of the population also matters.

In 2010, the European Commission published a new definition of rural areas which uses the OECD Method but is based on population grids instead of LAU2.

This definition introduced the concept of rural grid cells. These are used to define rural areas. This ensures for rural areas the same concept (rural cells). The main features of this definition are given below:

- urban centre (high density cluster) consisting of contiguous cells with a population density of at least 1,500 inhabitants per km² and a total of at least 50,000 inhabitants;
- urban cluster (cluster of moderate density) - cells of 1 km² with a population density of at least 300 inhabitants per km² and a minimum population of 5,000 inhabitants;
- rural grid cells - grid cells not identified as urban centres or urban clusters.

In order to achieve the objective of the RDP, the European Commission has offered EU Member States the possibility to use 'horizontal' benchmarks to define rural areas:

A/ The OECD definition, which includes three different sub-categories of regions (predominantly rural, intermediate and predominantly urban) according to the percentage of the region's population living in municipalities that have fewer than 150 inhabitants per sq.km;

B/ The importance of the rural area itself (based on four factors), namely percentage of national territory, population, gross added value and unemployment rate in the specific area.

One of the most important priorities of agricultural policy is the complementarity between different European and national funding instruments in these areas.

In Bulgaria, we have started to pay greater attention to the implementation of a specific policy targeting rural areas since our accession to the EU.

The National Plan for Agricultural and Rural Development (2000-2006) proposes a definition of rural areas as "municipalities whose largest town has a population of less than 30,000 and a population density of less than 150 inhabitants per sq.km". This definition has been slightly modified in the Rural Development Programmes (2007-2013 and 2014-2020), which define rural areas as "municipalities (LAU1) in which there are no settlements with more than 30,000 inhabitants".

Bulgaria is divided into 6 planning regions (NUTS 2 level according to the European classification), 28 administrative districts/regions (NUTS 3 level) and 264 municipalities (LAU 1 level). Based on the OECD definition of a rural area, Bulgaria has 20 predominantly rural districts (NUTS 3 level), 7 intermediate districts and only one predominantly urban district - the capital Sofia. Thus, predominantly rural and intermediate areas cover 98.8% of the country's territory and 84.3% of its population.

The national definition defines rural areas as those municipalities (LAU 1) in which there is no settlement with a population of more than 30,000. This definition has been used for the SAPARD programme and is also applied in the Rural Development Programme 2007-2013 for area-based interventions.

1.2. General characteristics and problems of development of rural areas in Bulgaria

The problems in rural areas are extremely diverse and a large amount of research is needed to describe them in detail. Within the context of the objective of

this dissertation thesis, attention is paid only to the most important ones, reflected in the table below.

Many of them have been analysed in an ex-post evaluation of the Final Report of the Rural Development Programme 2007-2013.

<i>With regard to the achievement of a competitive and innovative agriculture, forestry and food industry</i>	
Lack of funding	<ul style="list-style-type: none"> • Lack of equity capital and difficult access to credit for small farmers in agriculture and forestry;
Low-skilled and ageing workforce	<ul style="list-style-type: none"> • Ageing workforce in agriculture and forestry; • Low educational and qualification level, insufficient management skills of the agricultural workforce and private forest owners;
Lack of innovations	<ul style="list-style-type: none"> • Underdeveloped vocational training system in agriculture, food processing industry and forestry and insufficient scope of consultant's services; • Poor integration of research units and slow uptake of innovations in agriculture and food industry.

<i>With regard to quality of life in rural areas</i>	
Depopulation, poverty and social exclusion	<ul style="list-style-type: none"> • Ageing population, negative natural growth and population migration; • Poverty and social exclusion in rural areas; • Low quality of social services and poor access of the rural population to basic services (schools, health and social care, penetration of information and computer technology, leisure and entertainment services); • Poor social capital for local development.
Highly agriculture-dependent economy and high unemployment	<ul style="list-style-type: none"> • Highly agriculture-dependent economy and limited job opportunities outside agriculture; • Deteriorating quality of the workforce in rural areas (low educational status, inadequate participation in the process of continuous knowledge acquisition and qualification improvement, long periods of unemployment);
Depreciated or lacking infrastructure	<ul style="list-style-type: none"> • Severely depreciated and/or lacking basic infrastructure (road infrastructure, water supply and sanitation).

Structural problems in rural areas are the result of: uneven and poor development of economic sectors and sub-sectors, underdeveloped processing industry, weak horizontal and vertical linkages and integration processes, business activity oriented mainly to the primary sector of the economy, sub-optimal utilisation of the rich natural and productive resources of rural areas.

1.3. The RDP as a CAP instrument for development of rural areas

The European Union's (EU) rural development policy is determined by the Common Agricultural Policy (CAP) for the EU countries. One of the main instruments of the CAP is direct payments and market support to farmers, known as the first pillar of the CAP, and the second is specifically related to rural development policy (second pillar of the CAP).

Europe's Common Agricultural Policy is largely focused on the development of rural areas, which is also due to the fact that approx. 77% of the EU's territory falls into the rural category.

At national level, around 81% fall into the same category.

Regarding the CAP 2014-2020, the main regulations of the new CAP were published in December 2013.

Subsequently, the Commission had the task of drawing up the delegated acts and implementing acts that were necessary to put the planned measures into effect.

In fact, the Rural Development Programme 2007-2013 is the successor of the SAPARD programme. It was adopted by Minute No 8.30 of the Council of Ministers' meeting on 1 March 2007.

On 19 February 2008, by Commission Resolution No 755, the Programme was formally notified. It uses many of the measures implemented by SAPARD, but of course there are a number of changes.

EU rural development policy for 2007-2013 is organised into four "thematic axes".

Each axis consists of several measures designed to achieve the policy objectives.

The first three axes are:

- development of competitive and innovation-based agriculture, forestry and food processing industries;
- protection of natural resources and rural environment;
- improving the quality of life and diversifying employment opportunities in rural areas.

A fourth axis, Leader, seeks to achieve the same objectives through community-led local development strategies.

The programme has the following general objectives:

In Bulgaria, rural areas are defined as municipalities where there are no settlements with more than 30 thousand inhabitants.

According to this definition, 232 out of 265 municipalities in our country are classified as rural. They occupy 81% of its territory, covering 39% of the population.

The RDP in Bulgaria for the programming period 2007-2013 is aimed at developing competitive agriculture and forestry, innovations in food industry, protection of natural resources and environment, as well as promoting employment opportunities and a better quality of life in rural areas. These are also the objectives set out in the National Strategic Plan for Rural Development.

The Rural Development Programme was officially approved on 19 February 2008 by European Commission Resolution No 755.

The total budget of the Programme for the period 2007-2013 amounts to EUR 3.242 billion, of which EUR 2.609 billion from the EU and EUR 0.632 billion from the state budget.

The financial resources under the programme are allocated to priority axes, which in turn are divided into specific measures for financial support to individual applicants.

The amount of grant per applicant varies depending on the type of measure applied and the activities implemented.

It varies between 40% and 100% of the total project cost depending on whether the applicant is a private entity or a municipality.

For some measures, the grant is per area (arable land or forests) or per farm (e.g. in the case of support for young farmers and semi-market holdings).

The Managing Authority of the RDP is the Directorate for Rural Development in the Ministry of Agriculture, Food and Forestry.

Rural development policy continues to be a key focus of the Common Agricultural Policy beyond 2013.

In line with the objectives of EU rural development policy, the Rural Development Programme 2014-2020 has three objectives:

1. Increasing competitiveness and balanced development of agriculture, forestry and processing industry;
2. Ecosystem conservation and sustainable management, use of natural resources in agriculture, forestry and food industry, climate change prevention and adaptation thereto;
3. Socio-economic development of rural areas, providing new jobs, poverty reduction, social inclusion and better quality of life.

The measures for financial support under the programme are grouped into 4 priority axes, as follows:

- Axis 1: "Improving the competitiveness of the agricultural and forestry sectors" - 37% of the RDP budget;
- Axis 2: „Improving the environment and nature” - 24% of the budget;
- Axis 3: "Quality of life in rural areas and diversification of rural economy" - 27% of the budget;

- Axis 4: "LEADER" (from French: "Links between rural economic development activities") - 2.5% of the budget.

The EU's rural development policy aims to help rural populations respond to the range of social and environmental challenges they face every day.

It complements direct payments to farmers and measures to influence agricultural markets.

CHAPTER TWO. PRECONDITIONS FOR THE OCCURRENCE OF FLUCTUATIONS IN RURAL AREAS

2.1. Problems related to the selection of beneficiaries, axes and support measures

The dissertation analyses the spending of the European Agricultural Fund for Rural Development (EAFRD). However, programmes under the European Agricultural Guarantee Fund, the European Fisheries Fund and the state budget can also be applied for in support of these activities.

The RDP budget per priority axis for the period 2007-2013 is presented in the table below (EUR million in current prices).

Priority axis	EU funds /EUR million/	National co-financing /EUR million/	Total (EU+national) /EUR million/
Axis 1 „Improving the competitiveness of the agricultural and forestry sectors”	972.18	241.89	1214.07

Axis 2 „Improving the environment and nature“	637.46	139.93	777.39
Axis 3 „ Quality of life in rural areas and diversification of rural economy “	726.96	178.29	905.29
Axis 4 „Leader“	61.59	15.40	76.99
Technical assistance	98.54	24.64	123.18
National additional payments to direct payments	145.47	36.37	181.84
TOTAL — EAFRD	2642.25	636.52	3278.77

The payments effected under the individual axes of the RDP are summarised by measure also in tabular form below.

	2008-2010	2011 -2012	2013-2014
Measures under axis 1	40.7	41.9	17.4
Measures under axis 2	9.3	21.4	69.2
Measures under axis 3	20.5	46.3	33.1
Measures under axis 4	2.2	21.7	76.1

Only the measures under Axis 1 "Improving competitiveness in the agricultural and forestry sector" of the RDP managed to achieve success already in the first sub-period of the RDP and to some extent the measures under Axis 3 "Quality of life in rural areas and diversification of the rural economy" did, too.

Under the other two axes, especially axis 4 "Leader", for the first 3 years practically no activity was carried out.

There are some particularities in the implementation of the measures themselves.

There are some changes in the RDP 2014-2020 compared to the previous period:

- First, the territorial scope of local development strategies is being extended - in addition to rural areas, they will also include the villages of some municipalities in urban areas. That will be very important for these settlements, as they are often excluded from funding under Rural Development Programme measures;
- The second change relates to an increase in both the amount of funding and its scope. It is now also possible to have the so-called multi-funding, which means funding not only from the RDP but also from other EU operational programmes;
- Third, there is the introduction of some new measures, such as M14 – “Animal Welfare”. This instrument continues the policy of complying with European standards for organic and ecological production and ensuring food safety and animal welfare.

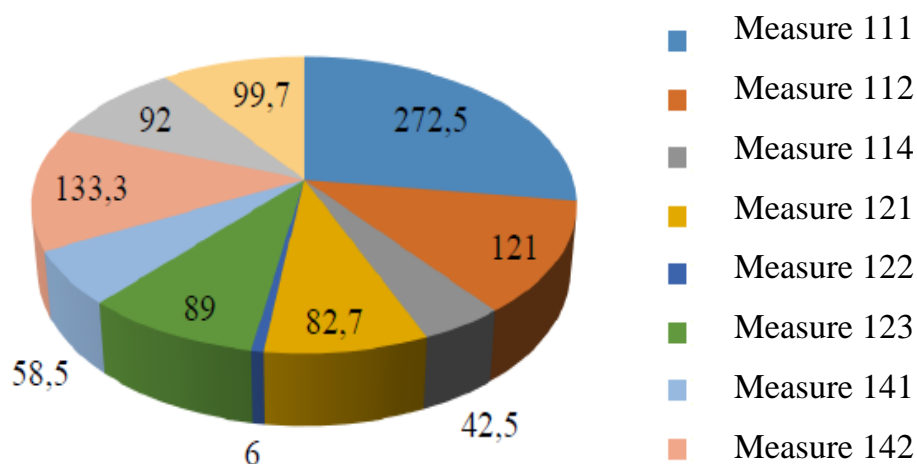
Of all the 16 measures, only 6 (37.5%) have been contracted as of May 2020. For measure M09 "Establishment of producer groups and organisations", 79.5% of funds have already been contracted.

For 3 other measures the rate is between 15-18% and these are Measure 4 "Investments in tangible assets", M07 "Basic services and rural renewal" and M20 "Technical assistance".

Two of the measures are at a beginning stage and for the remaining 10 measures it appears that the negotiation is yet to be completed.

2.2. Problems related to the implementation and execution of RDP measures in the first programming period 2007-2013.

The implementation of the measures under axis 1 for the period 2007 - 2013 is presented on the figure below:



Under Axis 1, 9 measures were implemented in the programming period, with a strong concentration of budgets under two of them: measure 121 "Modernisation of agricultural holdings" and measure 123 "Value addition to agricultural and forestry products", which account for about 81% of the total public funds disbursed.

Overall, the most successful measure in terms of targets set was measure 111 concerning „Vocational training, information and dissemination of scientific knowledge“, with 272.5% achieved

Measure 114 "Use of advisory services by farmers and forest owners" is one of the weakest in the whole Axis 1, for several reasons: first, its late start, second, lack of interest from beneficiaries.

Measure 122 „Improving the economic value of forests“ also features a very poor performance in terms of result indicators (especially for private forest owners).

Only 1% of private forest owners were approved and the main reason for rejection was the small size of the property and the requirements for eligible applicants - forest owners can apply while users cannot.

The performance of the indicators under measure 123 shows a very high level of applicability among beneficiaries.

73% of enterprises assisted were reached and those that introduced new products and technologies were 14% higher than targeted.

Under measure 141 „Support for semi-market farms in the process of restructuring”, BGN 72,230 thousand have been paid for the period 2008 - 2013, but assessments show that the amount of support is insufficient to restructure farms and additional support is needed to modernise and diversify activities.

2.3 Problems related to the implementation and execution of RDP measures in the second programming period 2014-2020.

The European Agricultural Fund for Rural Development remains the main source of funding for the 2014-2020 programming period.

The “Leader” approach is financially supported by 3 additional EU funds:

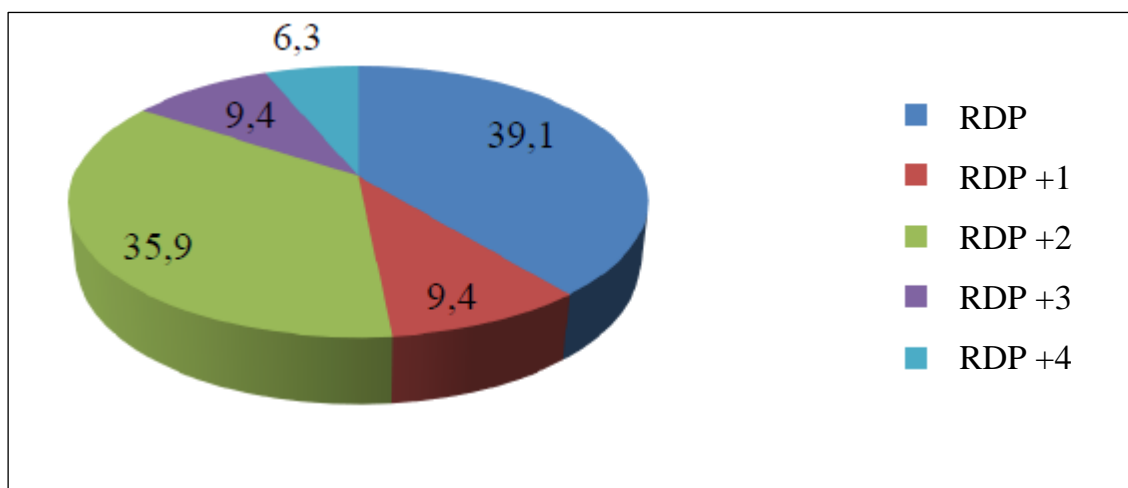
- European Maritime and Fisheries Fund (EMFF);
- European Regional Development Fund (ERDF);
- European Social Fund (ESF).

As of March 2020, a total of 72 Local Action Groups have been established in Bulgaria, distributed as follows:

	Funding	Share
64 local action groups	European Agricultural Fund for Rural Development	88,9 %
8 local action groups	European Maritime and Fisheries Fund	11,1%
Total		100

The advantages of using multiple funding sources are undeniable and this is illustrated by the figure below:

Number of funding sources for existing LAGs

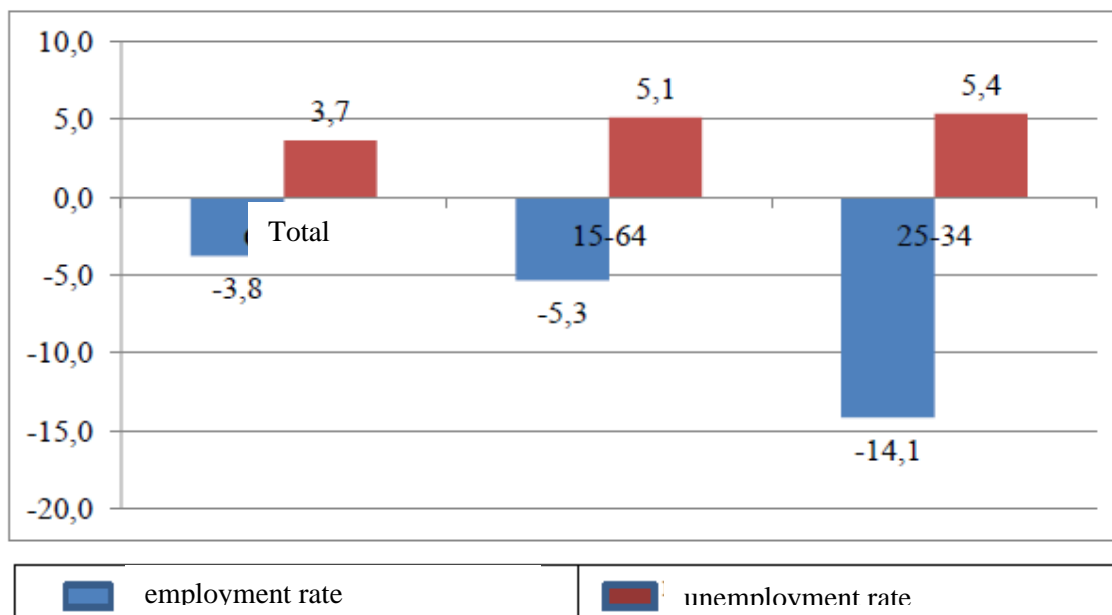


Only in about 40% of the cases LAGs rely solely on RDP funding, almost the same percentage - 35.9% - have two other sources of funding.

In terms of the resulting effect of the implemented measures on rural employment and unemployment in the first programming period, the aggregated results in the villages are presented in the table below for the period 2008-2014.

	Total	2008				Total	2014			
		Employed	%	Unemployed	%		Employed	%	Unemployed	%
Total	1945,6	769,7	39,6	77,1	4	1679,3	601,0	35,8	128,2	7,7
15- 64	1342,8	748,4	55,7	76,7	5,7	1168,6	589,2	50,4	126,9	10,9
25-34	210,2	143,1	68,1	16,9	8	293,0	95,3	53,9	31,6	13,4

The change in employment and unemployment in villages over the same period, for an aggregate population in three age groups, is illustrated in the figure below.



It is obvious that for the first programming period the RDP and its measures did not have the expected impact on employment and unemployment in rural areas.

The overall unemployment rate for the total population increased from 4 to 7.7% (by 3.7%), with the most significant increase for the 25-34 age group (5.4%).

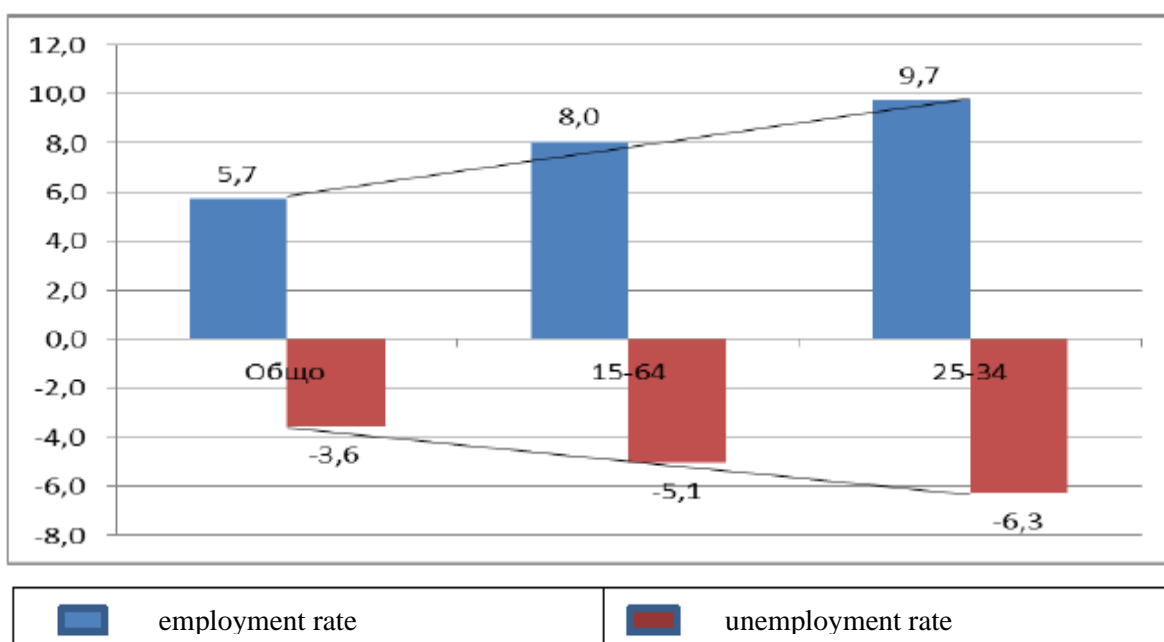
Towards the end of the first period (since 2014), the employment rate among the younger age group (25-34 years) declined by an extraordinary fall of 14.1%.

The effect of the measures implemented on rural employment and unemployment in the second programming period is illustrated in the table and figure below.

a/ Population, employed and unemployed persons in villages for the period, 2014 - 2018.

	Total	2014				Total	2018			
		employ ed	%	unemployed	%		employ ed	%	unemployed	%
total	1679,3	601,0	35,8	128,2	7,7	1603,7	665,4	41,5	65,4	4,1
15-64	1168,6	589,2	50,4	126,9	10,9	1104,7	645,8	58,5	64,1	5,8
25-34	293,0	95,3	53,9	31,6	13,4	262,7	99,7	63,6	15,8	7,1

b/ Change in rural employment and unemployment for the period 2008-2014 in three age groups



For the second programming period, things are radically different.

The overall unemployment rate for the whole population decreased from 7.7% to 4.1% or by 3.6%, with the most significant decrease in the age group of 25-34 year olds, namely by 6.3%.

For the period 2014-2018, for which the latest NSI data are available, the employment rate increased by a total of 5.7%.

Obviously, the younger age group (25-34 years) is one of those who benefit from the implemented measures and for them we have a jump of 9.7%.

The following main conclusions can be drawn from this analysis:

- There is an uneven utilisation of funds under the RDP and its individual

measures;

- Apparently there is almost no interest in some measures: e.g. measure 122 „Improving the economic value of forests“ from the first programming period.

For the second one it is too early to make an analysis, but from the data mentioned in the dissertation and their analysis the conclusion is that for 10 out of the 16 measures there are no contracted funds at all.

CHAPTER THREE. OPPORTUNITIES TO OVERCOME FLUCTUATIONS IN THE DEVELOPMENT OF RURAL AREAS

Overcoming the fluctuations in the development of rural areas in our country is not only a permanent problem to be solved, but also a task of national importance. Alongside the policy measures concerning the development of rural areas and the cohesion line in these measures, the starting point in such a process can be the systematic analysis.

The timely detection of fluctuations, inequalities and disparities is an important step in a methodological line of analytical behaviour by the part of the central government, regional representatives of central government and local self-governments.

3.1. Analysis of the implementation of the implemented RDP admissions

With regard to the implementation of the RDP 2014-2020, by years, as well as by regions and by types of measures, in order to carry out the relevant analysis, data from the "Information System for Management and Monitoring of EU Funds in Bulgaria 2020" were used in compliance with the necessary technological sequence.

Let's start by looking at the total RDP budget by regions and relating it to the respective rural population in the region.

For this purpose, the third column of the table below calculates the average budget per inhabitant and the 4th column provides a calculation of the ratio of this budget to the national average.

Region	Total RDP budget by regions, in thousands of BGN	Total population in rural regions	Budget per inhabitant in BGN*	% of budget to the national average*
North-west	113,470.2	263,423	430.8	103
North-central	83,705.5	253,188	330.6	79
North-east	82,571.6	246,055	335.6	80
South-west	202,704.6	325,763	622.2	149
South-central	194,265	457,742	424.4	102
South-east	86,147.7	279,904	307.8	74
Average	762,865	1,826,075	417.8	100

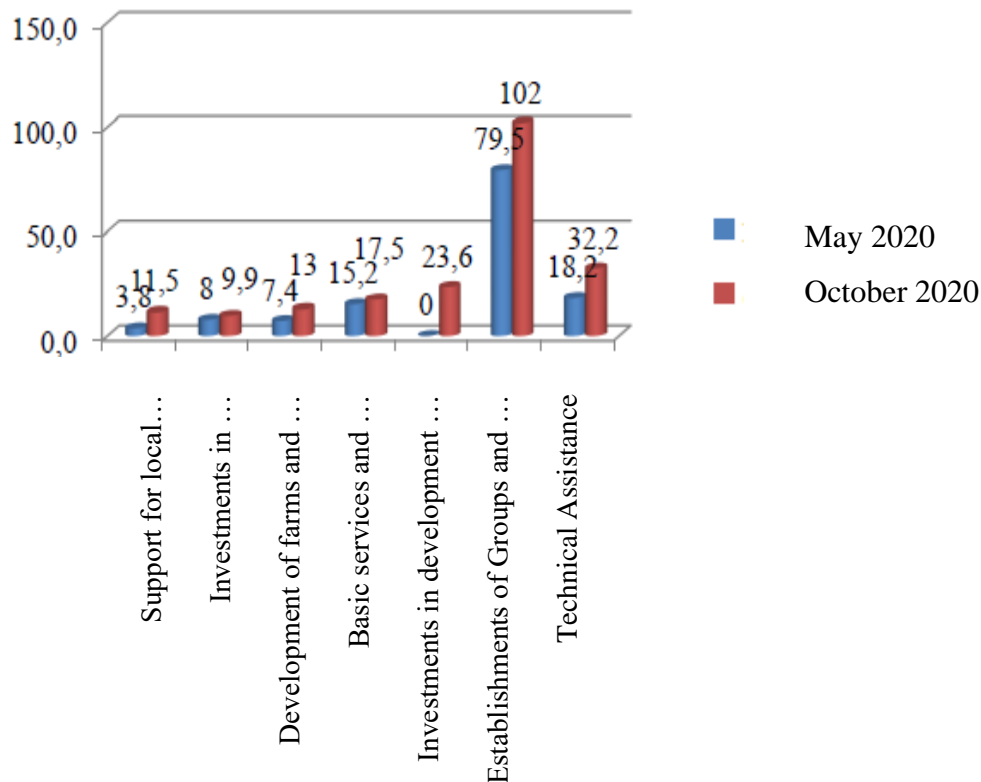
The analysis of the data shows that by its very nature, if the per capita budget indicator is taken into account, it is not particularly fair.

For two of the 6 regions, and namely, the South-Central and the North-West, the budget is around 100%.

In three of the other six regions it is in the range of 74-80% and there is a pronounced imbalance in the South-West region, where 150% of the RDP funds are set to be spent.

For the implementation of the RDP by types of measures, a chronological analysis has been carried out, first by comparing May 2020 to October 2020 and then supplemented with the latest data from MAFF as of May 2021.

The implementation of the programme by types of measures (in %) for the period 05.2020-10.2020 is illustrated in the figure below.



Of all the 17 measures, only 6 (35.3%) have been contracted as of May 2020. For measure M09 "Establishment of producer groups and organisations", 79.5% of funds have already been contracted.

For 3 other measures the rate is between 15-18% and these are measure 4 "Investments in tangible assets", M07 "Basic services and rural renewal" and M20 "Technical assistance".

Two of the measures are at an early stage and for the remaining 10 measures the negotiation is still to be done.

The main conclusion is that there is movement in some of the measures already

launched and apparently, based on the experience gained, beneficiaries continue to conclude new contracts. The main problem remains that for 2/3 of the measures no payments have yet been made to the beneficiaries.

On average for Bulgaria, one beneficiary concludes 1.1 contracts, with a ratio of one for the measure "Development of farms and enterprises" and the measure "Investments in tangible assets".

The highest number of contracts per beneficiary on average is seen for measure "Basic services and rural renewal" at 1.8 for Bulgaria and the region with the highest value is the North-West with 2.1.

3.2. Optimisation of activities in rural areas development by types of beneficiaries and programme effects on rural areas

In terms of seeking opportunities and exploiting available options to overcome fluctuations of rural areas within the context of the RDP, it is necessary after the analysis made to proceed to the next two stages, and namely:

- the first is to examine the effect of the programme on certain macroeconomic characteristics of rural areas in Bulgaria;
- and the second is related to how certain actions could be taken towards a specific type of beneficiaries.

In the rural areas of the EU, there has been a gradual increase in incomes of rural residents by a few percent per year, averaging 15% over the 5-year period, or 3% per year.

In rural areas of Bulgaria, such income encountered greater fluctuations and in 2015 and 2016 it has fallen by 1 and 5% respectively compared to that in 2014.

As we have already pointed out, in these years no funds have yet been utilised under the RDP 2014-2020, so this is a logical outcome.

In general, incomes of rural residents in our country are running in line with the EU average, with the exception of 2019, when a jump of over 20% on the previous year was seen.

Given the growing demographic challenges, Pillar II support is a key instrument for creating sustainable employment, boosting the rural economy by developing entrepreneurship and providing opportunities to raise people's incomes.

In order to propose measures and mechanisms to optimise GERD activities, it is necessary to make a very precise analysis of its performance, both by individual measures and by regions and for specific periods.

The dissertation sets out some of the doctoral candidate's proposals for measures that lack any activity, such as M01 "Knowledge transfer and awareness-raising actions".

Since the potential beneficiaries of the sub-measure are organisations that provide knowledge transfer through training courses and seminars, it is necessary to arrange meetings between government representatives and training organisations.

The conclusion drawn earlier that there is a strong concentration in only 3-4 measures of the programme is confirmed.

There appears to be an interrupted or insufficient information exchange between government authorities and potential beneficiaries.

Back in February 2020, there was talk of a mutual compensation fund subordinated to the Paying Agency to support farmers in combating hail, and the Ministry's goal is for this fund to be voluntary and structured by the end of 2020 so that it can actually operate in the current year 2021. The proposal is to pay compensations to farmers under the RDP through measure 17 „Risk Management“, which remained unused in the past programming period.

With regard to measure 2 „Advisory services, farm management and farm replacement services“, the planned joint information activities and events by the National Agricultural Advisory Service with research institutes and other organisations could be extremely useful.

Sustainable development of rural areas can become a permanent process in overcoming inequalities and fluctuations therein, and this is possible with a flexible

and adaptive approach to the implementation of support measures, not only as a financial instrument but also as a sustainable cohesion mechanism.

3.3. Using the capacity of regional analysis to assess the effects of public support to avoid fluctuations in the development of rural areas in Bulgaria

The analysis presented in the exposition shows that there are a number of fluctuations, the overcoming of which is a factor and condition for achieving sustainability in the development of rural areas and the agricultural sector as a whole.

A serious requirement in such cases to reduce the regional risk in rural areas induced and provoked by fluctuations is to take into account the influence of random factors which at a certain point (e.g. delay in the implementation of the measure concerned) may prevail and bring the final result to an undesirable outcome.

For a more successful management of each rural area and overcoming its fluctuations, it is important to make the support measures a serious factor and condition for achieving sustainable development while anticipating and taking into account the fluctuations that affect regional risk.

In this connection, it is necessary to provide for the so-called anti-risk factors, which could in practice overcome or minimise those factors in rural areas that are of a risk nature, including fluctuations.

The development of rural areas, ensuring its sustainability, is linked, as already noted in the exposition, most of all to the use of the opportunities of the natural geographic potential.

In the context of combining the economic and social development of rural areas, a task of a permanent nature is set, which is fundamental to the sustainable development of any rural area, and namely: to pursue a line of raising the standard of living of the population by providing a favourable environment for living, working and residing.

This task can be solved both by overcoming the fluctuations as a hindering factor and by mobilising the opportunities of the European Structural Funds and the

corresponding specific measures in the individual programming periods.

In the rural areas of the Republic of Bulgaria, a major influence on the sustainable development of each rural area should be exerted by its capacity to secure sources of funding, among which direct payments are to take priority. These payments also act as investments in the agricultural sector.

The analysis presented in the exposition shows that in the programming periods under review these investments do not have the desired and necessary effect on the development of rural areas, do not actively influence the overcoming of fluctuations and do not create sustainability in rural development.

The application and active use of the method of regional rural analysis will help to improve the quality and effectiveness of decisions relating to sustainable regional development of rural areas and overcoming fluctuations therein.

CONCLUSION

As a result of the research on the topic of the dissertation "Fluctuations in the Development of Rural Areas in Bulgaria" and the in-depth analysis of the status and potential for rural development, in the context of overcoming the fluctuations in rural areas, the following major **conclusions** can be drawn:

1. Within the individual rural areas and between them, as a whole, serious fluctuations have been found, based on the surveyed data. These fluctuations in some areas show serious critical positions and trends, which, in turn, have a negative impact on the development of the planning area concerned;
2. The Rural Development Programme, since its creation, has been designed to be an effective instrument for implementing the European Union's Common Agricultural Policy, to implement cohesion between different rural areas and to ensure the sustainable development of these areas. However, rural areas have not been sustainable in their development, as shown by the serious fluctuations mentioned in point 2;
3. In Bulgaria, as a full member of the European Union and an implementing country of the Common Agricultural Policy, the different measures and axes of the Rural Development Programme should be widely applied in terms of their diversity, sectoral affiliation and terms and conditions for applying. At this point in time, however, there are still no visible effects and visible results of the implementation of the RDP and, in this respect, no long-term effectiveness of the European Structural Funds funding has been demonstrated;
4. In order to play its full role in the country, the Rural Development Programme must be implemented in an efficient, analytical and expert manner, taking into account the need for funding for farmers as a whole. The results so far show serious shortcomings in the implementation of the individual measures, which are primarily administrative and subjective and to some extent legislative in nature;
5. Overcoming the above-mentioned fluctuations in the rural areas of Bulgaria

is possible through an active regional policy of the state, as well as through an effective and far-sighted use of financing measures in rural areas, through a rational application of the principles of the Common Agricultural Policy of the European Union, through its main instrument - the Rural Development Programme.

Based on the representations hereinabove and the analysis carried out in the dissertation, it can be concluded that its main objective has been fulfilled: to analyse the state and potential for development of rural areas in the context of overcoming the fluctuations therein.

IV. REFERENCE OF CONTRIBUTIONS AND ACHIEVEMENTS IN THE DISSERTATION

The dissertation work highlights the following research contributions of the doctoral candidate, as follows:

1. Thorough, justified and reasoned author's analysis of the data set for the first and second programme periods using the tool of statistical, economic-statistical, demographic and other analyses;
2. Drawing up author's estimates of the need for effective use of the RDP measures to overcome the fluctuations and inequalities in the rural areas of the Republic of Bulgaria;
3. Justification with concrete proposals and measures of the need for more effective, dynamic and targeted use of the RDP instruments to overcome fluctuations in the different programming periods and in future in order to reduce the role of fluctuations as a negative factor limiting the sustainable development of rural areas in the Republic of Bulgaria;
4. Justification of the need to use and apply the methods of regional analysis, including regional risk analysis and regional investment analysis, as well as mathematical modelling at a regional scale to support the processes of overcoming the fluctuations in rural areas and making optimal decisions to choose the most appropriate options for achieving high efficiency of the use of EU structural funds in these areas, by carrying out optimisation selection of the relevant measures.

V. LIST OF PUBLICATIONS RELATED TO THE DISSERTATION TOPIC

1. Articles

1.1 **Kotsev, R.** Implementation and effects of the Rural Development Programme in Bulgaria (2014 - 2020) // Annual Almanac Researches of Doctoral Candidates of “D. A. Tsenov” AE - Svishtov, 2020, p. 523-534, ISSN: 1313-6542.

2. Scientific Reports

2.1 **Kotsev, R.** Some characteristics and problems of rural areas in the context of the agricultural sector in the Republic of Bulgaria // Collection of Papers - State and Problems of Management and Development of Agriculture: International Scientific and Practical Conference, Svishtov, 4 October 2019, AE Tsenov 2019, p. 529-539, ISBN 978-954-23-1762-3.

2.2 **Kotsev, R.** Opportunities to overcome fluctuations in rural development // Collection of Papers - Sustainable development and socio-economic cohesion in the 21st century - trends and challenges: International Scientific and Practical Conference, Svishtov, 8-9 November 2021, AE Tsenov 2021 p. 788-795, ISBN 978-954- 23-2069-2 (print), ISBN 978-954-23-2070-8 (online).

VI. DECLARATION OF ORIGINALITY OF THE DISSERTATION THESIS

I, the undersigned doctoral candidate, Rosen Kostadinov Kotsev, in a part-time course of studies at the Department of Agricultural Economics with “Dimitar Apostolov Tsenov” Academy of Economics – Svishtov, do hereby declare that: The dissertation consisting of a total of 177 pages on the topic "Fluctuations in the Development of Rural Areas in Bulgaria" represents the author's own scientific production. It uses the author's own ideas, texts and visualization through figures, and complies with all the requirements of the Copyright and Related Rights Act by properly citing and referencing other authors' opinions, as well as data. The results achieved in the thesis and the scientific contributions made are original and have been borrowed from research and publications in which the author has contributed. The scientific results that have been obtained and/or published by other authors are duly cited.

November 2021

Svishtov

Declarer:

(Rosen Kostadinov Kotsev)