



**Study**

From  
implementing  
full EU CAP  
in the first  
seven years  
of full EU  
Membership  
and the  
Potentials for  
improvements



**Development in agriculture  
and rural areas of Bulgaria**

**Iordan Velikov**

**FRIEDRICH  
EBERT**   
**STIFTUNG**

Labour Relations  
and Social Dialogue  
in South East Europe



**EFFAT**



## Study

From  
implementing  
full EU CAP  
in the first  
seven years  
of full EU  
Membership  
and the  
Potentials for  
improvements

# Development in agriculture and rural areas of Bulgaria

**Iordan Velikov**

Iordan Velikov had various involvements with the implementation of CAP instruments in Bulgaria since 2000. In the period 2000-2004 he was working in the Ministry of Agriculture, where he participated in the elaboration of the National Strategic Plan for Rural Development under SAPARD and then was responsible for monitoring and reporting the implementation of three SAPARD measures associated with rural infrastructure and diversification of the rural economy. In the period 2006-2010 he has participated in various evaluation projects for the Rural Development Programme 2007-2013, and more specifically: the ex-ante evaluation 2006-2007, the ongoing evaluations in 2008 and 2009, the midterm evaluation 2010. Iordan Velikov is a master in Strategic Management from Sofia University with various short term trainings and specializations in various aspects of the CAP, the agriculture policy and the broader regional development the 2000-2004 in various new and old EU Member states, Japan and the USA.

**Published by:**

Friedrich-Ebert-Stiftung  
Regional Project for Labour Relations and Social  
Dialogue in South East Europe  
Tadeusa Kosciuska 8/5  
11000 Belgrade, Serbia  
Tel.: (381 11) 3284 255  
Tel.: (381 11) 3285 513  
Fax: (381 11) 2629 632  
fes@fesso.de

**In cooperation with:**

European Federation of Food, Agriculture and Tourism  
Trade Union (EFFAT)  
Rue de Fossé-aux-Loups, 38 box 3  
B-1000 Brussels, Belgium  
Tel.: (32 2) 218 77 30  
Fax: (32 2) 218 30 18  
effat@effat.org

**Author:**

Iordan Velikov

**Responsible:**

Roland Feicht, Friedrich-Ebert-Stiftung, Regional Project  
for Labour Relations and Social Dialogue in South East  
Europe

**Cover Design and Layout:**

ISSstudioDesign, Belgrade, Serbia  
igor.sandic@issstudiodesign.com

**Pictures:**

Cover, 5, 29, 123, 151:  
Roland Feicht  
13, 17, 89:  
Goran Pavlov

The views expressed in this publication are not  
necessarily those of the  
Friedrich-Ebert-Stiftung, EFFAT or of the organisation for  
which the authors work.

The text is an online publication available at  
[www.fes.de](http://www.fes.de) and [www.fesso.de](http://www.fesso.de)

Free download; Commercial use of all media published  
by the Friedrich-Ebert-Stiftung (FES) is not permitted  
without the written consent of the FES.

Belgrade, Serbia 2013

ISBN:



## Foreword

The study at hand of Iordan Velikov is a comprehensive analysis of the development and the rural areas in Bulgaria. It has been commissioned by the Regional Project of the Friedrich-Ebert-Stiftung (FES) for Labour Relations and Social Dialogue in South East Europe in cooperation with the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT). Its aim is to contribute to finding solutions for the further development and modernization of the agribusiness into a competitive sector providing jobs and income with decent working conditions in Bulgaria and the Western Balkans Region. We would like to express our sincerest gratitude to Iordan Velikov for this in-depth analysis and for his policy recommendations.

This paper is closely linked to the study of Radmila Grozdanic about the situation and possible perspectives of agribusiness in the Western Balkan countries, also published by FES and EFFAT this year, which has already contributed significantly to the evaluation of the performance of this economic sector in the region (<http://library.fes.de/pdf-files/bueros/belgrad/10206.pdf>).

Both, the FES and EFFAT hope that these two studies may contribute to the encouragement of all political authorities and social stakeholders in order to develop and promote the potential of the agriculture and the food sectors in this

region. In this respect FES, EFFAT and the Regional Council of the Agriculture Trade Unions in South East Europe together organized in Ohrid/Macedonia in November 2013 a conference about the perspectives of the agribusiness in South East Europe where both papers were presented and discussed. The Regional Council decided at the conference to prepare a common declaration with the vision and the demands of the trade unions *vis-à-vis* the agribusiness in South East Europe.

Belgrade,  
December 2013  
Roland Feicht  
Director,  
Friedrich-Ebert-Stiftung,  
Regional Project for  
Labour Relations and  
Social Dialogue  
in South East Europe

# Contents

|                                                                  |     |
|------------------------------------------------------------------|-----|
| <b>Introduction</b>                                              | 13  |
| <b>1. EXECUTIVE SUMMARY AND POLICY RECOMMENDATIONS</b>           | 17  |
| <b>2. RECENT DEVELOPMENT AND OUTLOOK OF THE AGRO-FOOD SECTOR</b> | 29  |
| 2.1. Macroeconomic indicators 2007-2013                          | 29  |
| 2.2. Agro-Food Outlook                                           | 39  |
| 2.2.1. External trade and competitiveness                        | 56  |
| 2.2.2. Social issues, employment, social dialogue                | 68  |
| 2.3. Organic production                                          | 80  |
| 2.3.1. Organic land, certified producers and products            | 81  |
| 2.3.2. Organic market                                            | 84  |
| 2.3.3. Support bodies and services                               | 86  |
| <b>3. AGRO-FOOD POLICY SUPPORT</b>                               | 89  |
| 3.1. Agricultural Policy and Budgetary Support                   | 91  |
| 3.1.1. Agricultural policy measures                              | 92  |
| 3.1.2. Market and direct producer support measures               | 102 |
| 3.1.3. Structural and rural development measures                 | 108 |
| 3.1.4. General measures related to agriculture and food industry | 109 |
| 3.1.5. Budgetary support to agriculture and food industry        | 112 |
| 3.2. The Agricultural Knowledge and Information Systems          | 113 |
| 3.3. Research and Innovation                                     | 119 |

|                                                                      |     |
|----------------------------------------------------------------------|-----|
| <b>4. CHALLENGES</b>                                                 | 123 |
| 4.1. Related EU-directives and implementation                        | 125 |
| 4.2. Climate Change and environmental risks                          | 127 |
| 4.2.1. Domains of countries response to risks                        | 127 |
| 4.2.2. Climate change and environmental risks mitigation             | 127 |
| 4.3. Free trade agreements, food safety and standards                | 129 |
| 4.3.1. Free trade agreements                                         | 129 |
| 4.3.2. Food safety rules, standards and implementation               | 129 |
| <b>5. SWOT ANALYSIS</b>                                              | 135 |
| 5.1. SWOT of agricultural policy and support services                | 135 |
| 5.2. SWOT analysis of agriculture structure                          | 138 |
| 5.3. SWOT analysis of livestock, meat and milk                       | 141 |
| 5.4. SWOT analysis of fruits and vegetables                          | 142 |
| 5.5. SWOT analysis of new products, modification type of products    | 143 |
| 5.6. SWOT of external macro- and micro-environmental actors          | 145 |
| 5.7. SWOT of market opportunities /internal strengths and weaknesses | 147 |
| 5.8. SWOT of critical actors                                         | 148 |
| <b>6. CONCLUSIONS AND POLICY RECOMMENDATIONS</b>                     | 151 |

## List of Tables

|                 |                                                                                                                     |    |
|-----------------|---------------------------------------------------------------------------------------------------------------------|----|
| <b>Table 1</b>  | Major population and economic indicators                                                                            | 31 |
| <b>Table 2</b>  | Structure of the Bulgarian economy 2009 and 2012                                                                    | 33 |
| <b>Table 3</b>  | Changes in overall population as well as in the villages and the rural areas                                        | 35 |
| <b>Table 4</b>  | Age structure of population per urban and rural areas in 2011                                                       | 36 |
| <b>Table 5</b>  | Education structure of population per urban and rural areas in 2011                                                 | 37 |
| <b>Table 6</b>  | Economic activity in BG and per rural and urban areas in 2011                                                       | 38 |
| <b>Table 7</b>  | Output from major plant production branches in 2011                                                                 | 39 |
| <b>Table 8</b>  | Output from major animal production branches in 2011                                                                | 40 |
| <b>Table 9</b>  | Output from less significant agricultural branches in 2011                                                          | 41 |
| <b>Table 10</b> | Major trends in agriculture                                                                                         | 42 |
| <b>Table 11</b> | Dynamics in the UAA and major animal and poultry herds                                                              | 44 |
| <b>Table 12</b> | Trends in the number of holdings and farmlands of the holdings in total and per holding land-size class             | 46 |
| <b>Table 13</b> | Dynamics in the structure of the holdings in animal breeding                                                        | 47 |
| <b>Table 14</b> | Dynamics in the contribution of agriculture to employment                                                           | 48 |
| <b>Table 15</b> | Hours worked per employee, thousands of hours                                                                       | 49 |
| <b>Table 16</b> | Distribution of the Standard Output volume, in 000 EUR, per major type of farm specialization and farm holding size | 50 |
| <b>Table 17</b> | Structure of breeding sows per size of pig farms in 2011                                                            | 52 |
| <b>Table 18</b> | Structure of cow milk farms in 2011                                                                                 | 53 |
| <b>Table 19</b> | Dynamics in the agriculture input prices and the producer prices                                                    | 55 |
| <b>Table 20</b> | Importance of international trade with agri products                                                                | 56 |
| <b>Table 21</b> | Agricultural trade in 2011                                                                                          | 57 |

|                 |                                                                                                                                        |     |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------|-----|
| <b>Table 22</b> | Trade with agriculture commodities per economic communities, countries and regions in 2011 and 2012                                    | 60  |
| <b>Table 23</b> | Trends in productivity in the economy and in the agriculture, forestry and fishery sector                                              | 62  |
| <b>Table 24</b> | Distribution of machinery per type of holding in 2010                                                                                  | 65  |
| <b>Table 25</b> | Distribution of holdings and irrigated areas per type of irrigation technology in 2010                                                 | 66  |
| <b>Table 26</b> | Trends 2008-2012 in average salary in selected economic activities, monthly, in EUR                                                    | 68  |
| <b>Table 27</b> | Indices of prices, household incomes and real expenditure in 2005-2010                                                                 | 70  |
| <b>Table 28</b> | Social vulnerability trends in 2005-2010                                                                                               | 71  |
| <b>Table 29</b> | Changes of purchasing power of households, calculated by total income average per capita, 2001=100                                     | 74  |
| <b>Table 30</b> | Expenditures in million BGN from the consolidated state budget, per function, by the 31st December each year                           | 77  |
| <b>Table 31</b> | Areas for production of organic produce 2006- 2011                                                                                     | 81  |
| <b>Table 32</b> | Areas of organic cultures 2011- 2012                                                                                                   | 82  |
| <b>Table 33</b> | Number of animals for organic produce                                                                                                  | 83  |
| <b>Table 34</b> | Number of registered operators for organic produce                                                                                     | 84  |
| <b>Table 35</b> | Number of organic items, shops and trade turnover for organic produce in 2008                                                          | 85  |
| <b>Table 36</b> | Authorized payments for Campaigns 2010 and 2011                                                                                        | 104 |
| <b>Table 37</b> | Graduates having earned a diploma for professional qualification in narrow spheres of knowledge after 8th grade of secondary education | 114 |
| <b>Table 38</b> | Graduates having earned a degree in higher education in narrow spheres of knowledge                                                    | 115 |

## List of Figures

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| Figure 1. Main agri exports in 2012                                             | 58 |
| Figure 2. Main agri imports in 2012                                             | 59 |
| Figure 3. Distribution of agricultural machinery numbers per owner and per type | 63 |

## Abbreviations

|              |                                                                                                                                       |                      |                                                                          |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------|
| <b>AAS</b>   | Academy of Agrarian Sciences                                                                                                          | <b>MAF</b>           | Ministry of Agriculture and Forestry                                     |
| <b>BAS</b>   | Bulgarian Academy of Sciences                                                                                                         | <b>NAAS</b>          | National Agriculture Advisory Service                                    |
| <b>CAP</b>   | Common Agricultural Policy; in 2007-2013CAP First Pillar financed by EAGF and CAP Second Pillar (Rural Development) financed by EAFRD | <b>NSI</b>           | National Statistical Institute                                           |
| <b>CP</b>    | Complementary Payments to farmers under various support schemes                                                                       | <b>NVZ</b>           | Nitrate Vulnerable Zones                                                 |
| <b>DP</b>    | Direct Payments                                                                                                                       | <b>PGs</b>           | Producer Groups                                                          |
| <b>EAFRD</b> | European Agriculture Fund for Rural Development                                                                                       | <b>POs</b>           | Producer Organizations                                                   |
| <b>EAGF</b>  | European Agriculture Guarantee Fund                                                                                                   | <b>RDP 2007-2013</b> | Rural Development Programme co-financed by the EAFRD (CAP Second Pillar) |
| <b>LFA</b>   | Less Favoured Areas                                                                                                                   | <b>SAPARD</b>        | Special Accession Program for Agriculture and Rural Development          |
| <b>LAG</b>   | Local Action Groups recognized under the LEADER Approach                                                                              | <b>SAPS</b>          | Single Area Payment Scheme                                               |
|              |                                                                                                                                       | <b>UAA</b>           | Utilized Agriculture Area                                                |
|              |                                                                                                                                       | <b>Y.O.</b>          | Years Old                                                                |



## Introduction

The agro-food sector in South East Europe is an important economic and social factor for income and employment. Its perspectives seem to be relevant to the economies in SEE because of its potential competitiveness; due to possible comparative advantages on the European and international market.

The European Trade Union Federation of Food, Agriculture and Tourism (EFFAT) with the support of FES-Regional Project for Labour Relations and Social Dialogue in SEE is starting to organize a discussion among its members organized in the Regional Council of Agriculture and Food Trade Unions in SEE about the situation and perspectives of the agriculture and food industries in South East Europe. The aim is to develop a comprehensive overview of the sector in order to develop its own economic policy recommendations in regard to sustainable and job-creating development of the agro-food-sector in South-East-Europe. Studies, workshops and conferences will be organized in order to achieve these goals.

The study about Bulgaria has been prepared by Iordan Velikov - an independent expert in the programming and implementation of Bulgarian SAPARD 2000-2006, and in the monitoring and evaluation of Bulgarian RDP 2007-2013.

The activities were carried out in the period August-September 2013 according to the Terms of Reference in Attachment 1 to this document.

The contents of the reports are as follow:

**PART 1. Executive summary** presents an overview of the findings and conclusions of the trends, importance and challenges to the development of agriculture, and outlines the broad fields and instruments of policy interventions in the next programming period 2014-2020.

**PART 2. Recent developments and outlook of the agro-food sector** presents the general trends in the development of the country, the place and trends in the development of the agriculture sector, as well as the ensuing socioeconomic hardships most affecting rural areas of the country.

**PART 3. Agro-food policy support** outlines the major elements of the legal environment in which the sector operates on the Common Market, and focuses on the agriculture support schemes financed by the CAP and the national budget; acting mostly in the 2010-2011 period. The section also offers an insight into the place of agriculture education and advisory systems within the overall educational system. The infrastructure for research and innovation is also briefly considered.

**PART 4. Challenges** presents not only an overview of the challenges faced by the agriculture sector and the production units arising mainly from Aquis, the climate changes and the globalization of the international markets for goods and services, but also a perspective on the globalizing market for qualified and motivated workforce.

**PART 5. SWOT-Analysis** summarizes the strengths, weaknesses, opportunities and threats with regards to: agricultural policy, the structure of agriculture, the livestock, meat and milk sectors, the fruits and vegetables sector, the rate of innovation in the sector measured by the launching of new products and modification of products, external micro and macro environmental actors, the internal strengths and weaknesses and market opportunities which the Bulgarian market for agrigoods offer, and finally presents a SWOT-Analysis of the critical actors shaping the policy and the general environment for development in the sector.

**PART 6. Conclusions and policy recommendations** tries to organize the conclusions from the various sections of the report and to produce working recommendations for medium term policy actions in the sector in the next 5-7 years.

Throughout the entire report an attempt was made to provide data from the post-accession period 2007-2011 m including data for 2012 where available.

Some difficulties were encountered with the accumulation of the necessary primary data. These particularly concern sections 3. Agro-food policy support and 4. Challenges, especially in view of the concrete difficulties to the farm-holdings arising from the Aquis.





# 1. Executive Summary and policy recommendations

## Some theoretical background

Agriculture is an integral part of the economy – it provides the raw materials to be processed and marketed by various value adding chains in the food industry, but also in various other sectors of the light processing industry – cosmetics, pharmacy, textiles, hide and leather production, and in turn is used by clothing and shoemaking industries, etc.

Farmers' families are the cornerstones of the local socio-economic fabric – on one hand they offer the "gifts of nature" to other families, but also in turn they create demand for processed goods and private and public services. Hence, the affluence of farmer families, i.e. their purchasing power, determines how many additional jobs will be preserved not only in processing enterprises and the retail and transport sectors, but also in public services sectors – i.e. teachers, pediatricians and doctors, dentists, police officers, postal officers, providers of drinking water and of electricity, of transport and communication services.

Family farming is usually a small business. A small business producing "without a roof, under the sky" will make everything possible to reduce the risks from weather

by diversifying its production in various branches of the agriculture plant production and animal breeding sectors. The last thing a farmer will want is to put *all his eggs in one basket* under the threat of losing everything because of a single natural disaster (flood, hailstorm or animal disease). Hence, specialization in a single product is rarely a strategy for the family farm holding. Moreover, mixed plant-animal production allows the holdings to add value by using the products of the one as the inputs to an other. Additionally mixed production will also supply raw materials to a greater number of value adding chains and thus support a greater variety of jobs (and other family incomes) will be preserved in the economy as a whole.

On the other hand, small family businesses have poorer bargaining powers to secure fair trade conditions as opposed to stronger units along the value added chain - be they suppliers of inputs, private marketing chains, banking institutions, etc. Therefore the small family farms will either choose to operate in the shadow economy or will try to join production cooperatives in order to increase their powers.

Family farming is based on families, and families need a minimum quality of life– if they don't have access to good social and technical infrastructure, if their children do not have access to quality education and health services they will choose to stop their economic activity and leave their homes situated in the rural areas.

However, if there are no family farms, then there will be no rural settlements. This is because rural settlements are operating in a municipal system which needs to be exporting goods and services in order to receive money to purchase goods and services not produced locally. While larger urban centers can have the capacity to export goods and services not originating or associated with agriculture, forestry and fishery, smaller rural settlements rarely can do so, because they lack the similar concentration of human capital with diverse knowledge and skills. In the case of rural economies, money from exported raw materials is indeed like the influx of oxygen rich blood to the limbs of a body. The greater the quality of the local produce and the degree of added value, the greater the amount of "blood" entering the local socio-economic system.

The conclusions from the theoretical deliberations above are that:

- Vibrant rural economies are dependent on sufficient concentration of affluent farmer families who will be able to spend money on other local goods and services; and who are producing a variety of raw materials to maintain the diversity of the local economy;
- Small farmers can rarely be affluent if they do not participate in cooperatives which ensure greater bargaining power in value adding chains; cooperatives not only allow for economies of scale in marketing the local output, but may add value by processing it according to the preferences of the final customers on the respective market;
- Vibrant rural economies should be adding value locally as much as possible to the primary raw materials; this will not only generate and preserve local jobs in related processing enterprises, but will also elevate and disperse the positive effects of the local economic multiplier;
- The families of the above workforce in the primary or processing sectors should be provided with sufficient quality of life.

### ***Overview of the developments in the general socio-economic context and the agriculture sector of Bulgaria***

Since accession in 2007 Bulgaria's **macroeconomic performance has been constantly improving** – the rate of the economically active population is rising, GDP is stable at 0-1% annual growth, as is the inflation rate –at 2-3%. The state budget deficit remains low, government debt is second best in the EU measured as its share of GDP, the national credit rating is stable, foreign trade deficit is decreasing, and purchasing power measured as GDP in PPS per capita is gradually converging to the EU level.

At the same time, because the economy of the country is small and depends on foreign trade, **the imported economic crisis** did bring negative developments: foreign direct investments decreased by six times compared to the pre-crisis levels, **thousands of small enterprises closed their operations, more than 350000 jobs were lost**, gross external debt of the country reached 94% of national GDP

in 2012, **the inequality of incomes is growing, purchasing power of poorer families are decreasing and the overall consumption rate in Bulgaria is decreasing.**

A **rapid depopulation** of rural areas is taking place – population density is rapidly dropping; there is a shortage of educated and economically active people and most worryingly – a shortage of families with young children, is observed. This in turn causes the closing down of schools and municipal hospitals, and further decreases the quality of life in rural areas; the rural province - being in a downward socio-economic spiral, is rapidly losing its inherited development potential.

The impacts from the **negative socio-economic and demographic trends are reinforced by the trends in agriculture.** First of all, Bulgarian agriculture is functioning significantly below its potential, and at present the country is not self-sufficient in almost any of agriculture product, except for the output of grain and oil-bearing industrial crops, where huge surpluses are regularly observed each year.

This is because of the rapid and chaotic transformation of the structure of agriculture production; where labour-intensive and value adding agricultural sectors and branches (such as animal breeding, fruit and vegetables and technical cultures) are gradually disappearing, together with family farms, which were the main producers of such outputs.

There are a number of drivers causing this transformation:

- some are influences dating back to the early years of the transition to a market economy, e.g. (i) the deindustrialization of the rural areas, (ii) the liquidation of the state cooperatives, (iii) unsuccessful land restitution, (iv) the dismantling of the irrigation infrastructure
  
- others are imported: e.g. (i) increased competition from imported commodities after joining the WTO because of reduced border protection against imported agriculture commodities, (ii) globalized speculative markets for energy sources causing constant increase in the prices of agriculture inputs, and/or (iii) expensive requirements to achieve compliance with the requirements of Aquis

■ a third group of drivers is associated with (i) a deficit in the policymaking by the inappropriate directing of the CAP support in agriculture towards the production of huge surpluses of raw materials, instead of supporting labour intensive sectors based on family farming; which would have provided quality raw materials for various branches of the processing industry and as a result of this negative impacts are hitting the wider rural economy, (ii) unfair competition from imported contraband foodstuffs or cheap food surrogates, (iii) barriers to trade with own farm produce (iv) difficult access to credit for modernizing production technologies, (v) low security and loss of productive assets because of thefts, (vi) low overall quality of life in rural areas and rapid depopulation which results in smaller markets for locally produced goods and services.

The changing structure and its drivers are causing economic underperformance in the sector, which can be assessed via the loss of employment, the lack of increase in the net GVA<sup>2</sup>, and the smaller than potentially possible proceeds from international trade; where exports of finished goods are still of lower quantity than the exports of raw materials.

This should not be happening in a Member state which has gained sufficient experience and administrative capacity to implement the complexity of the EU Aquis and various kinds of CAP support instruments.

The overview of institutions working in the area of information and knowledge and in innovation transfer, are operational and successful in achieving their objectives. There is a shadow of doubt, however, as to if they will have the necessary human capacity to meet the needs for consultation, advice, training and transfer of innovation, if the government decides to undertake massive reindustrialization of rural areas based on family farms, linked also with massive age restructuring of farm holders.

.....  
<sup>2</sup> Especially if the annual contribution of the CAP Direct Payments and BGRDP area-based payments is considered in the context of rising input price indexes (rising at 157 in period 2007-2012) and the even higher rise in the farmers price indexes (rise of 168 in period 2007-2012). [See tables 10 and 19 for details]

The same observations apply towards the systems, which control the quality and safety of foods – all necessary legislation is transposed and enforced by functional administrative units. One last major challenge remains – the achievement of compliance with the hygiene and sanitary standards in the cow milk sector, where the majority of the milk-cows are already hosted in productive dairy farms which comply to the recognized standards, but the majority of the holdings raising small numbers of animals are meeting neither the animal welfare standards nor the standards associated with milk hygiene.

Regarding globalization of trade in agricultural goods, and climate change – it appears that Bulgaria still has to prepare for climate related challenges, as its irrigation system and vulnerability to droughts and floods continues to be high. However, the country is aware of the challenges and is also preparing to use European support under the BGRDP 2014-2020 to remedy the risks related to the challenges of climate change.

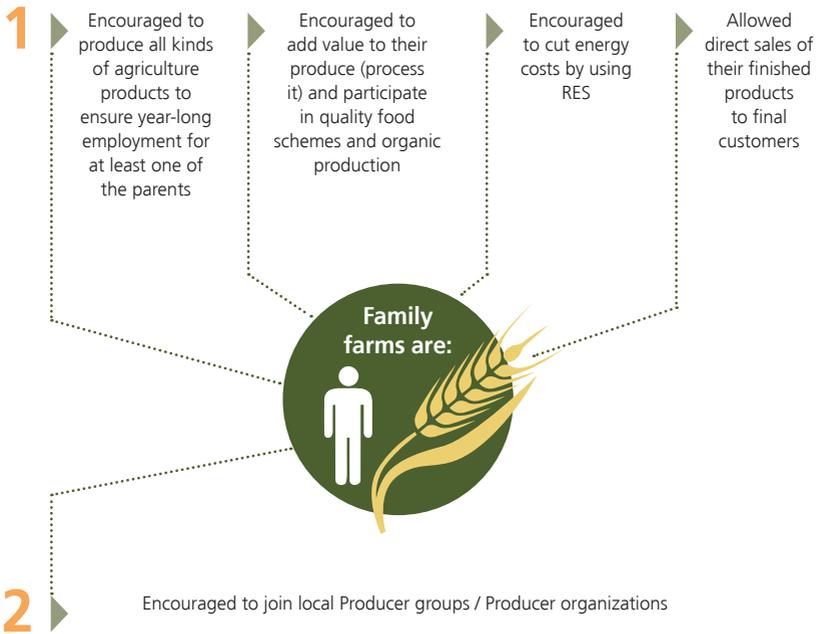
### ***Conclusions and recommendations***

The current structure and the driving forces currently influencing agriculture are **making the sector incapable of providing new employment opportunities to compensate for the jobs lost** in the construction and real estate sectors of the economy – which have suffered the most after the breakdown of the pre-crisis speculative bubble in these sectors.

This puts a grim perspective not only on the development of the sector but on the development of the entire economy.

This was to a great extent due to the **unsatisfactory level of social dialogue** both during the formulation of the policies in the sector, and in monitoring and adjusting the policy mechanisms.

The way out from this downward spiral is the **reindustrialization of rural areas, based on the creation of alternative family-based agriculture**. The possible model for achieving this is illustrated in the following scheme:





**NAAS and AAS** will contribute to the competitiveness of the holdings via consultations and transfer of innovations, preferably via the Producer Groups where available

**LAGs under LEADER** will be encouraged to (i) facilitate the formation of the PGs and to facilitate the improvement of human capital including via transfer of international practical experience on their territories, (ii) plan and implement local development strategies targeting the quality of life for the families, (iii) plan and implement tourism development strategy to bring additional demand for locally produced goods and services.

This approach will not only mobilize efficiently the knowledge and skills of various key players and allow concerted actions from various participants, but will also reduce the risks to individual farmer operations and will ultimately make agriculture a more attractive sector; offering jobs to replace employment lost in other sectors of the economy.

Thus social dialogue on the local level will contribute to local and national development goals including the ones set under the Europe 2020 goals and objectives.

**However, this will be an insufficient action if the social dialogue at the intermediate level – *EU Programs Monitoring Committee* and the upper level – *the National government level*, is not modified and fortified to ensure greater transparency in policy formulation and policy evaluation.**

Social dialogue should be based on exhaustive socio-economic and environmental impact assessment before any enforcement of political decisions with potential to affect various groups of the farm-holdings and/or regions or sub-regions in the country. The implementation of the formulated policies should then be ensured despite the particular party ruling the country, and the socio-economic and environmental impacts from the implementation of the policies should be monitored in a comprehensive and transparent manner, to ensure that policy instruments can be modified effectively in due time. This, among other things requires that:

- All the instruments available under CAP I and CAP II Pillars are coordinated for faster achievement of the alternative family based agrarian economy described above
- As quickly as possible, reindustrialization of the rural economy is achieved with the help of all EU-funded instruments in the 2014-2020 period via support for locally managed micro and small processing enterprises
- As quickly as possible, improvement of the quality of life in the rural areas is achieved with the help of all EU co-financed programs designed to cut down the exodus of rural families with young children.
- Transparent and effective decision making is introduced as soon as possible in order to ensure the efficiency of public funds in the achievement of the goals regardless of the origin of the funds – EU or the national budget.

These **necessities should also reflect on which CAP I and II instruments be enforced as early as possible** and which should be implemented at a later stage when all the actions and investments have been agreed on at a local level.

This means **that first should be launched the implementation of:**

- Measures which create capacity based on (a.) self-organization (e.g. producer groups), on (b.) acquiring knowledge (transfer of innovations) and (c.) acquiring knowledge and skills (education, training, information activities)
- Measures which mobilize the local communities for the achievement of local development objectives via the planning the implementation of local projects bringing benefits to wide groups of producers, processing businesses or wide social groups (e.g. pupils, unemployed youth, women, etc.).
- Measures supporting young farmers, small holdings, promote the shortening the market chain, or improving irrigation facilities
- Measures which will provide easier and cheaper access to small scale credit for the modernization of family farm holdings and adding value to their products on the farm, or in the Producer Group they participate.
- Measures which reduce the economic or natural risks for small holdings operations

Their implementation should be shortly followed by the launch of measures which improve the local quality of life for families with young children – these should improve not only the local technical infrastructure but also the facilities for better education, training and health services and access to fast and reliable internet.

It should be considered if the present maximum size of support for farm modernization should be preserved in the future. The Mid-Term Evaluation of the Rural Development Programme 2007-2013 has discovered that the provision of investment support to big farms is associated with big deadweight effects, which means that they are able to make the investments in increasing productivity without the support of the programme.

However, such a limitation should be considered carefully as there may be other non-fulfilled requirements imposed by the legislation, which are expensive to achieve compliance with.

In all cases, it is clear that in the next programming period (a.) small family farms run by families with young children, and (b.) locally operating and managed enterprises from the food industry and the light processing industry should become the focus and priority.

The support for all productive business and/or for improvement of public facilities should be accompanied with a horizontal requirement that the businesses or public services achieve greater energy efficiency or become energy independent after the support is over. This will be a great contribution to the competitiveness of businesses in the medium and long term, but will also open and preserve green jobs associated with the planning, construction and upkeep of the respective facilities.

The success of CAP interventions is heavily dependent on the formulation and sustainable fulfillment of "durable" national policies especially in the areas of:

- Sound management of municipal and state lands which can be used for agriculture production (these should be leased for long-term periods to allow the leasing farmers to invest in their upkeep and improvements and to participate in organic production and/or food quality schemes under PDO etc.)
- Border protection against contraband imports of raw materials and food stuffs;
- Protection of the interests of the customers via appropriate labeling on the marketed items
- Provision of quality public services associated with education, health, social services and security in all areas of the country
- Upkeep of acceptable public infrastructure both meeting the needs of businesses and families throughout the entire country

- Provision of support services (information, training, advice)
- Reduction of the administrative burden on micro and small business, as well as on micro and small family farms
- Balancing the prospects for development of all kinds of agriculture production, all geographic regions and all social groups including by the establishment of appropriate safety-nets for farmers, their businesses and ultimately – their families
- Improving social dialogue in the policy-making process including via the establishment of wider and more balanced farmer representation in the political process, as well as ensuring greater fiscal decentralization at the district or municipal government level.

It should be underlined that the last two governments made encouraging steps in some of the policy areas above by strengthening border controls, introducing national standards for foods, establishing and enforcing specific national state aid schemes to farmers, etc.

The preservation of these achievements as well as further progress in the above areas will be crucial for the sustainable development of the agriculture, forestry and fishery sectors, the wider rural economy and rural areas in general.



## 2. Recent Development and Outlook of the Agro-Food sector

### 2.1. Macroeconomic indicators 2007-2013

Bulgaria joined the EU in 2007. Since accession, the macroeconomic performance of the Bulgarian economy improved according to all indicators: the rate of employment increased, as well as the gross domestic product, the purchasing power of the population is gradually converging to the purchasing power of EU 28<sup>3</sup>, the foreign trade balance, and the inflation measured by the harmonized index of consumer prices stayed within the healthy 2.5-3.4%. The last<sup>4</sup> national credit rating is BBB (according to Standard & Poor's criteria) with a stable perspective.

<sup>3</sup> Measured as GDP per capita in PPS, but latter sections of the report will revisit this issue and give alternative reading of the data.

<sup>4</sup> According to data from the site of Ministry of Finance; rating assessment is by 13.12.2012.

A recent analysis<sup>5</sup> by the Bulgarian Industrial Association<sup>6</sup> indicates that in the period 2007-2012 investments in Bulgaria decreased by 79%, and the FDI plummeted more than 6 times – from 17.7 to 2.9 billion BGN. The economic crisis, the unfavorable economic environment, and low investment activity have caused the loss of more than 350 thousand jobs, as well as a lack of work for 112 thousand self employed workers.

.....  
<sup>5</sup> April, 2013.

<sup>6</sup> Based on data from the Bulgarian National Bank and the National Statistical Institute

**Table 1:** Major population and economic indicators

|                                                              | Unit           | 2007     | 2008     | 2009     | 2010     | 2011     | 2012        |
|--------------------------------------------------------------|----------------|----------|----------|----------|----------|----------|-------------|
| <b>Population</b>                                            | thou-<br>sands | 7 640. 2 | 7 606.5  | 7 563.7  | 7 504.8  | 7 327.2  | 7282.0      |
| <b>Labour<br/>force</b>                                      | thou-<br>sands | 3492.8   | 3560.4   | 3491.6   | 3400.9   | 3341.4   | 3344.3      |
| <b>Rate of<br/>economic<br/>activity pop.<br/>&gt;15y.o.</b> | %              | 52.6     | 53.8     | 53.0     | 52.0     | 52.5     | 53.1        |
| <b>Unemploy-<br/>ment rate-<br/>total</b>                    | %              | 6.1      | 5.0      | 7.9      | 11.2     | 11.4     | 12.4        |
| <b>Unemploy-<br/>ment rate<br/>- women</b>                   | %              | 6.7      | 5.1      | 7.4      | 10.3     | 10.0     | 11.4        |
| <b>Unemploy-<br/>ment 15-29<br/>y.o.</b>                     | %              | 9.8      | 8.9      | 14.5     | 19.8     | 20.0     | 20.7        |
| <b>GDP at cur-<br/>rent prices</b>                           | MEUR           | 30 863.9 | 35 535.9 | 35 036.7 | 36 159.6 | 38 619.4 | 39 785.7    |
| <b>GVA at basic<br/>prices</b>                               | % of<br>GDP    | 84.0     | 83.3     | 85.9     | 86.1     | 86.5     | 85.9        |
| <b>GDP per<br/>capita</b>                                    | EUR            |          | 4 648    | 4 605    | 4 789    | 5 169    | 5 450       |
| <b>GDP/capita<br/>in PPS1</b>                                | %              | 40*      | 43*      | 44*      | 44*      | 46*      | 47*         |
| <b>Inflation<br/>(HICP**)</b>                                | %              | 7.6      | 12.0     | 2.5      | 3.0      | 3.4      | 2.4         |
| <b>Govt. bud-<br/>get surplus/<br/>deficit (-)</b>           | % of<br>GDP    | 1.2      | 1.7      | -4.3     | -3.1     | -2.0     | -0.8        |
| <b>Foreign<br/>trade bal-<br/>ance</b>                       | MEUR           |          | -9 919.7 | -5 191.7 | -3 694.6 | -3 128.7 | -4 705.0*** |

**Source:** National Statistic Institute. Data indicated with '\*' is from EUROSTAT.

\*\* HIPC =Harmonized index of consumer prices

\*\*\* NSI, Preliminary data

BNB data indicates that by June 2013 the gross external debt<sup>7</sup> of Bulgaria reached EUR 37.5 billion - around 94% of the national GDP in 2012. It has increased by MEUR 500 in the period June 2012-June 2013. State debt remains less than 10% of total gross debt; by the 30th of June it had reached EUR 3.1 billion – an increase by MEUR 386 in the 12 month period. In June 2013 the net external debt<sup>8</sup> stood at EUR 15.4 Billion.

According to NSI preliminary data, FDI in the non-financial enterprises dropped by 0.1% to EUR 21.6 billion in 2012 compared to the 2011 level. Industry (EUR 9.4 billion) and Trade (EUR 4.4 billion) remain the leading sectors for FDI. In 2012 their share already constituted 64.0% of all FDI.

According to NSI preliminary data, in 2012 there were operating 312,458 non-finance enterprises, which produced an output of EUR 62.5 billion and generated GVA (at factor costs) amounting to EUR18.2 billion. These enterprises provided jobs to 1.88 million employed persons.

“Processing” and “Trade” are the most significant sub-sectors of the economy which generate the majority of the GVA and the employment. “Mining and quarrying”, “Communications” but especially “Energy and gas”, are on the other hand, generating the highest added value per employed person in the respective enterprises, as the generated GVA by them has a higher share in the GVA than their share in the overall employment.

.....  
<sup>7</sup> The gross debt includes the debt of the state government and the debt of the private sector.

<sup>8</sup> Calculated as the gross external debt plus BNB reserves minus the assets of the banks, the business and the Bulgarian citizens residing abroad.

**Table 2:** Structure of Bulgarian economy 2009 and 2012

|                                                      | Num Enterprises |               | Output MEUR    |                | GVA MEUR2      |                | Hired Employees Thousand |               |
|------------------------------------------------------|-----------------|---------------|----------------|----------------|----------------|----------------|--------------------------|---------------|
|                                                      | 2009            | 2012*         | 2009           | 2012*          | 2009           | 2012*          | 2009                     | 2012*         |
| <b>Nonfinancial enterprises – TOTAL</b>              | <b>316565</b>   | <b>312458</b> | <b>55816,4</b> | <b>62524,6</b> | <b>16651,8</b> | <b>18223,6</b> | <b>2041,9</b>            | <b>1878,9</b> |
| Mining and quarrying                                 | 373             | 388           | 987,2          | 1520,5         | 464,1          | 850,3          | 26,6                     | 25,0          |
| Processing                                           | 32177           | 29866         | 19081,5        | 25201,0        | 3894,9         | 4666,2         | 577,5                    | 525,1         |
| Energy and gas                                       | 921             | 1724          | 3584,1         | 4950,8         | 1202,6         | 1519,5         | 35,6                     | 33,3          |
| Water provision, Sewage and Waste management         | 627             | 771           | 614,9          | 700,5          | 273,3          | 339,5          | 32,1                     | 34,1          |
| Construction                                         | 23606           | 19042         | 9895,4         | 6515,4         | 2232,8         | 1233,3         | 237,5                    | 151,3         |
| Trade, auto and motorcycle repair                    | 143258          | 138541        | 7585,6         | 8229,2         | 3276,9         | 3715,9         | 539,2                    | 508,0         |
| Transport, storage, postal services                  | 19306           | 19002         | 4330,8         | 5496,4         | 1347,7         | 1579,5         | 161,1                    | 151,9         |
| Accommodation and catering                           | 25962           | 26479         | 1183,1         | 1375,9         | 476,9          | 615,4          | 140,5                    | 140,8         |
| Communications                                       | 7915            | 9265          | 3172,3         | 3323,1         | 1575,4         | 1636,9         | 66,3                     | 73,3          |
| Real estate operations                               | 16964           | 18740         | 1329,2         | 1171,3         | 526,2          | 484,6          | 36,3                     | 35,2          |
| Professional activities and scientific research      | 34353           | 36649         | 2985,1         | 2727,2         | 938,5          | 1036,9         | 90,0                     | 93,7          |
| Administrative and auxiliary services                | 7715            | 8593          | 1024,1         | 1270,8         | 425,1          | 527,7          | 93,4                     | 101,5         |
| Repair of computers, of personal and household items | 3388            | 3398          | 43,1           | 42,6           | 17,4           | 17,9           | 6,0                      | 5,7           |

Source: National Statistic Institute; \* \*\* indicates preliminary data.

The comparison of the structure of the economy in 2012 to the one in 2012 indicates that no significant changes have taken place.

Construction was the subsector most affected by the economic crisis: all indicators, e.g. *number of enterprises* (-19%), *output* (-35%), *GVA* (-44%) and *employment* (-36%) plummeted in this sector. Similar but milder trends are observed in the subsector "Real estate operations". This was due to the collapse in these two sectors after the breaking down of the pre-crisis speculative bubble; which propelled the rapid growth in these two sectors.

All the remaining sectors, even if they lost up to 10% of their employees, managed to increase the GVA generated by the respective sector. Most notable were the increases in GVA generated by "Mining and quarrying" (+83%), "Accommodation and catering" (+29%), "Energy and gas" (+26%) and "Water provision..." (+24%), which all managed to stay ahead of inflation in the reported period.

NSI preliminary data for 2012 indicates that the investments in capital formation in all sectors of the economy increased by 5.8% compared to the previous year, to reach EUR 9.72 billion in 2012.

In general, the economic crisis and the ensuing layoffs reduced the purchasing power of households and consequently the rate of internal demand and consumption<sup>9</sup>. This not only puts significant obstacles in the path to the economic recovery, but also makes a greater part of the population vulnerable to ever increasing<sup>10</sup> prices of the foodstuffs.

*Much more alarming problems are posed by the loss of an active, educated and motivated work population; in the last 10 years, the Bulgarian population diminished by 10%.*

.....  
<sup>9</sup> More on household purchasing power and consumption is provided later in subsection 2.2.2. Social issues, employment, social dialogue.

<sup>10</sup> More on producer price indices for farm output, in 2005-2012 period, is presented in the next section 2.2. 2.2. Agro-Food Outlook.

NSI data indicates that in the period 2004-2011 the country has lost almost 480,000 people from its population, the major loss being in the after-accession period 2007-2012, and is mainly caused by a loss from the population of villages and the rural areas<sup>11</sup>.

**Table 3:** Changes in overall population as well as in the villages and the rural areas

|                        | Popula-<br>tion<br>2004 | Popula-<br>tion<br>2007 | Popula-<br>tion<br>2012 | Change<br>2012 –<br>2004 | Loss<br>2012-<br>2007 | Loss<br>2012/<br>2007 % |
|------------------------|-------------------------|-------------------------|-------------------------|--------------------------|-----------------------|-------------------------|
| <b>Bulgaria</b>        | 7 761 049               | 7 640 238               | 7 282 041               | -479 008                 | -358 197              | -4,7%                   |
| <b>Villages</b>        | 2 329 203               | 2 237 050               | 1 975 808               | -353 395                 | -261 242              | -11,7%                  |
| <b>Rural<br/>Areas</b> | 3 232 167               | 3 136 451               | 2 848 139*              | -384 028                 | -288 312              | -10,1%                  |

\* According to data from the Population Census in 2011, there number was 2.903.101 in the beginning of 2011; i.e. this indicates a loss of 55.000 people in just two year period.

**Source:** NSI. **Note:** data for rural areas is derived by the author of this material, based on the definition for rural areas used in the Bulgarian Rural Development Programme 2007-2013.

The main reason for population loss in the rural areas is the negative demographic “growth” – due to higher mortality rates, and to a lesser extent - the outmigration of some 51.000 people from the active population of the rural areas (it accounts for 17.8% of the rural areas population loss in the 2007-2012 period.).

Due to the faster loss of population in the villages, the population of rural areas is currently concentrated in the municipal centers of the rural areas – i.e. in just 231 out of 4128 settlements in total are concentrated: 49.3% of the total rural population,

.....  
<sup>11</sup> According to the definition for implementing CAP II- Rural Development in Bulgaria, rural areas are the municipalities (LAU 2 level) where there is no settlement with population higher than 30.000 people. There are 231 rural municipalities out of 264 in total. The remaining 33 are herewith regarded as “urban” municipalities. Rural areas comprise 81.4% of total country territory but only 39.4% of Bulgarian population.

52.5% of the rural population between 15-64 y.o. and 40% of population >64 y.o. This indicates not just concentration, but concentration of the younger and more active population, in the municipal centers.

The fast depopulation of rural areas makes the age structure therein unfavourable for development. Table 4 compares the age structure in the rural and urban areas.

**Table 4:** Age structure of population per urban and rural areas in 2011

|                | Popula-<br>tion total | 0-14 y.o. |       | 15-64 y.o. |       | >64 y.o. |       |
|----------------|-----------------------|-----------|-------|------------|-------|----------|-------|
| Rural<br>areas | 2903101               | 399845    | 13.8% | 1882003    | 64.8% | 621253   | 21.4% |
| Urban<br>areas | 4461469               | 575427    | 12.9% | 3145898    | 70.5% | 740144   | 16.6% |

**Source:** NSI, *Population census 2011* -, own calculations, based on the definition for rural areas used in the *Bulgarian Rural Development Programme 2007-2013*.

The education structure of the population in rural areas is also more unfavourable for economic development: the share of population in the urban areas which has secondary or higher education is almost 50% higher than the share of such population in the rural areas.

**Table 5:** Education structure of population per urban and rural areas in 2011

|                        | Popula-<br>tion | Declared<br>educa-<br>tion<br>degree | Higher edu-<br>cation |                     | Secondary<br>education |       | Never<br>attended<br>school |      |
|------------------------|-----------------|--------------------------------------|-----------------------|---------------------|------------------------|-------|-----------------------------|------|
| <b>BG</b>              | 7 364 570       | 6 891 177                            | 1 348 650             | 19,6% <sup>13</sup> | 2 990 424              | 43,4% | 80 951                      | 1,2% |
| <b>Rural<br/>Areas</b> | 2 903 101       | 2 716 408                            | 256 404               | 9,4%                | 1 059 646              | 39,0% | 49 870                      | 1,8% |
| <b>Urban<br/>Areas</b> | 4 461 469       | 4 174 769                            | 1 092 246             | 26,2%               | 1 930 778              | 46,2% | 31 081                      | 0,7% |

**Source:** NSI, *Population census 2011, own calculations*

The rate of economic activity in rural areas was also significantly lower than in the urban areas. Table 6 indicates not only that the rural areas have less population aged above 15 years of age, but also that a smaller share of the population have jobs or participate in the overall socio-economic life of the country.

According to NSI data, the number employed people in villages was 618,000, with the employment coefficient being barely 36.3%, while in the towns this figure stands at 50.9%.

<sup>13</sup> Of all who declared a their level of education during the Census.

**Table 6:** Economic activity in BG and per rural and urban areas in 2011

|                        | Popu-<br>lation<br>≥15<br>y.o. | Economically active |                            |                 | Economi-<br>cally Inac-<br>tive |         |             |           |              |
|------------------------|--------------------------------|---------------------|----------------------------|-----------------|---------------------------------|---------|-------------|-----------|--------------|
|                        |                                | Total               | Employed                   | Unem-<br>ployed |                                 |         |             |           |              |
| <b>BG</b>              | 6 389 298                      | 3 329 683           | <b>52,1%</b> <sup>14</sup> | 2 834 834       | <b>44,4%</b>                    | 494 849 | <b>7,7%</b> | 3 059 615 | <b>47,9%</b> |
| <b>Rural<br/>Areas</b> | 2 563 566                      | 1 171 978           | <b>45,7%</b>               | 937 253         | <b>36,6%</b>                    | 234 725 | <b>9,2%</b> | 1 391 588 | <b>54,3%</b> |
| <b>Urban<br/>Areas</b> | 3 825 732                      | 2 157 705           | <b>56,4%</b>               | 1 897 581       | <b>49,6%</b>                    | 260 124 | <b>6,8%</b> | 1 668 027 | <b>43,6%</b> |

**Source:** NSI, Population census 2011, own calculations

The rural areas of the country are rapidly losing their labour force, a fact which impedes the utilization of the potential for economic growth in these areas. The knowledge, skills and abilities of the remaining workforce are decreasing. This process is associated with increasing poverty and decreasing purchasing power in rural areas; which leads to a shrinking demand for, and consumption of, goods and services; this makes it even harder for the emergence of new businesses – especially in the tertiary sectors of the economy.

A shrinking and aging population makes obsolete entire layers of the public service infrastructure – lack of young families means lack of children, lack of children makes obsolete kindergartens, schools and community centres. The closing of schools cuts down jobs for teachers and pediatricians, reduces the workload for dentists and diminishes the use of public and private transport, etc.

All this sends the rural economy into a downward spiral of ever-decreasing active population, employment, productivity and potential for future economic development.

The implementation of the Common Agriculture Policy in Bulgaria has contributed significantly to these negative developments. Section 2.2. and especially Part 3 will give more details on this topic.

<sup>14</sup> Share from all population ≥ 15 y.o.

## 2.2. Agro-Food Outlook

Bulgaria is situated in the southeastern part of the European Union. Its climate, soils and natural conditions offer possibilities to grow a diverse list of cultures which could be used in various value adding chains from the food industry to the light processing industry.

The geography of the country is also quite diverse – more than 33% of its territories are semi-mountainous or mountainous, and offer possibilities for animal breeding based on free grazing.

The data on Bulgarian agriculture dated 2011 shows that the majority of the agriculture output comes from the production of arable crops – mostly grain and industrial oil-bearing plants. These cultures occupy the majority of the 3.0 million hectares of arable lands situated in the plains of the country.

The quantities of grain and oil-bearing produce exceed greatly the annual needs for self-subsistence of the country estimated at less than 2.0 million tons of grain. The remaining production surpluses are exported in the EU or on the markets of third countries.

**Table 7:** Output from major plant production branches in 2011

| PLANT OUTPUT     | Harvested areas, thousand ha | Output, thousand tons | Average yield, tons/ha |
|------------------|------------------------------|-----------------------|------------------------|
| <b>Wheat</b>     | 1,137.5                      | 4459.0                | 3.92                   |
| <b>Barley</b>    | 179.0                        | 704.0                 | 3.95                   |
| <b>Maize</b>     | 399.4                        | 2209.0                | 5.53                   |
| <b>Sunflower</b> | 795.3                        | 1439.0                | 2.24                   |
| <b>Rapeseed</b>  | 231.3                        | 511.0                 | 2.24                   |

**Source:** MAF, Agristatistics directorate

The production of animal output is on the other extreme –Bulgaria ranks almost always last in the EU with regards its production of animal output per capita of its population or per hectare of its Utilized agricultural area. If distributed evenly per capita from 7.3 million total Bulgarian population, the total 213000 tons of meat output would be distributed at less than 30 kg/capita; this is almost 2.9 times lower than the average per capita consumption of meat in the EU in 2009 (82.6 kg./capita).

**Table 8:** Output from major animal production branches in 2011

| ANIMAL OUTPUT             | Number, thousands | Milk, tons | Meat, tons | Eggs, thousands |
|---------------------------|-------------------|------------|------------|-----------------|
| <b>Cattle</b>             | 558               | -          | 20,887     | -               |
| <b>Incl. milk cows</b>    | 307               | 1,125,824  | -          | -               |
| <b>Pigs</b>               | 608               | -          | 72,506     | -               |
| <b>Sheep</b>              | 1,454             | 89,296     | 11,811     | -               |
| <b>Goats</b>              | 341               | 61,543     | 4,116      | -               |
| <b>Poultry</b>            | 14,656            | -          | 103,856    | -               |
| <b>- laying hens</b>      | 6,627             | -          | -          | 1,185,034       |
| <b>-broilers for meat</b> | 6,522             | -          | 75,337     | -               |

**Source:** MAF, Agristatistics directorate

Bulgaria is also lagging behind in the production of most of its agriculture products in which it has comparative advantages, due to its geographic location.

**Table 9:** Output from less significant agriculture branches in 2011

|                                           | Harvested areas, ha | Output, tons   | Average yield, tons/ha |
|-------------------------------------------|---------------------|----------------|------------------------|
| Rice                                      | 11,791.0            | 59,619         | 5.05                   |
| Fiber plants (only cotton*)               | 415.0               | 414            | 1.0                    |
| Tobacco                                   | 21,702.0            | 40,607         | -                      |
| Medicinal plants and essential oil plants | 48,972.0            | -              | -                      |
| <b>Vegetables total</b>                   | <b>46,600.0</b>     | <b>691,686</b> | -                      |
| <i>of fruit type</i>                      | 16,489.9            | 337,471        | -                      |
| <i>of pulses type</i>                     | 6,301.2             | 16,959         | -                      |
| <i>of brassicas and leafy type</i>        | 4,033.0             | 62,919         | -                      |
| <i>of root and tuber type</i>             | 18,659.4            | 205,000        | -                      |
| Cultivated mushrooms                      | 9.7                 | 2,171          | -                      |
| <b>Fruits</b>                             | <b>38,551.0</b>     | <b>163,108</b> | -                      |
| - apples                                  | 4,890.0             | 40,413         | 8.3                    |
| - pears                                   | 469.0               | 1,974          | 4.2                    |
| - apricots                                | 2,606.0             | 11,931         | 4.6                    |
| - peaches                                 | 4,225.0             | 28,422         | 6.7                    |
| - plums                                   | 6,938.0             | 32,371         | 4.7                    |
| - cherries                                | 7,742.0             | 30,063         | 3.9                    |
| - walnuts                                 | 5,192.0             | 2,406          | 0.5                    |
| - raspberries                             | 1,634.0             | 7,650          | 4.7                    |
| - other                                   | 3,226.0             | 3,550          | -                      |
| <b>Vineyards</b>                          | 46,145.0            | 240,531        |                        |
| - for wine                                |                     | 228,451        | 5.2                    |
| - for dessert grape                       |                     | 12,080         | 5.0                    |

**Source:** MAF, Agristatistics directorate

Bulgarian agriculture has passed through a rapid transformation since the last decade of the 20th century when the abolishment of state cooperatives and land restitution reforms were launched; as a result, all operations in the sector were liberalized and the sector was left to self-organize according to the mechanisms of the free market economy.

**Table 10:** Major trends in agriculture

|                                               | Unit | 2007   | 2008   | 2009   | 2010   | 2011   | 2012*  |
|-----------------------------------------------|------|--------|--------|--------|--------|--------|--------|
| <b>Output of AGRICULTURE INDUSTRY</b>         | MEUR | 3314.9 | 4494.1 | 3811.1 | 3821.9 | 4349.4 | 4426.1 |
| <b>Crop Output, incl.</b>                     | MEUR | 1565.8 | 2489.5 | 2016.8 | 2153.3 | 2542.0 | 2640.8 |
| - cereals                                     | MEUR | 446.4  | 1025.4 | 675.7  | 842.8  | 1196.1 | 1319.9 |
| - industrial                                  | MEUR | 314.7  | 588.2  | 534.4  | 747.3  | 921.1  | 808.2  |
| - vegetables                                  | MEUR | 436.4  | 540.6  | 242.9  | 184.4  | 119.8  | 111.8  |
| - fruits                                      | MEUR | 215.6  | 162.4  | 158.6  | 122.0  | 129.1  | 162.4  |
| <b>Animal Output, incl.</b>                   | MEUR | 1246.5 | 1375.2 | 1162.0 | 1081.0 | 1230.3 | 1223.0 |
| <b>Animals</b>                                | MEUR | 636.9  | 673.6  | 642.0  | 559.7  | 621.7  | 647.9  |
| <b>Animal products</b>                        | MEUR | 609.6  | 701.6  | 520.0  | 521.4  | 608.9  | 575.1  |
| - only milk                                   | MEUR | 487.6  | 554.9  | 392.3  | 375.4  | 467.1  | 426.9  |
| <b>Gross Value Added</b>                      | MEUR | 1227.2 | 1885.7 | 1296.0 | 1355.7 | 1624.2 | 1685.8 |
| <b>Net Value Added</b>                        | MEUR | 1112.4 | 1761.6 | 1118.0 | 1444.3 | 1422.9 | 1508.4 |
| <b>Direct Payments – CAP Pillar 1**(EAGF)</b> | MEUR | 0      | 166,3  | 209,1  | 265,6  | 293,8  | 370,9  |

**Note:** Figures don't add up because only the output of major cultures are shown in the Crop output; various subheadings to the "Output of the Agriculture Industry" are also not included (e.g. "Agriculture services output", etc.)

**Source:** EUROSTAT <http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database>, current prices.

\* **Estimated data.**

\*\***Source:** National Agriculture Report 2012; the data indicates the effected authorized payments

Table 10 indicates the major transformation of the production structure, where crop output accounted for 47.2% in 2007 and increased to 59.7% in 2012, while the share of the animal output shrank from 37.6% to 27.6% respectively. Most notable was the increase in the output from cereals (almost 300%) and industrial crops (almost 260%); the output from more labour intensive subsectors, however, significantly decreased: vegetables output plummeted by -74%, fruits output by almost - 25%, animal products by almost - 6% and milk by - 12.5%.

The output of the agriculture industry rose in the period by 33.5% due only to the increase in output of cereals and industrial crops. GVA in the same period increased by 37.4%, and the Net Value Added rose by 35.6%, but mainly due to the ever increasing subsidies under CAP I – Direct Payments.

Table 11 shows the reasons for the changing output structure: some drop in the UAA, a notable increase in the areas for wheat and maize growing, but prominent decrease in the areas for growing vegetables, as well as in the areas of family gardens, orchards, vineyards and other perennials.

The numbers of the raised poultry, pigs, goats, sheep and even cattle also plummeted, even though the animal output remained relatively stable in the 2007-2012 period.

**Table 11:** Dynamics in the UAA and major animal and poultry herds

|                                              | Unit             | 2006.            | 2007.            | 2008.            | 2009.            | 2010.            | 2011.            |
|----------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>UAA</b>                                   | <b>Ha</b>        | <b>5 190 053</b> | <b>5 116 220</b> | <b>5 100 825</b> | <b>5 029 585</b> | <b>5 051 866</b> | <b>5 087 948</b> |
| <b>Arable lands</b>                          | <b>Ha</b>        | <b>3 089 531</b> | <b>3 057 740</b> | <b>3 060 543</b> | <b>3 122 516</b> | <b>3 162 526</b> | <b>3 227 237</b> |
| - <i>wheat</i>                               | <b>Ha</b>        | 979 925          | 1 120 510        | 1 114 427        | 1 254 151        | 1 095 703        | 1 152 999        |
| - <i>barley</i>                              | <b>Ha</b>        | 192 539          | 193 840          | 223 004          | 264 689          | 250 640          | 174 010          |
| - <i>maize</i>                               | <b>Ha</b>        | 386 772          | 408 880          | 348 402          | 303 881          | 360 046          | 430 914          |
| - <i>sunflower</i>                           | <b>Ha</b>        | 785 064          | 686 692          | 723 962          | 687 209          | 734 314          | 795 319          |
| - <i>fresh vegetables</i>                    | <b>Ha</b>        | 39 899           | 41 088           | 30 001           | 28 715           | 29 420           | 27 227           |
| <b>Family gardens</b>                        | <b>Ha</b>        | 40 388           | 25 790           | 25 763           | 21 411           | 21 629           | 22 517           |
| <b>Orchards</b>                              | <b>Ha</b>        | 71 084           | 75 035           | 69 893           | 71 995           | 72 913           | 69 478           |
| <b>Vineyards</b>                             | <b>Ha</b>        | 100 564          | 103 949          | 100 873          | 84 438           | 82 675           | 78 468           |
| <b>Other perennials</b>                      | <b>Ha</b>        | 12 094           | 11 565           | 14 888           | 10 197           | 10 133           | 11 940           |
| <b>Permanent pastures or grassy-orchards</b> | <b>Ha</b>        | 1 876 392        | 1 842 141        | 1 828 865        | 1 719 028        | 1 701 990        | 1 678 308        |
| <b>CATTLE</b>                                | <b>Num</b>       | 628 271          | 602 056          | 564 904          | 539 555          | 544 456          | 557 641          |
| <b>BUFFALO</b>                               | <b>Num</b>       | 8 247            | 8 968            | 9 222            | 8 311            | 9 241            | 9 887            |
| <b>SHEEP</b>                                 | <b>Num</b>       | 1 635 410        | 1 526 392        | 1 474 845        | 1 400 252        | 1 367 987        | 1 454 617        |
| <b>GOATS</b>                                 | <b>Num</b>       | 549 076          | 495 484          | 429 834          | 360 822          | 356 334          | 341 362          |
| <b>PIGS</b>                                  | <b>Num</b>       | 1 012 655        | 888 609          | 783 649          | 729 798          | 664 000          | 608 266          |
| <b>POULTRY TOTAL</b>                         | <b>thousands</b> | 20157            | 18698            | 17549            | 17400            | 15934            | 14656            |

**Source:** MAF, Agristatistics: <http://www.mzh.government.bg/MZH/bg/ShortLinks/Selska-Politika/Agrostatistics.aspx>

The structural changes in agriculture output, use of agriculture areas and animals herds was due to structural changes in the number of family holdings; among the

two agriculture censuses in 2003 and 2010 their number dropped by -44% from 665.6 thousand in 2003 to 370.5 thousand in 2010.

The number of the animal holdings which did not have farmlands increased from 10.7 thousand in 2003 to 13.2 thousand in 2010; on the contrary, the number of holdings with farmlands decreased from 654.8 thousand to 357.0 thousand. The average size of farmland per holding increased from 4.4 ha to 12.0 ha in this period.

**Table 12:** Trends in the number of holdings and farmlands of the holdings in total and per holding land-size class

|                                       | 2003           |                  | 2005         |                | 2007          |                | 2010          |  |
|---------------------------------------|----------------|------------------|--------------|----------------|---------------|----------------|---------------|--|
|                                       | number         | number           | 2005 / 2003  | number         | 2007 / 2003   | number         | 2010 / 2003   |  |
| <b>Farm Holdings, thousand</b>        | <b>665,5</b>   | <b>534.6</b>     | <b>79,5%</b> | <b>493,1</b>   | <b>75,3%</b>  | <b>370.2</b>   | <b>56,6%</b>  |  |
| <b>0 ha</b>                           | <b>10.7</b>    | <b>14.1</b>      | <b>na</b>    | <b>11.2</b>    | <b>na</b>     | <b>13.2</b>    | <b>na</b>     |  |
| <b>0 - 1.9 ha</b>                     | 591.7          | 456.6            | 77.2%        | 428.6          | 72.4%         | 308.1          | 52.1%         |  |
| <b>2 - 4.9 ha</b>                     | 41.9           | 40.5             | 96.7%        | 39.2           | 93.7%         | 30.4           | 72.6%         |  |
| <b>5 - 9.9 ha</b>                     | 9.7            | 10.4             | 107.4%       | 10.1           | 103.5%        | 10.7           | 110.4%        |  |
| <b>10 - 19.9 ha</b>                   | 4.0            | 4.8              | 119.6%       | 5.5            | 137.7%        | 6.8            | 171.4%        |  |
| <b>20 - 29.9 ha</b>                   | 1.3            | 1.6              | 124.6%       | 1.9            | 154.0%        | 2.9            | 234.1%        |  |
| <b>30 - 49.9 ha</b>                   | 1.2            | 1.3              | 111.8%       | 1.6            | 137.0%        | 3.1            | 257.1%        |  |
| <b>50 - 99.9 ha</b>                   | 1.2            | 1.5              | 123.8%       | 1.9            | 161.5%        | 2.9            | 240.2%        |  |
| <b>≥100 ha</b>                        | 3.9            | 3.8              | 98.5%        | 4.2            | 108.8%        | 5.5            | 141.5%        |  |
| <b>Holdings Farmland, thousand ha</b> | <b>2 904.5</b> | <b>2 729.390</b> | <b>94.0%</b> | <b>3 050.7</b> | <b>105.0%</b> | <b>4 475.5</b> | <b>154.1%</b> |  |
| <b>0 - 1,9 ha</b>                     | 312,8          | 241,4            | 77,2%        | 191,1          | 61,1%         | 144,2          | 46,1%         |  |
| <b>2 - 4,9 ha</b>                     | 121,7          | 116,9            | 96,1%        | 115,5          | 94,9%         | 90,5           | 74,3%         |  |
| <b>5 - 9,9 ha</b>                     | 64,2           | 66,9             | 104,2%       | 66,6           | 103,6%        | 72,7           | 113,2%        |  |
| <b>10 - 19,9 ha</b>                   | 52,7           | 60,5             | 114,7%       | 73,0           | 138,5%        | 92,5           | 175,4%        |  |
| <b>20 - 29,9 ha</b>                   | 29,8           | 36,1             | 121,1%       | 45,5           | 152,8%        | 70,0           | 235,0%        |  |
| <b>30 - 49,9 ha</b>                   | 44,4           | 49,4             | 111,4%       | 61,4           | 138,4%        | 116,2          | 262,0%        |  |
| <b>50 - 99,9 ha</b>                   | 83,1           | 101,1            | 121,7%       | 139,5          | 167,8%        | 201,7          | 242,7%        |  |
| <b>≥100 ha</b>                        | 2 195,8        | 2 057,1          | 93,7%        | 2 358,2        | 107,4%        | 3 687,9        | 168,0%        |  |
| <b>Average Size, ha/holding</b>       | 4,4            | 5,2              | 118,2%       | 6,2            | 139,4%        | 12,1           | 272,3%        |  |

Source: Eurostat, agriculture database.

The decrease in the number of holdings with up to 5 ha of farmland has been especially rapid: 48% for holdings managing up to 2 ha and 27% for holdings managing between 2 and 5 ha. The most rapid increase was in the number of holdings managing between 20 and 50 ha; a category which contained the greatest overall concentration of farmland.

In 2003 approximately 17% of the lands were managed by holdings with up to 10 ha of farmland; in 2010 it had decreased to just 7%. This was due both to the fact that the number of smaller holdings decreased and that the size of lands managed by these smaller holdings also declined.

Focusing in only on the developments in the animal-breeding subsector reveals even faster farm restructuring; in particular in animal breeding.

**Table 13:** Dynamics in the structure of the holdings in animal breeding

|                           | Agriculture holdings<br>(thousands; % change) |       |               | Animals, poultry, beebees<br>(thousands; % change) |         |               |
|---------------------------|-----------------------------------------------|-------|---------------|----------------------------------------------------|---------|---------------|
|                           | 2003                                          | 2010  | 2010 to 2003  | 2003                                               | 2010    | 2010 to 2003  |
| <b>Cattle, incl.</b>      | 212.0                                         | 95.4  | <b>-55.0%</b> | 683.0                                              | 576.3   | <b>-15.6%</b> |
| <b>- milk cows</b>        | 194.7                                         | 85.5  | <b>-56.1%</b> | 371.0                                              | 327.5   | <b>-11.7%</b> |
| <b>Goats</b>              | 269.0                                         | 84.6  | <b>-68.6%</b> | 856.9                                              | 388.9   | <b>-54.6%</b> |
| <b>Sheep</b>              | 237.7                                         | 91.8  | <b>-61.4%</b> | 1635.2                                             | 1415.2  | <b>-13.5%</b> |
| <b>Pigs</b>               | 278.8                                         | 82.3  | <b>-70.5%</b> | 1278.9                                             | 670.5   | <b>-47.6%</b> |
| <b>Poultry</b>            | 494.3                                         | 85.5  | <b>-82.7%</b> | 21796.4                                            | 17491.2 | <b>-19.8%</b> |
| <b>Productive beebees</b> | 37636                                         | 23982 | <b>-36.3%</b> | 409.7                                              | 588.7   | <b>+43.7%</b> |

**Source:** MAF, *Agriculture Annual Report 2013*, p25 and own calculations

Restructuring has led to a rapid loss of employment in the sector. According to Eurostat data, in just four years the number of Annual Work Units generated in Bulgarian agriculture dropped from 494.5 thousand AWU in 2007 to 406.5 AWU in 2010.

In comparison to 2003, in 2010 there was a decrease in 45% in the number of people engaged in agriculture with the volume of the labour inputs reduced by 51%. This indicates that small holdings are becoming even smaller in production output – i.e. more and more subsistent, and providing less and less employment to the holders' families.

NSI data sheds further light in these developments: the share of the population employed in agriculture, forestry and fishery has diminished in relation to the overall employment rate in the country. This is valid only for the self-employed however, as the share of the hired workforce is actually maintaining a level of 2.6% despite the numerical drop from 91.5 thousand hired in 2011 to 87.7 thousand hired in 2012.

**Table 14:** Dynamics in the contribution of agriculture to the employment

| YEAR  | Total em-<br>ployed in the<br>economy | Agriculture – Total<br>Employed |       | Agriculture -<br>Hired |      | Agriculture<br>Self employed |       |
|-------|---------------------------------------|---------------------------------|-------|------------------------|------|------------------------------|-------|
|       | A, thousands                          | B, thousands                    | B/A   | C, thou-<br>sands      | C/A  | D, thousands                 | D/A   |
| 2003  | 3317.4                                | 759.0                           | 22.9% | 91.9                   | 2.8% | 667.1                        | 20.1% |
| 2007  | 3726.7                                | 723.9                           | 19.4% | 81.4                   | 2.2% | 642.5                        | 17.2% |
| 2008  | 3814.6                                | 736.6                           | 19.3% | 88.3                   | 2.3% | 648.2                        | 17.0% |
| 2009  | 3749.3                                | 736.7                           | 19.6% | 93.6                   | 2.5% | 643.1                        | 17.2% |
| 2010  | 3603.9                                | 710.5                           | 19.7% | 88.9                   | 2.5% | 621.5                        | 17.2% |
| 2011  | 3524.6                                | 689.5                           | 19.6% | 91.5                   | 2.6% | 598.1                        | 17.0% |
| 2012* | 3436.4                                | 648.7                           | 18.9% | 87.7                   | 2.6% | 561.0                        | 16.3% |

**Source:** National Statistical institute, \* - preliminary data

Data on hours worked in the economy and in the agriculture, forestry and fishery sector confirms the above trend; as the contribution of overall hours by employed persons in agriculture in relation to the overall hours worked in the economy remained steady at 2.5-2.6%, while the contribution of the self-employed dropped from 15.4% in 2007 to 14.5% in 2012.

**Table 15:** Hours worked per employed, thousands of hours

| YEAR  | Total in the economy |             |               | Agriculture, forestry and fishery |           |               |
|-------|----------------------|-------------|---------------|-----------------------------------|-----------|---------------|
|       | Employed             | Hired       | Self-employed | Employed                          | Hired     | Self-employed |
| 2003  | 5 442 215,3          | 4 004 836,9 | 1 437 378,4   | 1 114 161,4                       | 161 753,2 | 952 408,2     |
| 2007  | 6 165 970,6          | 4 584 574,6 | 1 581 396,1   | 1 084 379,6                       | 137 706,5 | 946 673,0     |
| 2008  | 6 334 772,0          | 4 719 070,5 | 1 615 701,5   | 1 103 023,0                       | 150 203,6 | 952 819,3     |
| 2009  | 6 165 499,0          | 4 561 461,0 | 1 604 038,0   | 1 095 204,5                       | 147 768,5 | 947 436,1     |
| 2010  | 5 870 019,5          | 4 307 059,7 | 1 562 959,9   | 1 056 284,7                       | 140 374,1 | 915 910,7     |
| 2011  | 5 617 759,6          | 4 124 751,1 | 1 493 008,5   | 1 018 839,7                       | 143 123,0 | 875 716,7     |
| 2012* | 5 650 971,2          | 4 216 767,3 | 1 434 203,9   | 966 621,8                         | 144 482,7 | 822 139,1     |

**Source:** National Statistical institute, \* - preliminary data

It should be noted that the workforce in the sector is aging and lacks appropriate education: 29% of all those working in agriculture are above 65 years of age, and less than 4% of farm managers have a degree in agriculture, but rather rely on traditional knowledge and personal experience. Just 1.3% of farm managers have a higher education degree, which makes this economic sector, the least represented by graduates of higher education.

Despite the rapid transformation in the productive structure, even in 2010 smaller family holdings managing up to 10 ha of land constituted 94% of all holdings. They produced the majority of fruit and vegetables, of sheep and goat milk, as well as a significant part of the cow milk production. On the other hand - the production potential (measured by the proxy 'Standard Output') in the branches *arable crops*, and especially in "pigs, poultry and rabbits" is being concentrated in industrial producers with mass production capacities.

**Table 16:** Distribution of the Standard Output volume, in 000 EUR, per major type of farm specialization and farm holding size

| Class-<br>es          | Arable crops     |                  | Vegetables           |        | Perennials           |               | Herbivores           |        | Pigs,<br>poultry and<br>rabbits |        | Mixed<br>Plant pro-<br>duction |        | Mixed<br>animal pro-<br>duction |        | Mixed<br>animal and<br>plant pro-<br>duction |        |
|-----------------------|------------------|------------------|----------------------|--------|----------------------|---------------|----------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------------------|--------|----------------------------------------------|--------|
|                       | 000 EUR          | SO <sup>15</sup> | Num<br>hold-<br>ings | SO     | Num<br>hold-<br>ings | SO            | Num<br>hold-<br>ings | SO     | Num<br>hold-<br>ings            | SO     | Num<br>hold-<br>ings           | SO     | Num<br>hold-<br>ings            | SO     | Num<br>hold-<br>ings                         | SO     |
| <b>Total</b>          | <b>1 231 362</b> | 63 376           | <b>166 013</b>       | 18 223 | <b>60 544</b>        | 32 111        | <b>379 413</b>       | 88 630 | <b>348 827</b>                  | 28 583 | <b>65 950</b>                  | 14 607 | <b>76 439</b>                   | 50 186 | <b>208 118</b>                               | 73 788 |
| <b>I. &lt; 2</b>      | 30 596           | 41 292           | 8 008                | 6 963  | <b>12 567</b>        | <b>27 852</b> | <b>54 119</b>        | 57 098 | 22 283                          | 21 025 | <b>8 921</b>                   | 9 610  | <b>36 034</b>                   | 41 207 | <b>48 962</b>                                | 49 079 |
| <b>II. 2 - 4</b>      | 20 907           | 7 296            | 12 593               | 4 347  | 5 975                | 2 160         | 38 556               | 13 946 | 13 718                          | 5 112  | <b>7 309</b>                   | 2 595  | <b>17 747</b>                   | 6 502  | <b>47 265</b>                                | 17 517 |
| <b>III. 4 - 8</b>     | 26 219           | 4 636            | <b>18 817</b>        | 3 356  | 5 641                | 1 031         | 42 894               | 7 691  | 6 693                           | 1 263  | <b>7 803</b>                   | 1 422  | 9 652                           | 1 839  | <b>26 968</b>                                | 5 051  |
| <b>IV. 8 - 15</b>     | 30 682           | 2 803            | <b>19 130</b>        | 1 754  | 4 914                | 454           | 53 697               | 4 918  | 3 871                           | 371    | 5 713                          | 532    | 4 570                           | 443    | 12 783                                       | 1 239  |
| <b>V. 15 - 25</b>     | 32 346           | 1 681            | 15 429               | 797    | 4 152                | 216           | 47 792               | 2 494  | 3 635                           | 190    | 3 535                          | 189    | 2 064                           | 111    | 7 173                                        | 377    |
| <b>VI. 25 - 50</b>    | 61 661           | 1 756            | <b>19 236</b>        | 566    | 7 588                | 219           | 56 749               | 1 649  | 4 893                           | 138    | 4 152                          | 119    | 1 818                           | 54     | 8 813                                        | 250    |
| <b>VII. 50 - 100</b>  | 86 148           | 1 201            | 17 327               | 252    | 8 537                | 121           | 44 146               | 657    | 7 848                           | 111    | 4 399                          | 62     | 1 344                           | 20     | 10 123                                       | 145    |
| <b>VIII. 100-250</b>  | <b>228 229</b>   | 1 402            | <b>18 185</b>        | 122    | 6 953                | 47            | 18 943               | 137    | 24 918                          | 160    | 6 877                          | 43     | 1 183                           | 7      | 10 180                                       | 68     |
| <b>IX .250-500</b>    | <b>276 036</b>   | 792              | 13 679               | 40     | 2 566                | 8             | 9 305                | 27     | 29 057                          | 84     | <b>7 572</b>                   | 21     | 337                             | 1      | 13 504                                       | 36     |
| <b>X .500-750</b>     | 177 673          | 297              | 8 431                | 14     | 1 651                | 3             | 2 480                | 4      | 23 141                          | 38     | 4 996                          | 9      | 661                             | 1      | 7 845                                        | 13     |
| <b>XI. 750 - 1000</b> | 110 044          | 128              | 2 315                | 3      | 0                    | 0             | 2 769                | 3      | 14 410                          | 17     | 2 554                          | 3      | 0                               | 0      | 6 117                                        | 7      |

|                                   |        |    |       |   |   |   |       |   |                |    |       |   |       |   |       |   |
|-----------------------------------|--------|----|-------|---|---|---|-------|---|----------------|----|-------|---|-------|---|-------|---|
| <b>XII. 1<br/>000 - 1<br/>500</b> | 69 388 | 59 | 7 980 | 7 | 0 | 0 | 4 568 | 4 | 30 689         | 25 | 2 118 | 2 | 1 029 | 1 | 4 758 | 4 |
| <b>XIII.<br/>1500 -<br/>3000</b>  | 51 721 | 27 | 4 884 | 2 | 0 | 0 | 3 395 | 2 | <b>60 080</b>  | 28 | 0     | 0 | 0     | 0 | 3 626 | 2 |
| <b>XIV. &gt;<br/>3000</b>         | 29 712 | 6  | 0     | 0 | 0 | 0 | 0     | 0 | <b>103 591</b> | 21 | 0     | 0 | 0     | 0 | 0     | 0 |

**Source:** MAF, Agristatistics, Agriculture Census 2010,

**Note:** there are almost 1000 non-classified holdings which data is integrated in the table.

<sup>15</sup> SO, standard output is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock. Since 2007 it replaces the SGM – Standard Gross Margin in calculating the size of the holdings in EUR (their production potential measured in EUR)

Data for the year 2011 from MAF, Agristatistics directorate indicates that the restructuring in the animal sector continues. Data from Table 17 below shows that both the number of holdings and the number of animals in the mid-size classes of pig breeding farms are decreasing the fastest.

**Table 17:** Structure of breeding sows per size of pig farms in 2011

| Number of animals per holding | Holdings |                  | Breeding sows |                  |
|-------------------------------|----------|------------------|---------------|------------------|
|                               | Number   | Change 2011/2010 | Thousands     | Change 2011/2010 |
| <b>1-2</b>                    | 5893     | 6.9%             | 7.5           | 10.3%            |
| <b>3-9</b>                    | 955      | 13.3%            | 3.9           | 14.7%            |
| <b>10-49</b>                  | 145      | -33.5%           | 2.5           | -49.0%           |
| <b>50-199</b>                 | 42       | 27.3%            | 4.0           | 17.6%            |
| <b>≥ 200</b>                  | 46       | 2.2%             | 46.1          | -2.9%            |
| <b>Total</b>                  | 7171     | 6.4%             | 64.0          | -3.0%            |

**Source:** MAF, Agristatistics

In 2011, the number of sheep breeding farms also decreased by 28.8% compared to the previous year (2010), but the number of the sheep slightly increased by 6.3% to reach 19.6 animals per farm. The highest reduction of farms was in holdings with up to 49 ewes – by 31.1%. Holdings with more than 100 mated ewes increased by 20.6%, and the number of ewes in such farms reached 571,000 (a 30% increase compared to 2010).

Similar trends were observed in the restructuring of the goat-breeding sector – the number of holdings breeding goats decreased by 28.2% with the number of holdings breeding ≥ 50 mother goats increasing by 27.6% and the number of total animals raised in this larger group of holdings increasing by 43.5%.

Data from Table 18 indicates that most of the cows are concentrated in bigger farms of more than 20 milk cows, with no significant changes observed regarding the number of milk cows.

**Table 18:** Structure of cow milk farms in 2011

| Milk cows per holding | Holdings  |                  | Cows      |                  |
|-----------------------|-----------|------------------|-----------|------------------|
|                       | thousands | change 2011/2010 | thousands | change 2011/2010 |
| <b>1-2</b>            | 58.6      | 2.0%             | 72.3      | 2.4%             |
| <b>3-9</b>            | 9.9       | -7.7%            | 45.7      | -3.2%            |
| <b>10-19</b>          | 3.4       | 9.5%             | 44.5      | 10.7%            |
| <b>≥ 20</b>           | 2.8       | -14.1%           | 144.3     | -3.9%            |
| <b>Total</b>          | 74.8      | 0.2%             | 306.8     | -0.5%            |

**Source:** MAF, Agristatistics,

However, it should be noted that the majority of the dairy farms are not meeting the sanitary and hygiene requirements for production of cow milk, despite the expiry of the second extension of the grace period to achieve compliance with these requirements.

The government is trying to negotiate a third extension of the grace period as the alternative would be to close down more than 33000 dairy farms and thus cause further socio-economic problems especially in the semi-mountainous and mountainous areas of South Bulgaria, where the majority of the non-complying small farms are situated.

For similar reasons - associated with expiry of the grace period to achieve compliance with animal welfare standards, 2011 was also a critical year for the poultry sector. The expiry of the grace period caused both the reduction in the numbers of the laying hens and in number of the breeding farms. Further details on the challenges associated with the enforcement of Aquis are presented in section 4 of this document.

Smaller holdings continue to dominate the agriculture sector of the mountainous and other less favoured areas, as well as the zones of intensive production of vegetables, fruits and tobacco. Their operations are critical to the formation and preservation of the landscape and the upkeep of local culture and traditions. These smaller holdings have paramount significance for the balanced social and territorial development of the country as they are in fact acting as initial units of numerous value adding chains in all sectors (not just in the food industry, but in the light processing industry as well). Their output not only brings an influx of money to the rural municipalities they inhabit, but also maintains employment of people involved with the processing of their raw materials into cosmetics, pharmaceutical commodities, and goods for the clothing and shoemaking industries, etc. Last, but not least – agriculture generates the majority of goods to be transported through processing enterprises to the final customers on the domestic and international market.

Affluent farmer families are also important for the local demand of public and private services as they generate demand for, and preserve the jobs of shopkeepers, bakeries, pediatricians, teachers, dentists, communications and entertainment operators, etc.

Undermining the purchasing power of family holdings not only undermines the prospects for their economic development; it undermines the total rural economy and hits the competitiveness of sectors which rely on agriculture produce (as mentioned in the previous paragraph).

Table 19 shows the dynamics in the prices of agriculture inputs and of farmers' prices. Highest growth is observed with the prices of electricity, fuel and mineral fertilizers all of which are highly dependent on the prices of the petroleum and natural gas on the international market; in turn they affect the prices of the forages used for feeding the animals.

On the other hand, the highest growth was registered with the farmers' prices of cereals and industrial crops<sup>16</sup> - this can be explained by the steady ever rising international demand for grain, and oil seeds including for the production of biodiesel.

<sup>16</sup> Especially for the oil-bearing industrial crops like sunflower, rapeseed, etc.

**Table 19:** Dynamics in the agriculture input prices and the producer price

| Indicator                             | Unit            | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         |
|---------------------------------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Agri-Input Price Index – TOTAL</b> | <b>2005=100</b> | <b>114,9</b> | <b>130,9</b> | <b>130,5</b> | <b>133,9</b> | <b>148,3</b> | <b>157,9</b> |
| <b>Seeds</b>                          | 2005=100        | 99,7         | 108,9        | 119,0        | 137,5        | 139,5        | 136,2        |
| <b>Electricity, Fuel...</b>           | 2005=100        | 109,9        | 123,6        | 120,8        | 129,2        | 158,4        | 169,3        |
| <b>Mineral Fertilizers</b>            | 2005=100        | 128,1        | 156,3        | 177,2        | 150,7        | 181,4        | 211,5        |
| <b>Plant protection materials</b>     | 2005=100        | 101,0        | 101,1        | 101,9        | 102,4        | 100,3        | 101,5        |
| <b>Veterinary medicines</b>           | 2005=100        | 102,2        | 108,6        | 116,6        | 117,3        | 115,5        | 124,6        |
| <b>Forages</b>                        | 2005=100        | 120,9        | 145,1        | 123,9        | 133,6        | 147,4        | 156,4        |
| <b>Producer prices index - TOTAL</b>  | <b>2005=100</b> | <b>135,8</b> | <b>151,8</b> | <b>120,4</b> | <b>134,0</b> | <b>153,2</b> | <b>168,4</b> |
| <b>CEREALS</b>                        | 2005=100        | 201,1        | 208,1        | 141,1        | 162,0        | 215,6        | 256,2        |
| <b>INDUSTRIAL CROPS</b>               | 2005=100        | 127,4        | 136,1        | 112,2        | 140,7        | 169,0        | 204,5        |
| <b>VEGETABLES</b>                     | 2005=100        | 135,0        | 181,0        | 131,0        | 139,7        | 134,0        | 123,8        |
| <b>FRUITS</b>                         | 2005=100        | 108,6        | 105,5        | 88,2         | 108,1        | 104,3        | 108,9        |
| <b>LIVE ANIMALS</b>                   | 2005=100        | 101,5        | 108,2        | 107,3        | 107,9        | 112,2        | 118,2        |
| <b>ANIMAL PRODUCTS</b>                | 2005=100        | 116,7        | 142,7        | 118,0        | 125,1        | 144,0        | 148,1        |
| <b>MILK</b>                           | 2005=100        | 116,1        | 144,4        | 115,1        | 124,6        | 146,8        | 148,8        |

**Source:** National Statistical institute: <http://www.nsi.bg/otrasal.php?otr=1>

Table 19 gives the primary reason for the transformation of the agriculture production structure in Bulgaria: it is evident that only the prices of two crops manage to stay above the ever rising agriculture input prices, most of which are influenced by the ever rising energy and fossil fuel prices.

### 2.2.1. External trade and competitiveness

In the period 2006-2011 the volume of international trade with agrigoods increased 2.84 times measured in current prices<sup>17</sup>.

**Table 20:** Importance of international trade with agri products

|                                          | 2006       | 2007       | 2008        | 2009        | 2010        | 2011        |
|------------------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| <b>Trade with agri commodities, MEUR</b> | 1 956.1    | 2 522.4    | 3 727.2     | 3 750.7     | 4 525.3     | 5 560.9     |
| <b>Exports, MEUR</b>                     | 1 054.4    | 1 205.3    | 1 935.1     | 2 006.8     | 2 622.5     | 3 300.8     |
| <b>Imports, MEUR</b>                     | 901.7      | 1 317.1    | 1 792.1     | 1 743.9     | 1 902.8     | 2 260.1     |
| <b>Balance, MEUR</b>                     | 152.7      | -111.8     | 143.0       | 262.9       | 719.7       | 1 040.7     |
| <b>Relative share of agritrade from:</b> |            |            |             |             |             |             |
| <b>- Country exports, %</b>              | <b>8.8</b> | <b>8.9</b> | <b>12.6</b> | <b>17.2</b> | <b>16.9</b> | <b>16.3</b> |
| <b>- Country imports, %</b>              | <b>4.9</b> | <b>5.9</b> | <b>5.2</b>  | <b>10.3</b> | <b>9.9</b>  | <b>9.7</b>  |

**Source:** Eurostat, (<http://appsso.eurostat.ec.europa.eu>)

<sup>17</sup> The agri-input price indexes and the producer price indexes were respectively 148.3 and 153.2 compared to their 2005 price levels; this indicates that there was also a significant increase in the physical volumes of traded goods.

Agri exports have increased by 313% and imports by 251% in the period 2006-2011. The trade balance for all years in this period has been positive, with the exception in 2007, when harvested crops were at record-low levels. The trade balance in 2011, however, was at a record high.

**Table 21:** Agriculture trade in 2011

|                            | Total trade | Trade with EU countries |                    | Trade with non-EU countries |                    |
|----------------------------|-------------|-------------------------|--------------------|-----------------------------|--------------------|
|                            | MEUR        | MEUR                    | % change 2011/2010 | MEUR                        | % change 2011/2010 |
| <b>Exports</b>             |             |                         |                    |                             |                    |
| Commodities                | 888.1       | 709.9                   | 38.5%              | 178.1                       | -12.7%             |
| Intermediate               | 1335.3      | 992.5                   | 45.8%              | 342.8                       | 66.5%              |
| Final products             | 1128.1      | 736.5                   | 5.8%               | 391.6                       | 16.0%              |
| Other products*            | 16.6        | 9.9                     | 23.6%              | 6.7                         | 368.6%             |
| Total agriculture products | 3368.1      | 2448.9                  | 29.0%              | 919.2                       | 22.6%              |
| As % of total exports      | 16.6%       | 19.4%                   | -                  | 12.0%                       | -                  |
| <b>Imports</b>             |             |                         |                    |                             |                    |
| Commodities                | 233.0       | 142.3                   | 8.9%               | 90.7                        | 3.8%               |
| Intermediate               | 621.6       | 463.9                   | %                  | 157.7                       | 58.4%              |
| Final products             | 1350.8      | 1166.6                  | %                  | 184.2                       | -6.2%              |
| Other products*            | 69.3        | 65.5                    | %                  | 3.8                         | 134.9%             |
| Total agriculture products | 2274.7      | 1838.3                  | 13.2%              | 436.4                       | 13.4%              |
| As % of total exports      | 9.7%        | 13.2%                   | -                  | 4.6%                        | -                  |
| <b>Balance</b>             |             |                         |                    |                             |                    |
| Commodities                | 655.0       | 567.7                   | -                  | 87.4                        | -                  |
| Intermediate               | 713.7       | 528.6                   | -                  | 185.1                       | -                  |
| Final products             | -222.7      | -430.1                  | -                  | 207.4                       | -                  |
| Other products*            | -52.7       | -55.6                   | -                  | 2.9                         | -                  |
| Total agriculture products | 1093.4      | 610.6                   | -                  | 482.8                       | -                  |

\* **Note:** Other products = products that do not bear a direct linkage to agriculture, e.g. waters, flavors...

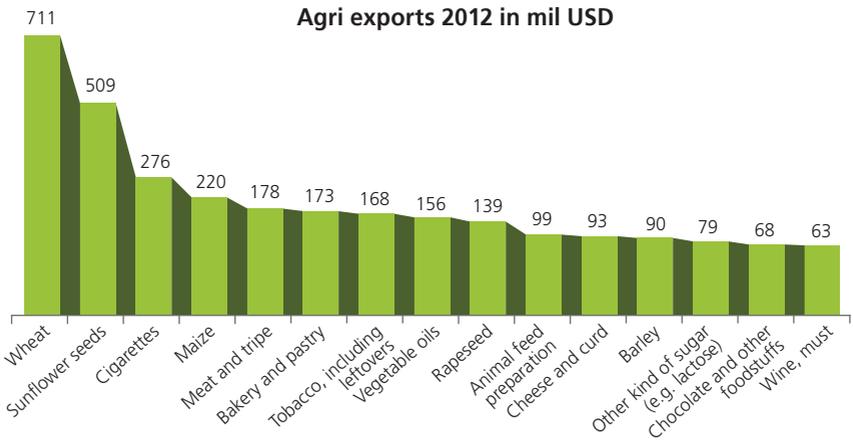
**Source:** Directorate General for Agriculture and Rural Development, based on COMEXT data. Updated: November 2012.

Eurostat and NSI data indicate that both in 2011 and 2012<sup>18</sup> the prevailing value of exports (>50%) was due to the exports of plant raw materials – particularly oil-bearing seeds 23-17% and grain 21-25% of all agroexports.

Next in importance was the export of processed goods – approximately 1/3 of all exports, with tobacco, sugar and confectionery being the leading exported items in 2011.

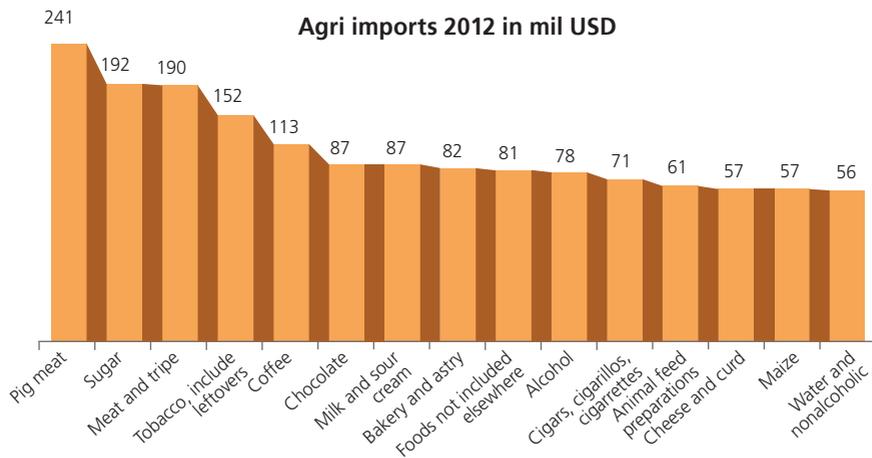
The next two figures indicate the items which are generating the most income from exports and the most expenditure from imports in 2012.

Figure 1 shows that the majority of the income came from the exports of wheat, sunflower seeds, cigarettes, maize grain, meat and tripe, etc. Of them only cigarettes and vegetable oils can be considered as finished products for final consumption. Major expenditure items were imported pig meat, sugar, meat and tripe, tobacco, coffee, etc.



**Figure 1.** Main agri exports in 2012

.....  
<sup>18</sup> Preliminary data.



**Figure 2.** Main agri imports in 2012

**Source:** NSI, preliminary data

In the last several years there has been a gradual shift in the trade significance of the EU markets as more and more Bulgarian exports are redirected to the markets of the third countries, which can offer better sales conditions for the Bulgarian commodities.

**Table 22:** Trade with agriculture commodities per economic communities, countries and regions in 2011 and 2012

| Trade Zones                                              | 2011         |            |              |              |               | 2012*          |            |                |            |               |
|----------------------------------------------------------|--------------|------------|--------------|--------------|---------------|----------------|------------|----------------|------------|---------------|
|                                                          | Exports      |            | Imports      |              | Bal-<br>ance  | Exports        |            | Imports        |            | Bal-<br>ance  |
|                                                          | Mil.<br>USD  | %          | Mil.<br>USD  | %            | Mil.<br>USD   | Mil.<br>USD    | %          | Mil.<br>USD    | %          | Mil.<br>USD   |
| <b>All coun-<br/>tries</b>                               | <b>4 594</b> | <b>100</b> | <b>3 143</b> | <b>100.0</b> | <b>1450.6</b> | <b>4 241.7</b> | <b>100</b> | <b>3 023.4</b> | <b>100</b> | <b>1218.3</b> |
| <b>EU</b>                                                | 3 391        | 74.0       | 2 531        | 80.5         | 860.4         | 3 046.8        | 71.8       | 2 522.1        | 75.12      | 524.7         |
| <b>EFTA**</b>                                            | 10           | 0.2        | 4            | 0.1          | 6.1           | 11.6           | 0.3        | 4.9            | 0.16       | 6.7           |
| <b>OECD***<br/>excl. EU<br/>&amp; EFTA<br/>countries</b> | 536          | 11.7       | 138          | 4.4          | 398.2         | 334.3          | 7.9        | 130.5          | 4.32       | 203.8         |
| <b>Incl. USA</b>                                         | 69           | 1.5        | 27           | 0.9          | 42.2          | 61.4           | 1.5        | 27.5           | 0.91       | 33.9          |
| <b>Balkan<br/>states****</b>                             | 191          | 4.2        | 86           | 2.8          | 104.9         | 187.4          | 4.4        | 83.0           | 2.75       | 104.4         |
| <b>CIS</b>                                               | 119          | 2.6        | 32           | 1.0          | 86.4          | 122.8          | 2.9        | 41.4           | 1.37       | 81.4          |
| <b>Incl. Rus-<br/>sia</b>                                | 65           | 1.4        | 10           | 0.3          | 55.5          | 75.9           | 1.8        | 9.2            | 0.30       | 66.7          |
| <b>The<br/>League<br/>of Arab<br/>states</b>             | 266          | 5.8        | 43           | 1.4          | 222.7         | 464.2          | 10.9       | 16.0           | 0.53       | 448.2         |
| <b>Others</b>                                            | 81           | 1.8        | 309          | 9.8          | -228.1        | 74.6           | 1.8        | 225.5          | 7.46       | -150.9        |

\* Preliminary data

Source: NSI

\*\*Includes data for Island, Lichtenstein, Norway and Switzerland

\*\*\*Includes data for Australia, Canada, New Zealand, USA, Turkey, Japan, Republic of Korea, Mexico, Chili and Israel

\*\*\*\* Includes data for Albania, BiH, FYROM, Croatia, Serbia, Montenegro and Kosovo

The **EU is the major partner** for Bulgaria's trade in agriculture commodities – in 2012 almost 72% of export value was realized in the EU and 75% of the imports into BG were generated by Member States. Trade turnover, however, has decreased by 6% compared to the previous year, mainly due to the 10.2% decrease in exports to the Member states, while imports from the EU kept at the same level. The positive trade balance in 2012 has dropped by 39% compared to the data from the previous year 2011. Major trade partners from the EU are: Greece (18.8%), Romania (17.9%), Germany (9.2%), Spain (8.5%) and Italy (7.0%), and to a lesser extent – Poland (5.9%), the Netherlands (5.6%) and France (5.6%).

OECD countries accounted for 7.9% of BG exports and for 4.3% of imports in 2012. The positive trade balance with them dropped by almost 49% in 2012 compared to 2011.

CIS countries, which in the past were the major market for Bulgarian agriculture commodities, no longer play an important role for Bulgarian agriculture produce.

**Trade with the countries from the Arab League**, however, marked a significant increase in 2012 compared to 2011. The positive trade balance increased more than twofold to contribute by more than 1/3 to the overall trade balance in 2012. The trade **with the Balkan states** is insignificant.

**There is a complex set of factors which determine the competitiveness of agriculture holdings on the domestic market, the Common EU Market, and on the markets of the Third countries. Among the more important factors are:**

- The *characteristics of the farm holders* (education and information levels, professionalism, entrepreneurial skills, willingness to innovate production processes and technologies, to produce new products and services)
- The *characteristics of the farm holdings* (size, specialization, level of mechanization and productivity, their bargaining power on the market for particular goods)
- The *border protection policies* against imports of particular commodities (e.g. customs barriers for imports of particular commodities)

- The *agriculture infrastructure* (e.g. irrigation infrastructure, road network, ICT - based services, etc.)
- The *farm support policies* (monetary and non-monetary support for development and farm risk prevention and mitigation)

The productivity in Bulgarian agriculture in 2011 was around EUR 5000/AWU which is equal to 35% of the average agriculture productivity in the EU.

NSI data however shows that productivity in the agriculture sector is significantly lagging behind the average productivity of the national economy.

**Table 23:** Trends in productivity in the economy and in agriculture, forestry and fishery sector

|       | GDP per employed, current prices, BGN | GDP per hour worked, current prices, BGN | GVA ** per hour worked in current prices, BGN |                |             |             |
|-------|---------------------------------------|------------------------------------------|-----------------------------------------------|----------------|-------------|-------------|
|       |                                       |                                          | In the economy                                | In agriculture | In industry | in services |
| 2007  | 16149                                 | 9,76                                     | 7,6                                           | 2,6            | 8,9         | 8,5         |
| 2008  | 18115                                 | 10,94                                    | 8,5                                           | 3,8            | 9,4         | 9,5         |
| 2009  | 18341                                 | 11,08                                    | 8,8                                           | 2,6            | 10,3        | 10,1        |
| 2010  | 19858                                 | 12,01                                    | 9,6                                           | 2,8            | 11,3        | 11,0        |
| 2011  | 21949                                 | 13,29                                    | 10,7                                          | 3,4            | 13,2        | 11,9        |
| 2012* | 23639                                 | 14,31                                    | 11,5                                          | 4,5            | 14,1        | 12,4        |

\* Preliminary data

\*\* Data for GVA does not include the provisional renting savings for persons who live in their own dwellings

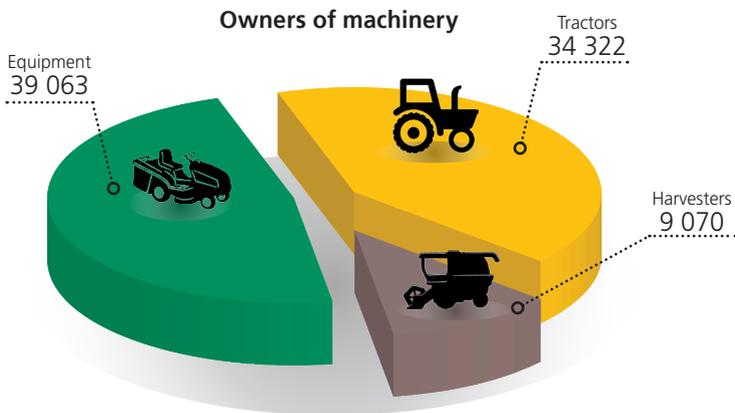
Source: NSI

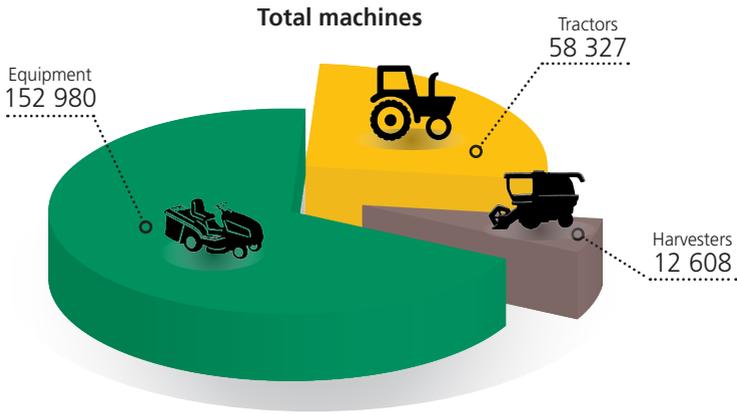
The reasons for this low productivity were already mentioned above – fragmented production structure in most of the agriculture subsectors, non-modernized and small holdings, elderly and non-educated managers of the holdings, low bargaining power of the small producers, fragmentation of land ownership, etc.

Additionally, data from the agriculture census in 2010 indicates that the vast majority of the 370 thousand farm holdings do not have agricultural machinery.

The Census data shows that in 2010 just some 40000 holdings had machinery for mechanized agriculture.

**Figure 3.** Distribution of agriculture machinery numbers per owner and per type





**Source:** MAF, Agriculture Census 2010

Of all types of owners, physical persons own a little less than 59% of the harvesters and almost 68% of the tractors and equipment.

**Table 24:** Distribution of machinery<sup>19</sup> per type of holding in 2010

|                   | Physical persons |          | Sole proprietors |          | Cooperatives |          | Companies |          | Associations and others |          |
|-------------------|------------------|----------|------------------|----------|--------------|----------|-----------|----------|-------------------------|----------|
|                   | Owners           | Machines | Owners           | Machines | Owners       | Machines | Owners    | Machines | Owners                  | Machines |
| <b>Tractors</b>   | 29380            | 39358    | 1300             | 4397     | 812          | 5637     | 2230      | 8298     | 150                     | 637      |
| <b>Harvesters</b> | 6391             | 7421     | 755              | 1309     | 647          | 1491     | 1209      | 2254     | 68                      | 133      |
| <b>Equipment</b>  | 34702            | 103417   | 1277             | 12481    | 803          | 14087    | 2131      | 21594    | 150                     | 1401     |

Source MAF, *Agriculture Census 2010*

However, compared to the total number of 370000 holdings counted during the Census in 2010, it appears that only 12-13% have some agricultural equipment for mechanized production.

Plant production is especially vulnerable to adverse weather condition. Droughts, floods and hailstorms have caused great losses in the sector in the last ten-year period. Therefore the condition of the irrigation and drainage systems are of particular importance for the competitiveness of farm holdings specializing in plant production.

The Bulgarian irrigation system is managed by the “Napoitleni Sistemi”, company and to a lesser degree – by irrigation associations.

In 2012 the irrigable areas cover just 1.5% of arable lands in the country. The irrigation infrastructure is built on 0.74 million ha, and 0.54 million ha are still irrigable. The infrastructure is organized into 235 irrigation systems in separate irrigation basins using more than 2000 irrigation reservoirs.

<sup>19</sup> Accidental data from the Control Technical Inspectorate indicates that additional 877 tractors had been registered only in the period 1 Jan-31 July 2013. There is no data for accumulated machinery per end 2011 and end-2012.

The prevailing irrigation technology used remains *gravitation irrigation*; a system based on networks of irrigation canals.

**Table 25:** Distribution of holdings and irrigated areas per type of irrigation technology in 2010

| Total irrigated areas |           | Sprinkler installations |           | Drip installations |           | Gravitation irrigation network |           | Other equipment |           |
|-----------------------|-----------|-------------------------|-----------|--------------------|-----------|--------------------------------|-----------|-----------------|-----------|
| Holdings (N)          | Area (ha) | Holdings (N)            | Area (ha) | Holdings (N)       | Area (ha) | Holdings (N)                   | Area (ha) | Holdings (N)    | Area (ha) |
| 104 267               | 137 511   | 2 711                   | 11 115    | 3 696              | 9 733     | 78 371                         | 101 105   | 21 326          | 15 558    |

**Source** MAF

(\* The same irrigation field can be serviced by various irrigation installations)

The existing hydro melioration systems and equipment are in critical physical condition; they are ineffective and with high rate of water losses (70-80% in the state owned Napoitleni Sistemi areas). The irrigation water becomes too expensive and forces the farmers to give up the irrigation services to their fields.

Furthermore, the irrigation system was designed in the socialist era to serve big state cooperatives – at present they not well-suited to be used by the fragmented and small farms in the vegetable and fruit production subsectors.

Hence, poor mechanization of the smaller holdings and the inappropriate irrigation system can be added to a) the factors which impede the competitiveness in the plant production subsectors and b) the drivers, as identified in section 2.2., which are causing the transformation of Bulgarian agriculture:

- The Direct Payments effected under the SAPS, as well as the support effected under the national support schemes

- The implementation of SAPARD and RDP
- The banking policy to extend credit mostly to the producers who have access to subsidies
- Land ownership fragmentation due to ill-managed land restitution in the 1992-1999 period

### ■ **The dismantling of the irrigation system**

### ■ **Poor mechanization levels of the smaller farms**

- The lack of security for crop and animal produce against stealing
- The dominant market position of regional quasi-oligopolies established in the processing industry
- The lack of protection against illegal competition from imported agricultural commodities
- The barriers to trade established because of the marketing policies of larger wholesale chains
- The unwillingness of farmers to establish cooperative production and marketing based on models of producer groups and producer organizations
- Especially in the animal breeding sector – the abrupt introduction of the requirements of Acquis without the provision of appropriate grace periods and appropriate support for physical restructuring of animal farms
- Especially in the animal breeding sector – the prohibition for direct sales of own produce to final customers

### 2.2.2. Social issues, employment, social dialogue

The reaction of Bulgarian business to the economic crisis from 2009 was to lay off the less qualified employees who added little value in the production process. This resulted in higher unemployment but also in higher levels of salaries and wages in most of the sectors of the economy.

NSI data for the 2008-2012 period indeed supports this statement as it shows that the salaries in most sectors increased in 2012 by 10-60% compared to the levels in 2008.

**Table 26:** Trends 2008-2012 in average salary in selected economic activities, monthly, in EUR

|                                         | 2008  | 2009  | 2010  | 2011  | 2012  | 2012/2008 |
|-----------------------------------------|-------|-------|-------|-------|-------|-----------|
| <b>Total</b>                            | 410,3 | 399,5 | 421,0 | 431,3 | 444,1 | 137,1%    |
| <i>In Public sector</i>                 | 278,5 | 308,7 | 338,5 | 379,5 | 419,5 | 108,3%    |
| <i>In Private sector</i>                | 310,8 | 332,3 | 359,5 | 392,8 | 426,2 | 150,6%    |
| <i>Agriculture forestry and fishery</i> | 200,0 | 232,3 | 264,6 | 290,3 | 329,2 | 164,6%    |
| Quarrying and mining                    | 444,6 | 527,2 | 532,3 | 618,5 | 666,7 | 149,9%    |
| Processing industry                     | 253,3 | 273,8 | 308,2 | 315,9 | 338,5 | 133,6%    |
| Construction                            | 260,0 | 290,3 | 307,2 | 332,8 | 335,9 | 129,2%    |
| Accommodation and catering              | 193,8 | 200,0 | 214,9 | 229,2 | 268,2 | 138,4%    |
| State government*                       | 535,4 | 454,4 | 485,6 | 508,7 | 498,5 | 93,1%     |
| Education                               | 379,0 | 387,7 | 416,9 | 425,6 | 439,5 | 116,0%    |
| Health and social services              | 342,1 | 353,3 | 372,8 | 377,9 | 436,4 | 127,6%    |
| Culture, sports and entertainment       | 265,6 | 297,9 | 303,6 | 334,9 | 429,7 | 161,8%    |

**Note:** All data is valid by last quarter of the year, annual bonuses included. The government in the period 2009-2013 reduced the annual bonuses for the administration; this explains the decrease in the salaries for the „State government“ row.

**Source:** National Statistical institute

The increase in salary levels in the agricultural sector is particularly visible, as the growth there is the highest among all other sector. This good news, however, is relevant only to a very limited section of the workforce; and in fact is due to the increase in the Direct Payments under the SAPS, and good international prices for grain (from wheat, maize) and for oil-bearing cultures (sunflower, rapeseed); hence the good news pertains primarily to employees of the big companies operating in the arable crops sectors.

The situation with the employed in the animal breeding subsectors, and particularly of self-employed farmers reveals the opposite extreme.

This is very well reflected in the diminishing purchasing power of the households and the ever-decreasing household consumption of food, energy apparel and electronic appliances – all these are considered on the next pages of this section.

NSI data<sup>20</sup> indicates that in the 2005-2011 period, the prices of purchased goods and food increased faster than the rate of increase in the income of the households.

.....  
<sup>20</sup> AVERAGE PRICES AND PURCHASED QUANTITIES OF MAIN FOODS AND NON-FOODS BY HOUSEHOLDS FOR THE 2001- 2011 PERIOD, NSI, 2012. The publication contains data on the average prices and purchased quantities foods and non-foods by households by years for the 2001 - 2011 period and by quarters for 2011. These average prices differ from consumer prices, which are also published by the NSI, because in this publication is used information obtained from the household budget survey.

**Table 27:** Indices of prices, household incomes and real expenditure in 2005-2010

| Year for which the data is valid                                                  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  |
|-----------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Dynamic price index calculated by data from the household budget survey, 2001=100 | 120.2 | 131.8 | 146.7 | 161.6 | 171.2 | 176.4 | 188.6 |
| Index of real total household income average per capita, 2001 = 100               | 125.9 | 129.2 | 139.2 | 139.7 | 143.4 | 138.3 | 137.5 |
| Index of real total expenditure average per capita, 2001 = 100                    | 131.2 | 140.3 | 154.9 | 157.2 | 144.9 | 139.0 | 142.2 |

Source: National Statistical institute

Data on social vulnerability further demonstrates increasing poverty and social inequality.

**Table 28:** Social vulnerability trends in 2005-2010

| Year for which the data is valid                                             | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
|------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|
| Poverty line per person, in EUR                                              | 830.0  | 888.0  | 1303.0 | 1697.0 | 1810.0 | 1741.0 |
| Poverty line per two adults with two children <14y.o., in EUR                | 1743.0 | 1865.0 | 2736.0 | 3563.0 | 3801.0 | 3656.0 |
| Poor people, in thousands                                                    | 1417.1 | 1690.8 | 1632.1 | 1657.0 | 1564.2 | 1673.5 |
| Relative share of poor people, %                                             | 18.4   | 22.0   | 21.4   | 21.8   | 20.7   | 22.3   |
| Relative share of poor people before social transfers, %                     | 44.9   | 41.4   | 40.0   | 38.8   | 40.8   | 41.5   |
| Relative share of poor people before social transfers (pensions included), % | 24.7   | 25.5   | 27.1   | 26.4   | 27.1   | 27.1   |
| Relative share of working poor 18 - 64 y.o., %                               | 5.5    | 5.9    | 7.6    | 7.5    | 7.7    | 8.2    |
| Income inequality; ratio of incomes of 20% wealthiest to 20% poorest         | 5.1    | 7.0    | 6.5    | 5.9    | 5.9    | 6.5    |
| Income inequality - Gini coefficient                                         | 31.2   | 35.3   | 35.9   | 33.4   | 33.2   | 35.1   |
| Share of population living in material deprivation                           | 57.7   | 57.6   | 41.2   | 41.9   | 45.7   | 43.6   |
| People < 60 y.o., living in households with low economic activity*           | 869.9  | 931.6  | 470.3  | 398.9  | 453.7  | 623.3  |
| Population at risk of poverty or social exclusion, thousands:                | 4734.1 | 4663.2 | 3421.0 | 3511.2 | 3718.7 | 3693.5 |

|                                                                   |        |        |        |        |        |        |
|-------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|
| <b>Population at RPSE: 0-17 y.o., in thousands</b>                | 820.6  | 819.3  | 564.1  | 601.3  | 634.7  | 663.6  |
| <b>Population at RPSE: 18-64 y.o., in thousands</b>               | 2919.8 | 2882.1 | 1988.9 | 2033.4 | 2231.2 | 2215.7 |
| <b>Population at RPSE: &gt;64 y.o., in thousands</b>              | 993.6  | 961.8  | 868.0  | 876.4  | 852.8  | 814.1  |
| <b>Population at risk of poverty or social exclusion, total %</b> | 61.3   | 60.7   | 44.8   | 46.2   | 49.2   | 49.1   |
| <b>Population at RPSE: 0-17 y.o., % of all in the group</b>       | 61.0   | 60.8   | 44.2   | 47.3   | 49.8   | 51.8   |
| <b>Population at RPSE: 18-64 y.o., % of all in the group</b>      | 58.1   | 57.9   | 39.5   | 40.6   | 45.0   | 45.2   |
| <b>Population at RPSE: &gt; 64 y.o., % of all in the group</b>    | 73.7   | 71.1   | 65.5   | 66.0   | 63.9   | 61.1   |

\* *Low economic activity is calculated as the ratio between the actual working months in the previous year for each member 18-59 y.o. of the household, compared to total months available for potential employment of the same household members.*

**Source:** National Statistical institute: <http://www.nsi.bg/EPDOCS/SILC2010.pdf>

It should be considered, that given the unfavourable age structure and much lower rate of economic activity and employment in the rural areas, the above developments are hitting particularly hard families in rural areas, a fact which is forcing young families to emigrate to the urban areas, or move abroad.

The next table shows the purchasing power of household's total incomes as calculated in the index with 2001 being the anchor year = 100. The data shows that household purchasing power in 2011 was greater for all items than the purchasing power in 2001; this power actually diminished in the crisis years 2010-2011 for almost half of the items in the list; particularly in purchasing sugar and poultry meat, but also to a certain extent milk, butter, white bread and apples.

This observation is important as it also illustrates that the Direct Payments, which are primarily absorbed by the producers specializing in arable crops (mainly grain and oil-bearing seeds), cannot actually mitigate their rising prices on the domestic market,

thus making them more affordable to the final consumer. Particularly interesting is the fact that families lose almost the same purchasing power for white bread and for apples – the former subsidized in Bulgaria at 25-30% of the production costs of the grain, with apples at 5-8% of their production costs. On the other hand, Bulgaria is not self-sufficient in apples and the imported ones may also be heavily subsidized in their country of origin.

**Table 29:** Changes of purchasing power of households, calculated by total income average per capita, 2001=100

|                                | 2005  | 2007  | 2008  | 2009  | 2010  | 2011  | Change 2011-2005* | Change 2011-2007* | Change 2011-2008 | Change 2011-2009 | Change 2011-2010 |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------------------|-------------------|------------------|------------------|------------------|
| <b>White bread</b>             | 134,7 | 122,1 | 115,1 | 136,7 | 139,7 | 126,2 | -8,5              | 4,1               | 11,1             | -10,5            | -13,5            |
| <b>Rice</b>                    | 154,8 | 149,3 | 110,7 | 98,3  | 107,5 | 107,3 | -47,5             | -42,0             | -3,4             | 9,0              | -0,2             |
| <b>Dry beans</b>               | 221,6 | 231,3 | 203,4 | 209,4 | 222,0 | 264,0 | 42,4              | 32,7              | 60,6             | 54,6             | 42,0             |
| <b>Potatoes</b>                | 163,0 | 144,1 | 171,1 | 171,4 | 171,5 | 161,4 | -1,6              | 17,3              | -9,7             | -10,0            | -10,1            |
| <b>Tomatoes</b>                | 105,1 | 104,6 | 125,3 | 139,8 | 119,1 | 147,4 | 42,3              | 42,8              | 22,1             | 7,6              | 28,3             |
| <b>Cucumbers</b>               | 125,0 | 123,8 | 146,0 | 150,0 | 141,1 | 166,3 | 41,3              | 42,5              | 20,3             | 16,3             | 25,2             |
| <b>Peppers</b>                 | 107,3 | 118,4 | 115,2 | 137,7 | 130,3 | 145,4 | 38,1              | 27,0              | 30,2             | 7,7              | 15,1             |
| <b>Apples</b>                  | 130,1 | 150,7 | 142,7 | 182,0 | 190,1 | 174,2 | 44,1              | 23,5              | 31,5             | -7,8             | -15,9            |
| <b>Grapes</b>                  | 92,0  | 123,7 | 125,7 | 174,3 | 146,7 | 152,1 | 60,1              | 28,4              | 26,4             | -22,2            | 5,4              |
| <b>Milk</b>                    | 131,7 | 132,3 | 121,4 | 125,9 | 121,3 | 119,9 | -11,8             | -12,4             | -1,5             | -6,0             | -1,4             |
| <b>Yoghurt</b>                 | 133,6 | 135,7 | 132,7 | 139,2 | 139,8 | 138,0 | 4,4               | 2,3               | 5,3              | -1,2             | -1,8             |
| <b>White cheese</b>            | 147,6 | 150,6 | 151,9 | 169,6 | 166,2 | 156,0 | 8,4               | 5,4               | 4,1              | -13,6            | -10,2            |
| <b>Yellow cheese</b>           | 135,3 | 141,9 | 133,5 | 148,2 | 147,4 | 133,6 | -1,7              | -8,3              | 0,1              | -14,6            | -13,8            |
| <b>Pork</b>                    | 136,8 | 175,4 | 178,8 | 193,4 | 205,5 | 213,1 | 76,3              | 37,7              | 34,3             | 19,7             | 7,6              |
| <b>Poultry meat</b>            | 150,3 | 177,8 | 179,8 | 193,9 | 208,9 | 138,5 | -11,8             | -39,3             | -41,3            | -55,4            | -70,4            |
| <b>Perishable sausages</b>     | 135,9 | 161,6 | 165,7 | 157,9 | 156,8 | 160,8 | 24,9              | -0,8              | -4,9             | 2,9              | 4,0              |
| <b>Non-perishable sausages</b> | 140,4 | 163,4 | 167,7 | 163,5 | 163,3 | 170,1 | 29,7              | 6,7               | 2,4              | 6,6              | 6,8              |
| <b>Eggs</b>                    | 162,1 | 164,6 | 167,9 | 177,1 | 174,9 | 190,4 | 28,3              | 25,8              | 22,5             | 13,3             | 15,5             |
| <b>Sugar</b>                   | 161,1 | 125,5 | 142,4 | 157,9 | 164,4 | 113,6 | -47,5             | -11,9             | -28,8            | -44,3            | -50,8            |

|                         | 2005  | 2007  | 2008  | 2009  | 2010  | 2011  | Change<br>2011-<br>2005* | Change<br>2011-<br>2007* | Change<br>2011-<br>2008 | Change<br>2011-<br>2009 | Change<br>2011-<br>2010 |
|-------------------------|-------|-------|-------|-------|-------|-------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| <b>Butter</b>           | 153,3 | 170,9 | 163,9 | 163,2 | 150,4 | 138,6 | -14,7                    | -32,3                    | -25,3                   | -24,6                   | -11,8                   |
| <b>Men's shoes</b>      | 145,4 | 173,3 | 177,8 | 190,4 | 204,6 | 192,7 | 47,3                     | 19,4                     | 14,9                    | 2,3                     | -11,9                   |
| <b>Women's shoes</b>    | 146,4 | 172,3 | 185,5 | 203,1 | 219,5 | 207,1 | 60,7                     | 34,8                     | 21,6                    | 4,0                     | -12,4                   |
| <b>Children's shoes</b> | 139,7 | 164,8 | 171,5 | 178,1 | 180,8 | 169,8 | 30,1                     | 5,0                      | -1,7                    | -8,3                    | -11,0                   |
| <b>Men's suits</b>      | 125,9 | 165,6 | 148,0 | 151,1 | 141,9 | 144,5 | 18,6                     | -21,1                    | -3,5                    | -6,6                    | 2,6                     |
| <b>Women's suits</b>    | 147,6 | 146,0 | 168,0 | 166,8 | 142,7 | 158,4 | 10,8                     | 12,4                     | -9,6                    | -8,4                    | 15,7                    |
| <b>Coal</b>             | 108,8 | 108,8 | 100,4 | 134,9 | 108,9 | 101,9 | -6,9                     | -6,9                     | 1,5                     | -33,0                   | -7,0                    |
| <b>TV sets</b>          | 205,2 | 219,7 | 169,6 | 168,8 | 151,5 | 195,3 | -9,9                     | -24,4                    | 25,7                    | 26,5                    | 43,8                    |

\* Produces the difference in the index values in percentage points. Red figures indicate these items which are less affordable to the households in 2011, than in the particular year for comparison.

**Source:** National Statistical institute

Economic crises bring lower economic activity and higher levels of activity in the shadow economy. This reflects on the levels of collected dues and taxes in the state budget, and in the Bulgarian case, in the currency board and rules for financial discipline (threshold on state budget deficits) – and limits the abilities of the state to act anti-cyclically to the negative economic developments.

Data from the Ministry of Finance illustrates this. Until 2009<sup>21</sup> state budget expenditures increased for all state functions financed by the consolidated state budget. In 2011, there is an obvious sharp decline in the expenses for almost all items, except for the functions “Social security, support and services”, “Healthcare”, “Economic activities and services”.

.....  
<sup>21</sup> Unfortunately there is no publicly available information on the execution of consolidated state budgets in 2010 and 2012.

**Table 30:** Expenditures in million BGN from the consolidated state budget, per function, by 31. December each year

|                                                                                                    | 2005          | 2006          | 2007          | 2008          | 2009          | 2011*          |
|----------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|
| <b>EXPENDITURE</b>                                                                                 | 16678.5       | 18286.3       | 22103.4       | 25323.4       | 25666.9       | 18031.6        |
| <b>State service – total</b>                                                                       | 1268.3        | 1512.5        | 2003.3        | 1994.7        | 1951.8        | 1 708.5        |
| - including science                                                                                | 133.8         | 147.5         | 155.6         | 203.0         | 223.7         | 188.7          |
| <b>Defense and security</b>                                                                        | 2080.3        | 2390.9        | 3021.8        | 3228.4        | 3000.8        | 2 831.5        |
| <b>Education</b>                                                                                   | 1814.3        | 1941.1        | 2179.2        | 2768.4        | 2837.8        | 2 655.3        |
| <b>Healthcare</b>                                                                                  | <b>2008.6</b> | <b>2022.5</b> | <b>2373.3</b> | <b>2830.8</b> | <b>2634.4</b> | <b>3 247.6</b> |
| <b>Social security, support and services</b>                                                       | <b>5624.9</b> | <b>6210.2</b> | <b>6803.3</b> | <b>7879.5</b> | <b>9104.7</b> | <b>9 701.7</b> |
| <b>Construction of buildings, renovation, communal holding and preservation of the environment</b> | 725.8         | 988.1         | 1339.0        | 1509.0        | 1687.3        | 1 428,5        |
| <b>Recreation, culture, religion</b>                                                               | 348.3         | 375.2         | 482.9         | 602.0         | 537.6         | 513,2          |
| - including culture                                                                                | 287.5         | 319.8         | 382.8         | 460.9         | 440.5         | 409.8          |
| <b>Economic activities and services</b>                                                            | <b>2121.9</b> | <b>2205.4</b> | <b>2674.6</b> | <b>3205.4</b> | <b>2645.5</b> | <b>3 454,2</b> |
| <b>Other non-classified expenditure</b>                                                            | 685.6         | 640.3         | 1226.0        | 1305.2        | 1266.9        | 547,0          |

\*According to the 2011 Report for State Budget execution by Ministry of Finance.

**Source:** Ministry of Finance (data used from site of NSI)

The mechanisms for social dialogue in the sectors are not working very smoothly or sustainably. There is not yet an enforced law on the role, operations and functions of the Chamber of the Branch Organizations defending the interests of particular

subsectors of Bulgarian agriculture; hence the balanced participation of the branches in the preparation of the Bulgarian position towards changing CAP arrangements, is not always representative. Additionally, these positions are not always best backed by appropriate analysis or a comprehensive long-term national agriculture balanced development strategy for all subsectors and geographically diverse rural areas of the Bulgarian provinces.

This was particularly valid when the decision to introduce SAPS as the main system for Direct Payments in the country was made, or when a national budget to finance national support schemes compensating market distortions caused by the SAPS was established.

Furthermore, every next minister of agriculture has too much a freedom to reestablish instruments of the national support system; just like every financial minister has too great a power to decide if and how much of the national budget will be allocated to actually providing anti-cyclical financial support to Bulgarian agriculture. All this takes away from the transparency of the national policy in the sector and diminishes the predictability of the economic environment for the development of strategies of private entities.

The formulation of the national strategies, plans and positions on CAP implementation in the next programming period is generally not based on the larger socio-economic rural context in which agriculture subsectors are developing. In fact, no Bulgarian position, plan or programme is based on employment and/or purchasing power as the leading rationale for establishing particular instruments or interventions in the sector, nor are they taking into consideration that CAP and national instruments will be implemented in varying socio-economic environments, based on varying geographic characteristics with varying soil-climatic conditions.

In relation to the employment generated or preserved, the trends in social characteristics and the purchasing power of rural population are not considered even during the sessions of the Monitoring Committee which together with the Managing Authority of the Rural Development Programmes, even so, this programme remains the single most powerful financial instrument which can, in reality, improve the socio-economic fabric of a rural province.

A lot more should also be accomplished in aligning the real implementation of the instruments for regional development and the those designed for social protection and development in the rural development of the country. The demographic situation in the rural areas clearly calls for concerted actions from all instruments; else the outlook for the development of agriculture, the rural economy and rural areas as such will be dim.

The level of social dialogue in the agro-economy can and should be improved given the importance of the sector for the light processing industry and the rural economy in general. This should be achieved by shifting the focus of MAF positions, strategies, plans and programmes from sectoral development to social and regional development and then aligning instruments for regional and social development to the rural strategy in order to achieve synergy from the concerted actions.

### 2.3. Organic production

Organic production has beneficial effects in all the three domains of sustainable development: it encourages the preservation of the environment, it supports the production of healthy foods, and it creates and preserves better jobs in the agriculture and light processing industry of rural areas.

In Bulgaria, the first legislation on organic production was created in 2001, when the first Ordinance 35 and Ordinance 21 of MAF introduced the requirements and conditions from Regulation EC 2092/1991.

The National Plan for Development of Organic Production 2007-2013 set two major quantified objectives: 8% of the arable lands in the country should be used for organic production and 3% of the marketed foodstuffs should be organic.

Data from Agristatistics indicate that in 2012 the objectives are far from being achieved – the lands used for organic production reached 40.4 thousand hectares which is 1.3% of the 3.2 million hectares of arable lands in 2011 and 0.9% of the 4.5 million ha of farmlands in farm holdings.

Despite the objectives far from being achieved, organic production in Bulgaria is one of the agricultural activities with the highest rate of development, where both areas and operators engaged in production and marketing of the organic produce are constantly growing. The major reasons for the rapid growth are:

- support under the RDP 2007-2013 for compensating organic producers under measure 214 Agroecology , as well as a guaranteed budget within measure M121 Modernization of agriculture holdings for investments by organic producers – certified or still in the transition process
- the favourable natural conditions including the availability of ecologically clean areas suitable for organic production
- the desire of an increasing number of the consumers to put healthy food on their tables

- the realized benefits for the environment and the rural areas
- the information campaigns by MAF and the NGOs in the sector

Organic production was among the most important priorities in the Rural Development Program 2007-2013 with one of the highest budgets allocated to the respective measures. Its significance will be preserved in the future programming period in view of the strategic priorities of EU CAP in the next 2014-2020 programming period.

### 2.3.1. Organic land, certified producers and products

In the plant production sector the major plants produced under the organic methods are arable crops (grain, green forages and industrial cultures), perennial plants (fruits, berries, olive trees and vineyards), and meadows and pastures. In year 2010 the distribution of the areas under organic production was: 55% of areas were under arable crops, 23% were under perennials and 14% were pastures.

**Table 31:** Areas for production of organic produce 2006-2011

|                                          | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   |
|------------------------------------------|--------|--------|--------|--------|--------|--------|
| <b>Total cultivated areas</b>            | 4691   | 13646  | 12738  | 8163   | 20320  | 20618  |
| <b>Permanent meadows and grasslands</b>  |        |        | 2486   | 1843   | 3611   | 4491   |
| <b>Fallow lands</b>                      | 1261   | 1578   | 1438   | 1783   | 1716   | 1513   |
| <b>Total areas in the control system</b> | 5952   | 15224  | 16662  | 11789  | 25648  | 26622  |
| <b>Wild produce*</b>                     | 118243 | 397354 | 489083 | 401425 | 546195 | 543655 |

*\*Wild produce – of mushrooms herbs and forest fruits are gathered from eco-certified areas; however, the respective areas are not being cultivated, therefore they cannot be included in the heading „Total areas in the control system“*

**Source:** MAF, data from the annual reports of the entities controlling the organic production

According to data from the “Organic Production” department of the “Plant Production” Directorate of the MAF, in the year 2011 the areas under organic production increased 2.1 times compared to the areas in 2009, and reached 26.6 thousand hectares. Major plants cultivated were the perennial plants, but the significance of the vegetables and the grain cultures was rising.

Perennials, industrial and grain cultures are most preferred for **organic plant production**.

**Table 32:** Areas of organic cultures 2011- 2012

| Cultures                                                                    | Areas in transition (ha) |       | Certified areas (ha) |       | Total areas (ha) |        |
|-----------------------------------------------------------------------------|--------------------------|-------|----------------------|-------|------------------|--------|
|                                                                             | 2011                     | 2012  | 2011                 | 2012  | 2011             | 2012   |
| <b>Grain, incl. rice</b>                                                    | 4 980                    | 4 771 | 1 541                | 2 761 | 6 521            | 7 532  |
| <b>Industrial – total</b>                                                   | 3 350                    | 5 231 | 2 495                | 2 678 | 5 845            | 7 909  |
| <i>- including roses bearing essential oil (Rosa damascene)</i>             | 516                      | 769   | 329                  | 375   | 845              | 1144   |
| <b>Fresh vegetables, melons, strawberries, cultivated mushrooms (total)</b> | 467                      | 654   | 203                  | 767   | 670              | 1 421  |
| <b>Plantations of perennials</b>                                            | 5 087                    | 8 733 | 1 356                | 2 226 | 6 443            | 10 959 |
| <b>Permanent meadows and grasslands</b>                                     | 1 519                    | 4903  | 2 972                | 3054  | 4 491            | 7 957  |
| <b>Forage cultures (green feeding cultures)</b>                             | 771                      | 1593  | 225                  | 451   | 996              | 2 044  |
| <b>Fallow lands</b>                                                         | 1 057                    | 1 958 | 456                  | 357   | 1 513            | 2 315  |

**Source:** MAF, data from the annual reports of the entities controlling the organic production

Apples, strawberries, plums, nuts, essential oils (from rose and lavender), rose hip, aronia, some kinds of vegetables, bee honey – these were all among the organic products which were most exported from Bulgaria.

In 2012 organic animal breeding continued its steady rise; however its scope in Bulgaria remains the lowest within the EU. The lack of support under measure M214 from RDP 2007-2013 for organic animal breeding also contributed to the slower development of this subsector for organic production.

**Table 33:** Number of animals for organic produce

|                     | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   |
|---------------------|--------|--------|--------|--------|--------|--------|--------|
| <b>Cattle</b>       | 329    | 395    | 470    | 272    | 364    | 976    | 1 173  |
| <b>Sheep</b>        | 1 054  | 1 690  | 2 471  | 5 831  | 6 698  | 6 648  | 9 175  |
| <b>Goats</b>        | 131    | 1 058  | 1 624  | 2 732  | 2 773  | 3 397  | 2 831  |
| <b>Bee families</b> | 33 981 | 35 747 | 44 861 | 41 089 | 46 429 | 58 855 | 85 346 |

\* Includes both certified animals and animals still in the transition period

**Source:** MAF, Data from the annual reports from the controlling entities on organic production

The number of the animal holdings under organic farming methods is smaller, and this can be explained by the lack of processing enterprises certified for organic produce; this restricts the willingness of the farmers to undertake the obligations for certification under the organic methods for production of animal output. MAF ordinance 26 regulating the direct sales from farmers to the final consumers places further obstacles in the way of farmers' willingness to undergo the transition period and become certified organic producers.

By the end of 2012 the total number of organic operators (producers, processors, traders) registered with the MAF reached 2016 entities.

**Table 34:** Number of registered operators for organic produce

|                                 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011  | 2012  |
|---------------------------------|------|------|------|------|------|-------|-------|
| Operators in organic production | 214  | 339  | 311  | 476  | 820  | 1 054 | 2 016 |

**Source:** MAF, data from the annual reports of the entities controlling the organic production

The number of the operators does not account for the number of subcontractors; their number in the system for control also increased from 612 in 2011 to 867 in 2012.

### 2.3.2. Organic market

In 2005 the market for organic products was estimated at 800 thousand euro – a mere 0.023% share of the total market for food.

According to a study on the market for organic products carried out in 2006 by Julia Jabarova - associate professor at Plovdiv University, the market for organic produce in Bulgaria was assessed as “emerging” with market share below 1%, with only 5% of the locally produced organic output marketed on the domestic market.

A study by the consulting company Dikon Group confirmed that in the period 2005/2006, 95% of the organic products were exported - the exporters were mainly bigger firms which could produce sufficient quantities for the foreign markets or organizations which accumulated the quantities from numerous small producers; very often the latter group of exporters marketed primarily sorted and packaged raw materials on the international markets, including wild fruits and berries, mushrooms, herbs or medicinal plants.

A study carried out by BIOSELENA in February 2009 revealed that the number of organic items marketed in Bulgaria was 733; 657 of them were foodstuffs, and the remaining were cosmetic products or products for cleaning and hygiene. Only 54 of them were locally produced (7% of all marketed products). The overall turnover

of marketed organic products was estimated at approximately at EUR 4.5 million (including the sales estimate of traders who did not participate in the study).

**Table 35:** Number of organic items, shops and trade turnover for organic produce in 2008

|                                              |                  |
|----------------------------------------------|------------------|
| <b>Total number of organic items traded:</b> | <b>733</b>       |
| - of which foods                             | 657              |
| - of which non-foods                         | 76               |
| - of which produced in Bulgaria              | 54               |
| <b>Total number of trade outlets:</b>        | <b>1'801</b>     |
| <b>Total turnover in 2008 (in BGN):</b>      | <b>7'566'000</b> |

**Source:** *Study of Bioselena foundation in 2009*

Bulgaria still lacks official statistics regarding the sales of organic products.

The market outlets where organic products can be purchased include the big retail chains (BILA, Piccadilly, Fantastico, etc.), and the supermarkets and the shops offering healthy and dietetic foods including foods appropriate for persons who suffer from diabetes. Internet shopping is still not widely used despite the fact that part of the organic products range can be found and purchased only online.

Organic medicinal plants, essential oils and cosmetics can also be purchased in pharmacies and specialized sanitary shops; organic herbs, medicinal preparations based on organic plants and fruits and vegetables can sometimes be purchased from markets for agricultural produce. The majority of organic products is marketed in Sofia, where the majority of specialized shops for organic produce are operating.

More than 90% of the organic produce of Bulgaria still continues to be exported to the western countries; to Canada, USA, but also Japan for certain products. The products include medicinal plants – dried or in mixtures for tea, fresh, cooked or canned berries, fruits and vegetables, honey, nuts, and lately – durum wheat,

sunflower, etc. The exporters are usually bigger firms which are certified by a different European certification organization - most often residing in the importing country. These organizations also help with technical consultations for production methods. The majority of these exporters are not visible on the Bulgarian market – they are still convinced that it is too early to offer their organic products on the Bulgarian market because of the low purchasing power of Bulgarian customers.

In the last 3 years the number of the importers of organic products in Bulgaria has been rapidly increasing; the list of marketed organic products is rapidly expanding as well to include diversified products, for example the various varieties of the same kind of fruits and vegetables.

### **2.3.3. Support bodies and services**

MAF implements national policy in the area of organic production and enforces the requirements set in Regulation EC No. 834/2007 by the Council on Organic Production and Labeling of Organic Products, as well as its detailed implementing rules in the Regulation EC No. 889/2008.

In Bulgaria, the rules for organic production are enforced via the Law on Implementing the Common Market Organization for Agricultural Goods of the EU, and MAF Ordinance 1/7 February 2013 on implementing the rules for organic production from plants, animals and aquaculture, plant and animal products, aquaculture products and foods, their labeling and exercising controls upon their production and labeling.

According to article 18 from the Law on Implementing the Common Market Organization for Agricultural Goods of the EU, the controls on compliance to the rules for organic production and labeling are enforced by controlling entities. Controlling entities are local or foreign organizations – which are business entities according to the Commerce Act or according to the relevant legislation of an EU Member State, or a country – a member of the Agreement EU Economic Space, which are entities that have received licenses to carry out the relevant activities required by the Minister of Agriculture.

In 2012 there were 11 organizations which had been granted a license to carry out the controlling activities under Regulation (EC) 834/2007.

Each year MAF carries out checks on the activities of all the licensed controlling entities. The checks should ensure that the controlling entities demonstrate competence, objectivity and effectiveness in their controlling activities.





### 3. Agro-Food Policy support

The CAP has various impacts on agriculture and forestry but also on the preservation of the environment on some 70% of the EU territory, and the quality of life of some 50% of the EU population.

CAP is supposed to contribute to the objectives of the Cohesion Policy by promoting balanced territorial development, but also to ensure the safety<sup>22</sup> and quality<sup>23</sup> of foods consumed in the Common Market.

Virtually any of the financial support instruments under the CAP financed by the EAGF and EAFRD<sup>24</sup>; the market measures<sup>25</sup> and the state aid schemes<sup>26</sup> operating in particular Member states, or the national legislation which enforces the EU Acquis in the country, can have major influences on the development of agriculture in general or on particular agricultural subsectors and branches.

.....  
<sup>22</sup> Via “from farm to fork” traceability. [http://ec.europa.eu/food/food/index\\_en.htm](http://ec.europa.eu/food/food/index_en.htm)

<sup>23</sup> [http://ec.europa.eu/agriculture/quality/index\\_en.htm](http://ec.europa.eu/agriculture/quality/index_en.htm)

<sup>24</sup> [http://ec.europa.eu/agriculture/cap-funding/index\\_en.htm](http://ec.europa.eu/agriculture/cap-funding/index_en.htm)

<sup>25</sup> Under the Common Market Organization: [http://ec.europa.eu/agriculture/markets/index\\_en.htm](http://ec.europa.eu/agriculture/markets/index_en.htm);

<sup>26</sup> State aids in agriculture = all State aids, including aid measures financed by parafiscal taxes, granted in connection with activities related to the production, processing and marketing of agricultural products. [http://ec.europa.eu/agriculture/stateaid/index\\_en.htm](http://ec.europa.eu/agriculture/stateaid/index_en.htm)

The same applies to the national policies in the areas of: border protection, the collection and distribution of market information for agri-goods, the offering of specialized education in agriculture and related processing, training and extension services, science and research, upkeep and development of genetic resources including sales of certified seeds, propagation and insemination material, insurance and compensations to mitigate losses from natural disasters and vermin calamities, upkeep of major agricultural infrastructure (e.g. irrigation, drainage, anti-flood, anti-fire, anti hailstorm systems), etc. All of the above may add to or subtract from the competitiveness of holdings in particular subsectors, and occasionally impact the competitiveness of particular subgroups of holdings.

Therefore, the establishment of policy measures and their implementing arrangements should be scrutinized in advance in view of their potential impact on groups of holdings; as the impacts may also be influencing the socio-economic development of entire geographic areas specializing in particular agricultural production.

### 3.1. Agricultural Policy and Budgetary Support

Agricultural support in Bulgaria is extended under the Farmers Support Act, first enforced on May the 22nd 1998 and last amended in July 2013.

There are three sources of agricultural support to Bulgarian farmers: the CAP First Pillar instruments (financed by the EAGF), the CAP Second Pillar instruments (financed by the EAFRD) and the national support schemes (state aid schemes) as notified to the European Commission.

The extensive Community legislation concerning the environment, public health, animal and plant health, animal welfare, occupational safety, sanitary and hygiene conditions, statutory management requirements, good agricultural and environmental conditions<sup>27</sup> under the Direct Payments, is transposed to Bulgaria via various legislative acts, which are implemented by various governmental bodies including institutions outside the system of the MAF. For some of the requirements Bulgaria is still in the transition period prior to achieving compliance to particular sets of rules and standards.

The following sections will focus on particular aspects of the CAP and its integration into national support policies in Bulgaria:

■ point 3.1.1. presents an overview of support to Bulgarian farmers extended under the Market Measures<sup>28</sup>, Promotional measures<sup>29</sup> and Quality Policy<sup>30</sup> measures financed by the EAGF

<sup>27</sup> See Annex II and III to COUNCIL REGULATION (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003.

<sup>28</sup> [http://ec.europa.eu/agriculture/markets/index\\_en.htm](http://ec.europa.eu/agriculture/markets/index_en.htm)

<sup>29</sup> [http://ec.europa.eu/agriculture/promotion/index\\_en.htm](http://ec.europa.eu/agriculture/promotion/index_en.htm)

<sup>30</sup> [http://ec.europa.eu/agriculture/quality/index\\_en.htm](http://ec.europa.eu/agriculture/quality/index_en.htm)

- point 3.1.2. focuses on the details of the monetary support provided in Bulgaria via Direct payments<sup>31</sup>
- point 3.1.3. discusses structural and rural development measures financed by the Rural Development Programme 2007-2013<sup>32</sup>
- point 3.1.4. offers a summary of the legislation related to agricultural activities; as some of its requirements are demanding significant investments, and thus influence the cash flows and overall competitiveness of the farmers
- point 3.1.5. focuses on other national state aid<sup>33</sup> schemes in the period 2009-2012

### 3.1.1. Agricultural Policy Measures

The European Union has established common rules<sup>34</sup> for agricultural markets in the Common Market Organization. In particular, these rules concern public intervention in the markets, quota and aid schemes, marketing and production standards, and trade with third countries.

Another set of measures closely related with agriculture market measures are the promotional measures promoting EU farm products on the Common Market and on the global market. Their implementation is usually closely related with the implementation of the mechanisms for EU Food Quality Mechanisms - Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI), Traditional Speciality Guaranteed (TSG) and with implementing the instruments promoting organic farming<sup>35</sup>.

.....  
<sup>31</sup> [http://ec.europa.eu/agriculture/direct-support/index\\_en.htm](http://ec.europa.eu/agriculture/direct-support/index_en.htm)

<sup>32</sup> [http://ec.europa.eu/agriculture/rurdev/index\\_en.htm](http://ec.europa.eu/agriculture/rurdev/index_en.htm)

<sup>33</sup> [http://ec.europa.eu/agriculture/stateaid/index\\_en.htm](http://ec.europa.eu/agriculture/stateaid/index_en.htm)

<sup>34</sup> Common organization of agriculture markets: [http://europa.eu/legislation\\_summaries/agriculture/agricultural\\_products\\_markets/167001\\_en.htm](http://europa.eu/legislation_summaries/agriculture/agricultural_products_markets/167001_en.htm)

<sup>35</sup> [http://ec.europa.eu/agriculture/organic/home\\_en](http://ec.europa.eu/agriculture/organic/home_en)

Their follows a brief description of the support provided to Bulgarian producers in the period 2010-2012 under the instruments mentioned above. The information is derived from the MAF Annual Agriculture Report 2012 where the information is not organized per **agriculture market** as in the CMO, nor by separate CMO instruments, and thus the analysis becomes harder.

### ***Sector Arable crops***

In financial year 2009/2010 the Paying Agency made interventions on the grain market by purchasing 42.1 thousand tons of barley and 3.6 thousand tons of soft wheat at a total cost of BGN 11.3 thousand.

29 storehouses were contracted under the “grain storage” scheme with a total storing capacity of 136 thousand tons. BGN 852.7 thousands was paid to the owners for storing the soft wheat, barley and sorghum.

There were no market intervention for the purchasing of soft and durum wheat, barley, maize or sorghum in the 2010/2011 market year. The same applies for the 2011/2012 market year.

In 2011 payments of almost BGN 632 thousand (financed by EAGF) and almost BGN 127 thousand (VAT-payments) were made to storehouses where barley and wheat purchased in the 2009/2010 market year were stored. There were no such payments in 2012 as no market interventions were carried out in 2011.

### *Program “Welfare payments – help to the most deprived persons in the EU”<sup>36</sup>*

The program offered foodstuffs to poor people in 2010, 2011 and 2012. Its budget was BGN 16753 thousand in 2010, BGN 21598 thousand in 2011 and BGN 41931 thousand in 2012.

.....  
<sup>36</sup> <http://ec.europa.eu/agriculture/most-deprived-persons/>

### ***Meat and Beekeeping Sectors***

In 2010 the EC has not issued a decision concerning public intervention in the private storage of beef, veal, pork, sheep and goat meat.

In 2011 no public interventions had been carried on the markets for beef, veal, pork meat and no aid provided for the private storage of beef, veal, sheep and goat meat.

The national Beekeeping program 2011-2013 has a budget of BGN 19589 thousand, a budget almost 3 times higher than the one in 2008-2010. It is co-financed jointly and equally by the EAGF and the national budget at a level of BGN 9794 thousand.

### ***Milk Sector***

**“Milk quota” scheme.** The purpose of the scheme is to regulate the production of milk and milk products in the EU. The Bulgarian national milk quota was established at 979 million kilograms at the time of accession. The national quota is distributed among the producers and determines the quantities which any producer can sell on the market without payments of fines for overproduction above the particular quota in the respective year. There are two types of quotas – for individual deliveries for processing and for direct sales. Any producer can have both depending on his/her needs. Since 2009/2010 the national quota has increased by 1% annually in all the MS. Due to decreasing cattle herds (milking cows) the milk quota for Bulgaria was fulfilled: at 85.1% in 2007/2008 and 48.4% in 2011/2012 for the milk delivery quota; in the direct sales quota the fulfillment rate is even lower: 61.5% in 2007/2008, down to 21.7% in 2011/2012. There are times when more milk quotas were offered for sale than bids for purchasing the quotas for milk production rights.

**“School Milk” scheme.** The scheme has been implemented since 2008/2009. It subsidizes kindergartens, primary and secondary schools to purchase and promote the consumption of milk and dairy products by the children/pupils. In 2010/2011 the number of the participating kindergartens and schools was negligible – just 21 in total for a total budget of BGN 2162 all financed by the EAGF; milk/dairy products reached 3223 kids and pupils. In 2011/2012 the number of the participants was less and the number of the children was just 2176.

## **“Wine” Sector**

In 2008 reform in the wine sector of the EU allowed the MS to establish the appropriate measures within national support programs for their wine sectors, to be financed entirely by the EAGF. Bulgaria selected three measures for the wine sector program 2008/2009 - 2013/2014: *restructuring and conversion of vineyards for wine*<sup>37</sup>, *harvest insurance*<sup>38</sup> and *promotion in third countries*. The annual budget of the Programme is usually at BGN 45-55 million and is utilized at less than 35%.

## **“Fruit and vegetables” Sector**

**The “Producer groups for fruit and vegetables” scheme.** New member states were allowed to continue to use the schemes for supporting producer groups. Producer groups are producer organizations which are still not meeting the requirements for producer organizations but may request provisional recognition and receive support until fulfilling the requirements for PO.

PGs are eligible for two kinds of support – EC support for their administrative and organizational strengthening (% of PG joint sales on the market) and for co-financing their investments which helps them to achieve the criteria for PO recognition; the EC covers 75% of the investment costs and the remaining 25% - by the members of the PG. In 2011 modifications in the legislation for recognition and support of the PG in fruit and vegetables were enforced.

By 30.06.2012 three investment programs by the PGs in fruit and vegetables were submitted for consideration and approval. The investment projects amounted to BGN 39503 thousand. Two projects amounting to BGN 30983 and subsidy of BGN 27315 were approved.

.....  
<sup>37</sup> The support targets the restructuring of the vineyards in view of their varieties, layout, change of location, possibly accompanied with actions for the improvement of management methods and production technologies in the holdings. The measure offers 75% financing of the investment costs.

<sup>38</sup> The measure supports the producers of grapes for wine who have insured their harvest against one or several risks like hailstorm, storm, flood, torrential rains, etc. The support by the measure covers up to 80% of the risks comparable to natural disasters and up to 50% for other risks like fire, etc.

It is expected that by end of 2012, five more plans will be submitted and the investment costs for 2013 will be BGN 14864 thousand.

The total budget for investment costs in 2013 will be BGN 23715 thousand of which 25% (almost BGN 6000 thousand) will be covered by the recognized producer groups.

**“School fruit” scheme.** In order to promote the consumption of fruit and vegetables to create healthy eating habits for children in schools, in 2010 was started a scheme offering fruit and vegetables in schools. The scheme is co-financed by EAGF and the national budget. The number of the participating schools was 789, and 801 in the 2010/2011 and 2011/2012 financial years respectively. The respective number of participating children was around 100 thousand in 2011 and 121.1 thousand in 2012. BGN 1153 thousand and BGN 2828 thousand were paid under the scheme in 2011 and up to October 2012 respectively.

In 2012/2013 the interest in participation is significantly higher – already 56% of 6-10 y.o.’s in the country are included in the support scheme.

#### **“Extraordinary measures for support in the vegetable sector” scheme**

Because of the crisis with Escherichia Coli in the fresh vegetables sector in 2011, 82 producers of vegetables received compensation of BGN 3851 thousand.

#### ***“Sugar” sector***

**The “Quota regime” scheme.** The EU uses a quota system for the production of sugar and isoglucose in order to regulate the market.

In 2010/2011 BG had a national quota of 89.2 thousand tons for the production of isoglucose. In February 2011 BGN 1047 thousand were paid as dues. The majority of the tax – 75% is paid to the EU budget and the remaining 25% to the national budget. In December 2011, an additional BGN 416.7 thousand was paid based on an increase in the national production quota.

There were three more schemes implemented in the sugar sector: “Approval of the Producers of Isoglucose and Refineries”, “Aid for Restructuring” and “Aid for Diversification”. Under the first scheme, six refineries were approved in Bulgaria in 2011 and one enterprise for isoglucose. There were no payments made under the two remaining schemes.

### **Sector “Promotional Programs”**

The realization of promotional and informational campaigns provides possibilities for long-term entry of quality European products into the Common market and on the markets of third countries. The financing of the promotional programs is provided by the EAGF (50%), the national budget (30%) and the implementing organization (20%).

By October 2012 Bulgaria fulfilled the following promotional programs:

- “EU Cheese, Please” – is the first multinational promotional program with Bulgarian participation; it was proposed jointly by the Cyprus organization of cattle breeders and the Bulgarian association of milk processors to promote Greek and BG cheeses on the markets in Russia and the Ukraine. The program budget was at EUR 4988 thousand (BGN 9756 thousand). By October 2012 the program had reimbursed a total of BGN 635 thousand including BGN 396 thousand from EAGF and 238 thousand from the national budget

- “Information Project for Promoting Milk Products on the Internal Market (Germany, Spain)” is the first solely Bulgarian promotional program approved by the EU. It was proposed by the Association of the Milk producers with a budget of BGN 6200 thousand. By October 2012, the program had reimbursed BGN 1708 thousand including BGN 1 067 thousand from the EAGF

- “Free the Taste and Flavour” (approved by the EU in 2011) – is a promotional programme for processed fruits and vegetables in the production of Ljutenitza, roasted and peeled paprika, rose comfiture, hiprose marmalade and peach compote targeting the markets of Germany, Poland and Romania. It was proposed by the Union of processors of fruit and vegetables with a total budget of BGN 5 834 thousand. Paid by October 2012 was: BGN 770 thousand, including EAGF at BGN 481 thousand.

- Bulgarian Romanian programme “Interstate Programme for the Promotion of Wine in Third Countries” (approved by the EU in 2011), for promotion of quality wines (of geographic origin, etc.) in Russia and China. Budget: BGN 6237 thousand. Payments by October 2012: BGN 457 including EAGF 285.
- “EU Dairy Products Every Day” – proposed by the Association of the Milk Processors and approved by the EC in February 2012. The programme is targeting the markets for dairy products of Australia and the United Arab Emirates. It has budget of BGN 6461 thousand to be utilized during a 3 year implementation period. Payments by October 2012: BGN 425 thousand, including an EAGF contribution of BGN 265 thousand.
- “Promotion of Dairy Products in Third Countries” – approved by the EC in February 2012; targeting the markets of Russia and Brasil.
- “Interstate Programme for promotion of wine” quality<sup>39</sup> wine - of confirmed origin, etc., in third countries. Bulgarian Greek joint programme. Approved in June 2012. Targeting Switzerland, USA and China.

### ***Trade mechanisms***

Export licensing

#### **“Refunds of Exports of Agriculture Goods” scheme<sup>40</sup>**

The refunds compensate the difference in price levels of exported goods in the EU market and in markets outside the EU. Export refunds vary in time, by product sector and by the products made thereof.

Export refunds may differ per country of destination (differentiated refunds). In order to get differentiated refunds paid, it is necessary that the exporter proves in which

<sup>39</sup> [http://ec.europa.eu/agriculture/quality/index\\_en.htm](http://ec.europa.eu/agriculture/quality/index_en.htm)

<sup>40</sup> [http://ec.europa.eu/agriculture/markets/export\\_refunds/index\\_en.htm](http://ec.europa.eu/agriculture/markets/export_refunds/index_en.htm)

third country the products were imported. Such proof is given by copies of duly stamped customs import documents of the third country concerned.

In 2011 eligible for refunds were products from the sectors: poultry meat and eggs, beef, veal, pork meat and processed goods – eggs in processed foods - being outside Annex I (listing the agricultural products).

In 2011 135 licenses were issued for fixed refunds of exports of poultry and egg-powder amounting to BGN 1674 thousand – almost three times higher amount than the amount of licenses in 2010. 126 claims for refunds were received at a total amount of BGN 1604.

The effected refund payments in 2011 were under 98 licenses at a total amount of BGN 1233 thousand, but these included payments of BGN 459 thousand under licenses in 2010 for 29 beef exports.

Fifty six licenses were issued in the period January-October 2012 for exporting poultry meat and eggs, for a total budget of BGN 696 thousand. Fifty-six claims were paid to the amount of BGN 613 thousand. However, increase in exports are expected to the markets of Iraq, Georgia and Armenia, and thus the total expected amount of paid refunds is expected to reach more than BGN 1 million.

### **“Obligatory Licenses for Exports of Agriculture Goods” scheme**

The products to which exports are subject to obligatory licensing to third countries are grain, rice and sugar. The licensing is serving statistical purposes, thus monitoring of the developments in these sensitive products is performed.

There were 256 obligatory licenses issued in 2011 – a 30% increase compared to 2010. Highest was the number of licenses issued to exports of wheat/rye meslin mixes: 116 licenses for exporting 107 thousand tons. Next in importance were licenses for grain maize (50 licenses, 207 thousand tons) and rice (39 for 1.5 thousand tons, etc.). A total of 288 guarantees on issued licenses were established; 240 guarantees were relived at BGN 2771 thousand, and 12 fines were imposed at total amount of BGN 14.2 thousand.

In the period January-October 2012 257 licenses and 151 guarantees were issued at a cost of BGN 2478 thousand. If the trends in rising exports of grain, rice and sugar continue, it is expected that by end of 2012 licenses will be 20% higher than those in 2011.

### **“Licenses for exports of milk products to Canada” scheme**

According to an Agreement between the EU and Canada, signed in 1995, the imports of cheese and kashkaval into Canada fall within a limited quota of reduced customs duty, and are subject to export licenses issued in the country of origin. The Agreement became enforced for Bulgaria at the moment of accession to the EU on January 1st 2007. In 2011 Bulgaria issued 14 licenses for exporting milk and milk products to Canada, including 10 for exporting 132 tons of cheese and 4 licenses for 25 tons of kashkaval.

In 2012 (up to October) the number of the licenses issued was 39 including 26 for 195 tons of cheese and 13 for 40 tons of kashkaval.

### Import licensing

Product imports from third countries which are liable to licensing are: grain, rice, sugar, olive oil, fresh and processed fruit and vegetables, beef and veal, pork meat, milk, eggs and egg-albumin, poultry meat and ethanol alcohol made from agricultural raw materials. Licenses for part of them can be issued only within tariff quotas and preferential regimes (beef, milk and dairy products, sugar).

In 2011 there were 479 claims for issuing licenses and 372 licenses were issued. The highest number of licenses were issued for rice imports – 109, bananas – 79, sugar 50, maize – 43 and garlic – 40.

The largest licensed imports were of sugar – more than BGN 1.5 billion in 2011.

### ***Quality Policy - Protected Designation of Origin (PDO)***

The quality policy associated with the PDO is an instrument which is gaining popularity in Bulgaria as producers from various subsectors try to take advantage

of it, thus gaining additional competitiveness on the Bulgarian, the EU and even on the global market.

In 2011 the “Gornooryahovsky sudzhuk<sup>41</sup>” product was registered as the first protected geographical indication (PGI) product from Bulgaria in the EU Register of Agriculture Products and Foods with PGI. A web-page on the internet site of MAF contains the list of the producers which can produce it as well as the of the controlling bodies which certify the produce meets the criteria for the PGI product.

More applications from 2010 for registration of particular dried-meat products as PDO/PGI were scrutinized for approval in 2011, and in 2012 the documents for four new meat products were sent to the EC for consideration.

In January 2012 the application from the association of “Bulgarian Rose Oil” were submitted to the MAF to register their product under the PGI label. The national procedure was not finished by October 2012.

### ***Direct payments (by EAGF)<sup>42</sup>***

During the first few years after accession Bulgarian producers received only part of the direct payments provided to older Member states. In 2007 that part was equal to 25% of the average level of DP support in the EU, to gradually increased up to 60% in 2012. This rate will increase by 10 percentage points annually throughout 2013-2016 to reach 100% in 2016. All new Member states from the last enlargement in 2004 have passed through such a transition period of increasing DP.

Direct Payments in Bulgaria are paid under the SAPS scheme. The actual paid DP rose from MEUR 166.3 in 2008 to MEUR 370.9 in 2012. The cumulative DP paid since 2008 amounts to MEUR 1306 in 2012.

The budget for SAPS payments in 2013 is calculated at MEUR 473.6.

.....  
<sup>41</sup> Dry meat product made from minced meat and herbs and spices.

<sup>42</sup> [http://ec.europa.eu/agriculture/direct-support/index\\_en.htm](http://ec.europa.eu/agriculture/direct-support/index_en.htm)

The next point 3.1.2 will give more details on the SAPS system and the implementation of DP support financed by the EAGF in Bulgaria.

### ***Quasi-Direct Payments financed by the BGRDP (EAFRD)***

In Bulgaria, part of the Axis 2 measures from the Rural Development Programme 2007-2013 were implemented together with the DP under the SAPS scheme. These are measures M211, M212, M213, and a greater part of M214 (measure names and budget execution by August-2013 are presented in Attachment 3 to this document.) The total amount of measures' payments, paid together with direct Payments, amount cumulatively to MEUR 136.3. **Point 3.1.3** of this subsection will give more details on the implementation of the BGRDP 2007-2013, including the implementation of these four measures.

### ***Other state aid schemes***

Other payment instruments are also applied in the agricultural sectors of the Member states; some require preliminary notification to the EU, some do not. Bulgaria had the right to apply 22 state aid schemes mainly in the 2009-2012 period, and the country actually applied most of them at a total cumulative budget of MEUR 101.5. Subsequent **Point 3.1.5** provides more details on the implementation of the state aid schemes.

## **3.1.2. Market and direct producer support measures**

Market measures include the following interventions under the CMO: Promotion of EU Farm Products, Export Refunds, Free Food for the Most Deprived Persons in the EU, School Fruit Scheme and School Milk Scheme. These were described in the previous point.

Direct producer support is paid in two major modes – decoupled from produced agricultural goods and coupled to the produced quantities of particular product produced. The latest direction of CAP support is to decouple support from the produced quantities; hence, the prevailing part of the support instruments are paid decoupled from the produced goods in Bulgaria and in all remaining EU MS.

Direct producer support is paid mostly from the Direct Payments instrument of CAP First Pillar (financed by the EAGF). However, MS may implement national support schemes financed by the national budget, after notifying them to the EC, in order to ensure that their implementation will not bring distortion to the Common Market for agricultural goods.

The table on the next page provides comparison of the budgets for direct support paid to the farmers in 2010 and 2011<sup>43</sup> Campaigns. The majority of the effected payments were Direct Payments under the SAPS totalling BGN 1296.4 million. Next in importance were the paid national complements to direct payments (NCDP); they reached BGN 378.3 million cumulatively in this two-year period. NCDPs cover basically the same lands which receive aid under the Direct Payments scheme, with the exception of permanent grasslands (pastures, meadows, etc.), vineyards for wine and tobacco.

Area based payments for LFA<sup>44</sup> - paid together with the DP, but financed under BGRDP 2007-2013 – reached BGN 146 million cumulatively in 2010 and 2011.

Area-based payments for protection of the environment and organic production (M213 and M214)<sup>45</sup> - paid together with the DP, but financed under BGRDP 2007-2013 – reached BGN 51.4 million cumulatively in 2010 and 2011.

Tobacco producers received direct support of BGN 142.4 million.

The support targeting primarily the cow milk sector reached BGN 141.1 million, and the support for raising sheep and goats – BGN 41 million. Soft fruits – strawberries and raspberries received almost BGN 0.7 million.

.....  
<sup>43</sup> It should be clarified that farmers submit their applications for direct support up until June, year “n”, and usually receive their payments in the next year “n+1”. The EC may grant permission for the DPs to be paid to farmers in the same year in which they submitted their applications for support. This has become a practice in the last several years because of the widespread economic crisis in the EU.

<sup>44</sup> This is roughly equal to MEUR 74.9 million. See also the sharp increase in 2012 as data for cumulative payments indicates MEUR 130.1 under M211 and M212, until August 2013, in Attachment 2 to this document.

<sup>45</sup> This is roughly equal to MEUR 26.4 million. See also the sharp increase in 2012 as data for cumulative payments indicates MEUR 56.5 under M213 and M214, until August 2013, in Attachment 2 to this document.

**Table 36:** Authorized payments for Campaigns 2010 and 2011

|                                                                                                | Payments effected throughout 2011 |                                   | Payments effected under Campaign 2011 in the period 1.12.2011-18.10.2012 |                        |                   |
|------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------------------------------------------|------------------------|-------------------|
|                                                                                                | Payments under Campaign 2010, BGN | Payments under Campaign 2011, BGN | Payments under Campaign 2011, BGN                                        | Submitted applications | Paid applications |
| DP under SAPS                                                                                  | <b>573 274 920</b>                |                                   | <b>723 167 648</b>                                                       | <b>87795</b>           | <b>87747</b>      |
| CP for cow milk from economically vulnerable farms                                             | 362 110                           | 29 605 580                        | 13 659 831                                                               | 3466                   | 3466              |
| CP for cow milk from LFA                                                                       |                                   |                                   | 8 122 371                                                                | 1483                   | 1482              |
| CP for cow milk from NVZ                                                                       |                                   |                                   | 8 236 521                                                                | 443                    | 443               |
| CP for caprine and ovine mothers with kids, raised in vulnerable municipalities in Southern BG |                                   |                                   | 596 368                                                                  | 807                    | 806               |
| CP for caprine and ovine mothers, raised in LFA                                                |                                   |                                   | 748 271                                                                  | 1325                   | 1325              |
| CP for soft fruits (raspberries and strawberries)                                              | 354 740                           |                                   | 339 726                                                                  | 231                    | 230               |
| <b>LFA 1- Measure 211 from RDP</b>                                                             | <b>30 367 610</b>                 | <b>37 949 080</b>                 | <b>42 446 578</b>                                                        | <b>29210</b>           | <b>28708</b>      |
| <b>LFA 2 – Measures 212 from RDP</b>                                                           | <b>8 281 290</b>                  | <b>13 141 810</b>                 | <b>14 543 221</b>                                                        | <b>11490</b>           | <b>11325</b>      |
| <b>NATURA 2000 - Measure 213 from RDP</b>                                                      |                                   |                                   | <b>4 629 039</b>                                                         | <b>2427</b>            | <b>2392</b>       |
| <b>AEP – Measure 214 from RDP</b>                                                              | <b>12 401 060</b>                 | <b>14 324 080</b>                 | <b>20 037 504</b>                                                        | <b>1972</b>            | <b>1685</b>       |
| <i>NCDP</i>                                                                                    | 288 709 490                       |                                   | 89 632 365                                                               | 68449                  | 68406             |

|                                                               |                    |                    |                      |           |          |
|---------------------------------------------------------------|--------------------|--------------------|----------------------|-----------|----------|
| <i>CP for Cattle</i>                                          | 3 365 920          | 28 428 030         | 55 448 646           | 8101      | 8099     |
| <i>CP for caprine and ovine mothers, linked to production</i> | 1 739 310          | 19 135 250         | 19 171 157           | 5820      | 5818     |
| <i>CP for cows with suckling calves</i>                       | 309 300            | 3 404 280          | 4 696 496            | 2428      | 2428     |
| <i>CP for cattle slaughtering, linked to production</i>       | 225 380            |                    | 340 900              | 153       | 131      |
| <i>CP for tobacco</i>                                         | 69 246 790         |                    | 72 126 925           | 37432     | 35845    |
| <b>TOTAL</b>                                                  | <b>988 283 180</b> | <b>145 988 110</b> | <b>1 077 943 566</b> | <b>NA</b> | <b>N</b> |

**Source:** MAF, Agriculture Report 2012

#### **Legend:**

*BLUE COLOUR* is used to show support instruments financed by the EAGF;

**BOLD TEXT** identifies schemes funded by EAFRD, and

*ITALIC FONT* shows some of the state aid schemes providing direct payments to various producers financed entirely by the national budget.

It should be noted that direct support under most of the schemes is reaching quite a limited number of beneficiaries. Even the most horizontal schemes offering Direct Payments offers support to just some 88,000 farmer holdings which constitute just 23.8% of the 370,000 holdings counted in the agriculture census in 2010.

Almost 75% of all direct support schemes in the period 2010-2011 were paid in the form of Direct Payments and National Complements to Direct Payments under the Single Area Payment Scheme (SAPS scheme). This scheme, however, is distorting<sup>46</sup> the agriculture sector and hence its contribution to the economy and the employment in countries like Bulgaria, where the agriculture sector is operating on the basis of a steep dual structure.

On one extreme are several thousand big holdings which specialize in arable crops and oil-bearing plants (including for biodiesel), and which manage the vast majority of agricultural land – they are receiving the greatest direct support under SAPS (DPs+NCDPs). These holdings are already highly mechanized and preserve less jobs than the holdings producing fruits and vegetables, technical cultures and animal produce.

On the other extreme are situated big animal production holdings which do not cultivate lands but raise the majority of the country's poultry, pigs and a significant part of the cattle herd. Next to them - on the same extreme, are situated the numerous subsistent and semi-subsistent family holdings of mixed production, which raise the majority of sheep and goats, but also a significant part of the cattle herd – on the basis of joint communal grazing on municipal and state lands – for which they do not receive neither Direct Payments nor NCDPs,; however, they are the ones also producing the prevailing part of the fruit and vegetables, tobacco and other technical plants including the essential oil plants for which Bulgaria is famous.

Hence, the majority of the direct support is received for the production of grain and oil-bearing plants for which Bulgaria already produces surpluses three times

.....  
<sup>46</sup> The distortion comes from the fact that area based payments provide very different intensity of support to the production of 1 kg of wheat, and 1 kg of tomatoes, cherries, rose petals, dried tobacco, milk and veal.

the national needs. These however, are also the products for which the farmer price index is rising most rapidly due to the ever-increasing demand on the international market.

The final result is that Bulgaria uses direct support schemes to support agricultural produce for which it has no need but is exported as raw materials, whilst at the same time importing not only more and more of the agricultural products necessary for the healthy diet of its people, but also the raw materials necessary for the food processing industry, and other types of processing enterprises (in textiles, cosmetics, pharmacy, leather processing, etc.).

This has very serious implications on the job market and the purchasing power in rural areas, and has a negative influence on the development of the entire economy, as the diminishing population in rural areas causes the collapse in the local socio-economic fabric and the closure of jobs formerly maintained in the public services (education, training, communications, transport), as well employment in the wholesale and retail market outlets.

Such distorting developments not only cause sub-optimal functioning of agriculture, rural areas and the general economy – **as potentials for development are not utilized, jobs are lost and areas are abandoned**, but also **increases the dependency of the Bulgarian economy on global economic development, and even more importantly – makes the economy more vulnerable to imported economic shocks**, e.g. the last economic crisis now raging for almost 5 years.

It should be noted that the government in the last 2 years – 2012 and 2013, has started to realize the strategic threats from distorting direct agriculture support schemes implemented in Bulgaria, and has tried to redistribute some of the NCDP support towards the animal breeding sector. Parallel to that, ad-hoc nationally funded de minimis support was provided to animal breeders, investment credit schemes to meet animal welfare requirements were launched and support schemes for fruits and vegetable cultivation were established for the first time since 2007. These are discussed in greater detail in point 3.1.5. below.

Measures to cut illegal contraband of fruits and vegetables were also attempted, but with limited success due to the need to synchronize the legal framework for control mechanisms of various controlling bodies.

### **3.1.3. Structural and rural development measures**

The main instrument for rural development is the Bulgarian RDP 2007-2013, financed by the European Agriculture Fund for Rural Development.

The budget of the programme is EUR 3.23 billion - around 3 times higher than has been paid under CAP I in the period 2007-2011. However, by August 2013 – just 48% of the budget has been utilized.

There were programmed for implementation 30 rural development measures from the Regulation EC 1698/2005 for support of rural development. Most funds were allocated to strengthening the competitiveness of farmers and the processing industry (see measures 121 and 123 respectively), improving the quality of life by improving the rural infrastructure (see measure 321), and to agro-ecological activities including support for organic farming (see measure 214).

Attachment 2 shows the progress in their implementation in view of their budget absorption by August 2012. The implementation of all measures is lagging behind. The delay in absorption can be explained by various reasons – e.g. the late start of actual consideration and approval of applications submitted for support under particular measures. The slow implementation of M211, however, is due to the fact that farm holdings in the mountainous LFA cannot meet the eligibility requirements for DP and, hence, do not fill in the application form for M211 support.

Another deficit in RDP implementation is that five of the initially programmed measures are not being implemented (see Attachment 3). Among them are the following very important measures:

M125 – to support the land consolidation and irrigation network, much needed for the development of vegetable gardens and fruit orchards, which need long-term

leasing of the same land parcels in order to make the necessary on-farm investments (irrigation systems, fences, anti-hailstorm covers, machinery and equipment for cleaning, sorting and packaging the produce, etc.)

M124 – to establish close working relations among the science and innovation bodies and farmers in various branches of agriculture or the food industry. This would have created some experience and a necessary minimum of administrative capacity to be built upon in the next programming period when transfer of innovations from science and research bodies into actual production practices becomes a key cornerstone for all EU instruments to deliver on the Europe 2020 strategic goals and thematic objectives.

The overall impression from RDP progress is that it will fail to achieve its quantified objectives and that in turn will result in significant underperformance in achieving its strategic objectives.

It should be noted that the implementation of direct support schemes skews the implementation of the investment support measures under the RP 2007-2013. This is because rural estates, agricultural machinery and equipment are not accepted as collateral by the banks; hence, the farmers' access to DPs/NCDPs predetermines the willingness of the banking sector to extend the bridge capital necessary to implement and invest in projects, and then receive the reimbursement from RDP funds.

This calls for careful programming of the interventions/instruments under CAP I&II Pillars in the next programming period 2014-2020 in Bulgaria.

### **3.1.4. General measures related to agriculture and food industry**

It is impossible on few pages to even attempt a short overview on the extensive Community legislation imposing various limitations, restrictions and requirements associated with the preservation of the environment, public health, animal and plant health, animal welfare, occupational safety, sanitary and hygiene conditions, statutory management requirements and good agricultural and environmental conditions under the Direct Payments.

All these are transposed in the Bulgarian legislation via numerous laws and implementing ordinances, regulating sometimes in detail the production processes in holdings working in particular branches of agriculture. Particular parts of the transposed Acquis are implemented by various institutions belonging to different central authorities.

All holdings operating on the territory of the EU should achieve compliance with the relevant requirements and standards for their branch of agriculture. Entities which do not comply are banned from selling their products on the market. This applies also to the processing enterprises from the food industry. Thus, it will be ensured that foods produced on the EU market meet the highest safety and quality standards, and that all business units operate in the Common Market according to the same rules and conditions.

Achieving compliance with these standards sometimes requires expensive investments on behalf of the farm holdings and/or the respective processing enterprises. Therefore, a newly acceding country to the EU can negotiate a transition period (grace period) in which its holdings and the entire food chain for particular products achieve compliance with the relevant Acquis necessary before the products are allowed to be marketed to the Common Market.

Annex 4 to the BGRDP 2007-2013 and especially Attachment 1 to Measure 121 Modernization of Agricultural Holdings, and Attachment 2 to Measure 123 Adding Value to Agriculture and Forestry Products provide a good illustration of the newly introduced Community standards to which Bulgarian agriculture should have achieved compliance within the negotiated grace period.

We will conclude this point with several examples illustrating the role of Acquis in the workings of the animal breeding sector of agriculture.

The expiring in 2011 of the grace periods to achieve compliance with the *welfare requirements for laying hens in cages* required massive investment from the farm holders associated with the replacement of old cages in egg-production factories. This action made their produce more expensive – firstly from the need to payout new bank credits, and secondly – because the productivity per square metre of the

factory floor went down because of the greater space provided per hen. All this was taking place in an environment of ever-increasing feed prices because of the increased price for grain on the global market.

Some smaller farms could not make the investments necessary and closed down their operations.

As a result, not only did egg prices go sky-high and hurt the purchasing power of the families, but also some smaller producers were pushed out of the sector thus contributing to job-losses.

Similar developments were observed with the expiry of the grace period for achieving compliance with the *animal welfare requirements in the pig-rearing sector*.

Similar developments will happen if the closure of some 33000 cow milk farms were to be attempted at the expiry of the grace period for achieving compliance with the *milk hygiene standards in 2011*. The present government, however, decided to negotiate a further extension of the grace period rather close the farms and cause social unrest in the poorer parts of the country.

All these examples illustrate the importance of the participation of farmer organizations and social partners in the negotiations of both the country's position on future CAP, but also in the extent and longevity of the grace periods for achieving compliance with particularly demanding requirements of the Acquis.

This also explains why border controls on imported agricultural products should be such as to prevent unfair competition to local produce from imported goods of substandard quality, but also the need for the government to prepare appropriate **aid schemes including investment support schemes** to allow local farmers and producers to achieve the compliance imposed by the Acquis.

As a matter of fact the government initiated state aid schemes which offered either compensation or direct support to farmers producing and eggs and pork meet. Aid schemes were also established under which smaller milk farms would receive

investment credits from the state budget – via State Fund Agriculture – to achieve compliance with milk hygiene requirements.

### **3.1.5. Budgetary support to agriculture and food industry**

By 2012 Bulgaria is entitled to implement 22 state aid schemes. In the period 2009-2012 the country has implemented most of them and provided BGN 198 million to more than 49000 farmers.

The support provided in the animal-breeding sector amounts to BGN 47.5 million. The aid provided in the plant production sector is BGN 11.2 million.

Additional aid has been provided under the de minimis rules; it amounted to BGN 42.8 million, and most of it was utilized by holdings in the animal sector – BGN 29.1 million, followed by the holdings in plant production – BGN 13 million, and the remaining - by holdings in the aquaculture sector.

Farmers also received the opportunity to benefit from a 60% corporate tax reduction provided they used the money for reinvestments in their holdings – i.e. in new buildings, new machinery and equipment necessary for the production of non-processed plant and animal production. The total amount of tax reductions reached BGN 96.1 in the 2010-2011 period.

Two more state aid schemes were prepared in the same period – to support the achievement of compliance in the laying-hens sector, and to achieve compliance with the requirements for production and storage of raw cow milk. There is no information on the details of the two schemes and their achievements.

## 3.2. The Agricultural Knowledge and Information Systems

According to NSI data, in the period 2007-2012 the number of the general education schools which offer primary and secondary education dropped from 2551 to 2040 (-21.1%), and the drop in the professional schools from 506 to 494 (-3.4%).

The number of the teachers in the general schools dropped from 56.5 to 45.0 thousand (-21.4%), and in professional schools – from 17.4 to 13.0 thousand (-25.3%). The number of the pupils and students has decreased by 11.8% from a little over 860 thousand to almost 759 thousand.

Throughout the entire period the number of the early school leavers is around 2.4% of total numbers of pupils and students.

The total public and private yearly expenditure for education was gradually rising in the period 2007- 2009, from BGN 2.61 billion to almost 3.38 billion, however, by 2010<sup>47</sup> it had dropped by almost BGN 290 million, which represents a 8.6% drop compared to the expenditures in 2009.

In the school year 2012/2013 there are 2040 general schools and 494 professional schools offering primary and secondary education in Bulgaria – 41 of them are art and sports schools; the remaining, which are mainly professional gymnasiums, produce specialists for various sectors of the economy. 37 of the professional schools are colleges offering education beyond the secondary education degree. Seventy-eight of the professional schools are preparing professionals for the sectors of agriculture, fishery and forestry.

In 2012, almost 30.4 thousand students received diplomas for finished general secondary education, and 29.4 thousand graduated from professional schools as follows: 19.0 thousand earned diplomas for the third degree of professional qualification, 8.9 thousand – a diploma in the second degree, and approximately 1.5 thousand pupils graduated from arts and sports schools.

<sup>47</sup> Unfortunately, there is no accessible data for years 2011-2013.

**Table 37:** Graduates having earned a diploma for professional qualification in narrow spheres of the knowledge after 8th grade of secondary education

|                                                                          |            | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  |
|--------------------------------------------------------------------------|------------|-------|-------|-------|-------|-------|-------|
| <b>Total graduates</b><br>with diploma for<br>professional qualification | II degree  | 18819 | 15532 | 16816 | 14834 | 8271  | 8096  |
|                                                                          | III degree | 10409 | 8410  | 8332  | 9366  | 18628 | 15812 |
|                                                                          | IV degree  | 1104  | 1505  | 1651  | 1866  | 1547  | 1228  |
| <b>Graduates in</b><br><i>agriculture, forestry</i><br><i>fishery</i>    | II degree  | 1393  | 1251  | 1270  | 1043  | 810   | 885   |
|                                                                          | III degree | 730   | 612   | 778   | 748   | 1154  | 901   |
|                                                                          | IV degree  | 59    | -     | -     | -     | -     | -     |

**Source:** NSI

The number of specialized schools offering secondary education / profession in agriculture, forestry and fishery is 80 (including 1 secondary school in fishery). The quality of specific education in the schools is not meeting the requirements of the present times, and the practical training in the schools is performed with the use of outdated machinery and equipment. In fact, the big farm holdings complain that they have to retrain the graduates before letting them use new and modern machinery and equipment in their farms.

As opposed to the trends for diminishing numbers of graduates from the secondary school system, the situation in the higher education is somewhat different in the 2007-2012 period: the number of higher education institutions remained constant – 53 universities and colleges, the number of tutors was also constant - around 23.4 thousand, however, the number of students<sup>48</sup> increased from 260.0 to 278.6 thousand, and the number of graduates increased from 49.2 to 64.0 thousand.

<sup>48</sup> Total for bachelors, professional bachelors and masters in various fields.

**Table 38:** Graduates having earned a degree in higher education in narrow spheres of the knowledge

|                                                                    |                        | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  |
|--------------------------------------------------------------------|------------------------|-------|-------|-------|-------|-------|-------|
| <b>Total graduates with diploma for professional qualification</b> | Professional bachelors | 5098  | 5549  | 6769  | 6929  | 7555  | 4151  |
|                                                                    | Bachelors and Masters  | 43446 | 48760 | 50398 | 52998 | 55850 | 58961 |
|                                                                    | Doctors                | 621   | 601   | 636   | 596   | 638   | 979   |
| <b>Graduates in agrarian science, forestry aquaculture</b>         | Professional bachelors | 144   | 188   | 226   | 214   | 176   | 10    |
|                                                                    | Bachelors and Masters  | 495   | 610   | 615   | 726   | 814   | 810   |
|                                                                    | Doctors                | 23    | 25    | 19    | 15    | 20    | 24    |
| <b>Veterinary medicine</b>                                         | Professional bachelors | -     | -     | -     | -     | -     | -     |
|                                                                    | Bachelors and Masters  | 213   | 168   | 127   | 185   | 209   | 191   |
|                                                                    | Doctors                | 4     | ..    | 7     | 5     | 4     | 8     |

**Source:** NSI

There are five main universities which offer higher education in various sectors of agriculture, forestry and fishery: in the town of Plovdiv one university offers education in Agrarian sciences, and another one – in Food industry. The university in Russe prepares Managers and Engineers on agricultural machinery. In Stara Zagora there is a university in Veterinary medicine, but also in Aquaculture, and in Sofia – a university in Forestry.

A professional qualification in agriculture can also be earned via the centres for professional education operating in the country – there were more than 880 of them in 2012, and 570 of them are licensed to grant professional degrees via vocational training. It is, however, not clear how many of these exactly offer profession qualifications in agriculture and forestry, and what are the skills levels of the trainees.

At this moment it is unknown if the educational system of Bulgaria prepares only a highly qualified workforce to work as hired employees, or if the graduates are capable professionals with entrepreneurial spirit willing to take on the challenges associated with the management of farm holdings in the complicated legal and economic environment of the Common Market.

It is obvious, however, that the number of graduates is much smaller than the number required for rejuvenating more than 350.000 family holdings, thereby increasing their competitiveness on the local and on the global market, including via the use of innovation.

The major player offering vocational knowledge and information services to farmers is the National Agriculture Advisory Service (NAAS).

NAAS was established in 1999 by the Academy for Agriculture Sciences Act, and started its advisory activities in October 2000. The predecessor of NAAS was the National System for Agriculture Advice, which was created with the help of 2 PHARE projects in 1995 -1999.

NAAS' mission is to aid the implementation of state policy in agriculture and achievement of the objectives set forth by MAF for creating an effective and competitive agriculture in Bulgaria, via offering quality advice and consultations to farmers as well as timely and useful information, training and technical assistance.

NAAS activities include; provision of consultations to farmers, associations and other organizations in agriculture; advice, information and training materials, as well as specialized services in agriculture; supporting the transfer and implementation of scientific and practical innovations in the sector; providing free aid to candidates in the preparation of their applications for support under BGRDP measure M141 "Support for semi-subsistence farms"; helping the preparation of semi-subsistence farms' applications for support under other RDP measures; organizing and carrying out training to farmers; and providing support in the preparation of Producer organizations for relevant agricultural produce.

In 2011 NAAS provided 55028 free consultations to almost 15400 farmers (3.6 consultations per farmer on average). Most of the consulted farmers take advantage of the complex advice package and seek consultation in various spheres. Most of the consultations are carried out in the NAAS offices (89%); the remaining – on the spot in the farm of the consulted holder. The number of on-the-spot consulted farmers (in their holdings) reached 19.4% of all consulted holders in 2011 (in 2010 this share was only 10%).

Because NAAS always tries to keep updated on the consultations and the methods for their delivery, its popularity among the farmers is growing. The need and type of advice for farmers is also changing – more often are sought consultations for dealing with concrete problems in the holdings, as well as more complex solutions to holding's problems.

In 2011 more than 51% of the consultations provided were related to the conditions for support under the BGRDP 2007-2013. Next in significance -30%, were the specialized consultations in agriculture. Last was the group of consultations dedicated to "other" issues – 19%; these consultations were mostly concerning the conditions for financing under the CAP I Pillar, as well as legislative requirements' in particular agricultural branches. The share of the last type of consultations has grown constantly over the last few years.

Within BGRDP 2007-2013, NAAS receives financial aid under measures 143 to consult farmers in applying for support four BGRDP measures: M141 Semi subsistence farms, M112 Young farmers, M142 Setting up Producer Groups, and M214 Agroecology. Since its startup the NAAS has provided almost 11,000 free sets of advisory services to candidates under the measures.

NAAS can report successful beneficiaries under the M141Semisubsistence farmers and M112 Young Farmers schemes and also provides free preparation of applications (business planning) for investment support under measuresM121 Modernization of agricultural holdings, M122 Improving the economic value of forests and M311 Diversification of economic activities outside agriculture.

Regarding consultation in specific branches of agriculture, farmers are most interested in taxation, social security payments and finding markets for their produce. Of subsequent interest are consultations on Good Agricultural Practices and on GAEC – the interest here is rising in view of the importance for achieving compliance with conditions and eligibility for support.

Consultations in animal breeding constitute 17% of the specialized agriculture consultations; this share should grow as the holders in this agriculture subsector will need more detailed advice more often in order to cope with the increasing requirements in the sector.

Regarding training – the Centre for Professional Training under NAAS has trained 658 trainees in 2011 – 2.4 times more than in 2010. These activities helped beneficiaries under M112 and M214 to meet the requirements regarding information and training as previously they lacked the appropriate education.

Regarding activities associated with the provision of information, in 2011 NAAS experts organized and/or participated in 380 information events including 149 seminars, 156 information meetings, 20 consultation days, 7 demonstrations and 48 other events.

### 3.3. Research and Innovation

The Academy for Agriculture Sciences is the key player in the area of agricultural research and transfer of innovation in agriculture. The Academy is the organization responsible for scientific research and applied and auxiliary activities in the area of agriculture, animal breeding and food industry.

The academy has under its jurisdiction a network of 27 research institutes with their own experiment and laboratory facilities, each specializing in the research of particular related branches of the plant production or animal breeding sectors (e.g. there is an institute specializing in animal breeding in mountainous areas). A total of 681 scientists are working in the Academy and research is carried in the following main directions: plant production, animal breeding, soil science, general agriculture and meliorations, agrarian economics and food technologies.

The Academy publishes 7 different scientific magazines including: "Bulgarian Journal of Agricultural Science", "Agriculture Science", "Soil Knowledge, Agrochemistry and Ecology", "Economics and Management of Agriculture Holdings" and "Agriculture Machinery (and techniques)". 513 scientific articles were published in the magazines in 2011. The "Bulgarian Journal of Agricultural Science" increased its impact factor to 0,153 and this increased the popularity of the magazine and its attractiveness for publishing articles.

In 2011 the Academy was been working on 169 national science projects, 170 international scientific research projects and in 16 projects financed by the EU 7th Framework Programme. During the year 41 projects were finished, 41 new projects were launched and 118 projects were ongoing. These research activities produced 28 new varieties of wheat, sunflower, maize, sesame, vegetables and fruits, as well as 2 new breeds of silkworm.

The activities related to transfer of innovations were based on 91 "open days" events, where farmers were invited to respective field plots to see the performance of the new plant varieties.

The academy also carried out 58 short-term information and training courses to increase the qualifications of farmers, and 216 scientific-practice conferences, seminars, symposiums and round tables. The Academy also presented the 20th "Agra 2011": the annual international exposition of agricultural practices and technologies. There, the various institutes and units of the Academy presented a variety of scientific items, products, promising new plant varieties, hybrids, high quality seeds, seedlings and propagation materials, breeds of elite pedigree animals, modern machinery and equipment for agriculture and the food industry, eco-friendly and economically effective technologies in plant production, animal breeding information, information services, and IT – based management systems.

In 2011 the Academy elaborated and proposed a system for joint monitoring, together with scientists from the Institute for Hydro Melioration at the Bulgarian Academy of Sciences, of the condition of arable crops sown in the autumn of 2011, and recommended methods for overcoming possible adverse effects from the winter period.

In 2011 the Academy signed a framework agreement with the NAAS to carry out joint information and training events. By the end of 2011 the Academy participated in 10 seminars dedicated to relevant problems.

One of the most important areas of Academy activity was the provision of professional training. In 2011 the Academy organized 18 courses with a total duration of 150 training hours. Attending were 549 trainees which included farm holders and employees in the agricultural sector. The distribution of trainees per training areas was as follows: 223 in animal breeding and 325 in agro-ecology. A total of 537 professional certificates were issued to the trainees.

The academy was also active on the international arena, where it participated in cooperation projects with scientists from more than 40 countries within the framework of joint research projects, participated in international seminars, conferences, consultative meetings, hosted visiting scientists from abroad, etc.

A total 170 joint project were carried out, of which 117 were on a bilateral basis with partners from 30 countries. The institutes under the Academy are implementing a

total of 53 projects financed and supported by various international organizations – i.e. organizations from the EU, the FAO, the International Centre for Genetic Engineering and Biotechnologies, Biodiversity International (Italy), The International Centre for Studying Arid Areas and others. The Academy also participates in various projects funded under the 7th Framework Programme of the EU. It also implemented direct agreements for scientific cooperation with related institutions from Vietnam, China, Morocco, Romania, Russia, Moldova, Ukraine, France and the Joint Research Center (JRC) of the EC.





## 4. Challenges

In 2008-2009 DG REGIO has commissioned a series of studies and events dedicated to the identification of regional challenges that have to be tackled by the Member States in coming years, including with support under Cohesion Policy instruments<sup>49</sup>.

Four main challenges initially identified: *globalization, demographic change, climate change* and *energy supply*. They were reflected in the Commission Staff Working Document from November 2008 called: "REGIONS 2020 An Assessment of Future Challenges for EU Regions". Later, in November 2009, the *New Social Risks* were added as additional challenge to the EU regions in the coming years<sup>50</sup>.

.....  
<sup>49</sup> Their outputs were summarized on a dedicated webpage: [http://ec.europa.eu/regional\\_policy/sources/docoffic/working/regions2020/index\\_en.htm](http://ec.europa.eu/regional_policy/sources/docoffic/working/regions2020/index_en.htm)<sup>50</sup> [http://ec.europa.eu/agriculture/rurdev/index\\_en.htm](http://ec.europa.eu/agriculture/rurdev/index_en.htm)

<sup>50</sup> REGIONAL CHALLENGES IN THE PERSPECTIVE OF 2020 REGIONAL DESPARITIES AND FUTURE CHALLENGES; A report to the Directorate-General for Regional Policy Unit Conception, forward studies, impact assessment

<sup>51</sup> NUTS II level; all regions vulnerability, except of South Western Planning Region, are assessed to the maximum category 4 of the *multiple challenge vulnerability index*. South Western Planning Region is rated at category 2, because it is vulnerable to globalization and demographic situation due to the location of the capital within its boundaries.

These papers assessed the territory of the Member states according to their vulnerability to the particular challenges. Bulgaria has 5 of its 6 Planning Regions<sup>51</sup>: the highest vulnerability to all of them.

Even though most of them are outside the limited scope of this paper, they should be considered in the planning and the implementation of the CAP instruments in Bulgaria, as they are not only affecting the competitiveness of agricultural subsectors, but also the general socio-economic fabric of rural areas as discussed above.

This chapter of the report will discuss in greater detail the challenges arising from the implementation of Aquis within the context of globalized food markets, as well as the challenges to agriculture caused by climate change.

## 4.1. Related EU-directives and implementation

2011 was a critical year for the poultry egg production, when the grace period expired for obligatory introduction of bigger cages for the laying hens, which would guarantee animal welfare to the birds in line with the EU requirements.

In order to secure that the deadline of the 1st January 2012 was met by the farmers the MAF started a specialized information campaign in the beginning of 2011. Additionally it was arranged that the BGRDP measure 121 *Modernization of Agriculture Holdings* would have 2 separate windows for submission of applications specifically from the farm holders. The levels of support under this measure was raised from 50% to a maximum of 65% public support and the difference was financed by national funds. Furthermore, the poultry farmers who wished to participate in yet another support scheme could apply and receive credit at low interest rates from the State Fund Agriculture with maturity of 5 calendar years.

Despite this, in 2011 the number of the farms raising laying hens/ producing eggs, dropped in all size classes of farms with the decrease being most significant in the groups of holdings raising 100-9999 birds (- 29% decrease) and 10000-99999 birds (-23.2%). By the end of 2011 the number of the big farms raising more than 10000 laying hens dropped from 92 to just 54, but they were already raising 64% of the total number of laying hens. The number of the egg output also dropped by 17.6%. The achievement of compliance obviously caused the closure of farms and the reduction of output; despite all the efforts to alleviate the shock to the producers.

2011 also saw the continuance of efforts at compliance from pig rearing farms with the requirements for animal welfare in the pig breeding sector.

Table 17 above clearly indicates that this process was accompanied with the closing down of some holdings which had between 10-49 breeding sows; the number of such holdings decreased by 33.5% and the number of animals raised in this class dropped by 49.0%

Bulgaria is obliged to enforce the criteria for raw milk as set in Regulation EC 853/2004. In 2011 the period for derogation in achieving compliance with the hygiene requirements towards the raw cow milk was extended until the end of 2013.

## 4.2. Climate Change and environmental risks

### 4.2.1. Domains of countries response to risks

Changing climate poses serious challenges to the agriculture sectors. These changes may bring changing seasonal patterns, longer or shorter droughts, floods, changes in the timing and the quantity of rainfall and periods drought, etc.

Climate change (steady rise in global temperatures) may also bring uncommon pests and diseases which couldn't survive in the former climate and weather conditions.

All this can have serious negative effects on the development of both plant production and animal breeding, cause economic losses and make ineffective the production of particular agricultural commodities.

Therefore Bulgaria has to prepare its farmers and its science and research institutions to monitor and react quickly to the adverse effects of climate change.

### 4.2.2. Climate change and environmental risks mitigation

There are several directions in which appropriate actions should be taken.

First, the irrigation/hydromelioration system should be optimized to be able to compensate for intensive droughts/prevent flooding.

Second, risk mitigation measures associated with insurance of the produce and the compensation of losses should be established.

Third, new varieties and breeds - better adapted to the changing climate conditions, should be created to substitute the more vulnerable ones.

Fourth, the greening of sector should be continued. This means not only to converting to eco-friendly practices such as preserving water, soil, air and introducing greater

biodiversity, but also increasing the energy efficiency of the production technologies and/or increasing the use of renewable energy sources.

Bulgaria is in the southern part of the EU, where climate changes are expected to cause droughts and less rainfall during the calendar year. This should be addressed by helping the farm holdings create water storage points and water efficient irrigation systems.

The experience of agriculture producers in other countries with more arid climates could also be studied and appropriate innovations for Bulgaria could be transferred to its agricultural practices and technologies.

## 4.3. Free trade agreements, food safety and standards

### 4.3.1. Free trade agreements

Bulgaria became a WTO member on the 1st of December 1996. In the negotiation process the country undertook obligations to restrict the levels of export subsidies for particular goods when exporting to particular countries; the restrictions pertained to: fresh and processed fruit & vegetables, wine, meat from sheep, white brine cheese and kashkaval (yellow cheese). After the accession to the EU in 2007, the country's obligations towards greater trade liberalization increased within the WTO. After becoming a member of the EU, and joining the common Market, the interests of Bulgaria are represented by the EC.

In the period 1998-2007 Bulgaria was a member of the CEFTA.

The EU has both bilateral and multilateral trade agreements. Some CEFTA members, for example, have written agreements for duty free imports of fruits and vegetables in the EU; such countries are FYROM and other ex-Yugoslavian countries. FYROM, for example, has no obligations under the license regime when importing apples in the EU.

### 4.3.2. Food safety rules, standards and implementation

The central goals of the European Commission's food safety policy are to ensure a high level of protection of human health and consumers' interests in relation to food whilst taking into account diversity, including traditional products and ensuring the effective functioning of the internal market.

The Commission's guiding principle, primarily set out in its White Paper on Food Safety<sup>52</sup>, is to apply an integrated approach from farm to table covering all sectors

.....  
<sup>52</sup> [http://ec.europa.eu/food/food/intro/white\\_paper\\_en.htm](http://ec.europa.eu/food/food/intro/white_paper_en.htm)

of the food chain, including feed production, primary production, food processing, storage, transport and retail sales.

EU legislation on food safety is organized into several sectors:

1. Legislation in the "Foods" sector
2. Legislation in the "Animal Feed" sector
3. Legislation in "Animal Feed and Welfare"
4. Legislation in "Genetically Modified Organisms, Food and Feed"

Legislation on Food Safety in Bulgaria is completely harmonized with European legislation. The following major acts and ordinances are prepared and implemented based on the EU Food safety legislation:

1. The Food Act
2. The Veterinary Medicine Act;
3. The Animal Breeding Act;

Ordinance No. 4 / 19 February on specific requirements for the production, storage and transportation of raw cow milk and the requirements for marketing and trading with milk and dairy products;

Ordinance No. 44 / 20 April on veterinary requirements for animal breeding facilities

Ordinance 61/ 9 May 2006 on conditions and order for animal identification, the registration of animal breeding facilities and access to the database with registered animals and breeding facilities

Ordinance 16 on the preparation and submission of claims to the EC for agrigoods and foods under Protected Designation of Origin (PDO) and Traditional Specialty Guaranteed (TSG)

Ordinance 26/14 October 2010 on the specific requirements for direct sales of small quantities of raw materials and foods of animal origin

4. The Seedling and Propagation Material Act;

## 5. The Bulgarian Food Agency act

An ordinance on the establishment of slaughter facilities for limited number of animals is in the preparatory process, and modifications to Ordinance 26/14 October 2010 on the specific requirements for direct sales of small quantities of raw materials and foods of animal origin are forthcoming.

Apart from the transposed Aquis, Bulgaria implements additional legislation regulating the controls and the safety in the food industry.

Before 1990 all foods in Bulgaria were produced according to the Bulgarian State Standard (BSS). After 1990 they were no longer obligatory for the producers of foods. BSSs were upheld by the Bulgarian Institute for Standardization (BIS). BIS is the national organ for standardization, acting in accordance with the National Standardization Act.

In 2009-2010 the organization defending the rights of consumers protested against the input of harmless but non-nutritional ingredients in finished products without their products being properly labeled within the contents of the overall products.

In order to improve the quality of foods, MAF in partnership with various interested branch organizations, re-established with slight modifications the BSS for some traditional foods -i.e. for bread, Ljutenitza, oza and other traditional dairy and meat foods. MAF directorate "Animal Health and Welfare" issues certificates for the production of the foods according to the BSS. The Directorate keeps a Register of the issued certificates to producers of foods according to the BSS.

BSS were established in the dairy sectors for Bulgarian kiselo mljako (yogurt), Bulgarian white brined cheese and Bulgarian kashkaval (yellow cheese).

In 2011 9 BSS were also re-established for meat products, i.e. for ground meat, meatballs, raw sausages, durable salami, chicken ground meat, etc. The meat products produced according to the BSS have the trademark "Stara Planina". It is not allowed to use soya, potato starch, fibers, mechanically de-boned meat, etc. in the products carrying the trademark "Stara Planina" (In comparison, in the old

BSS there was a possibility to input soya between 2-5% of the overall content of the products) 87 companies were registered as producers of Stara Planina products.

In 2011 BSS were also established for three types of bread and for traditional flour. They carry the trademark “Bulgaria”. BSS were also established for “Ljutenitza” (canned finished food based on ground tomato / paprika mix).

In 2011 MAF also tried to enforce an Ordinance which ruled that any particular milk-processing enterprise is not allowed to produce at one and the same time traditional products and products where plant oil was added as an ingredient (the objective was to ensure that the labeling of the products was not misleading for the final consumers). This Ordinance was appealed by the producer associations and its enforcement was repealed at the first opportunity by the Supreme Administrative Court. This is because the Ordinance put stricter limitations on Bulgarian processors than the ones foreseen in the EU laws and was thus deemed to be violating European supranational legislation acting on the Common Market.

In economic terms, the Ordinance was hurting smaller processors with only one processing line and favoured the larger; those which dedicate separate processing lines for the simultaneous production of traditional and dairy products and dairy products with non-traditional but harmless ingredients.

In Bulgaria the policies on food safety and quality foods are implemented by the MAF<sup>53</sup>. The safety and traceability of foods and animal feed along the entire food chain are among the priorities of the Ministry. Its “Animal Health and Food Safety” directorate is the main administrative body which is responsible for the transposition of the relevant Aquis, the formulation the national policy, and the coordination of policy implementation with various national and European authorities.

The Bulgarian Agency on Food Safety (BAFS) is the sole organ exercising controls on the safety and quality of foods in Bulgaria. The agency was established at the beginning of 2011 and follows the best EU practices in implementing the high control

.....  
<sup>53</sup> Ministry of Health has some limited powers in this area as it controls the quality and compliance with the standards of the bottled natural waters.

standards in the areas of food safety and food quality, food additives, beverages, veterinary medicine, animal welfare, plant protection and fertilizers, phytosanitary controls, animal feed, border controls, etc.

In 2011 BAFS experts have exercised hundreds of thousands of inspections along the entire food chain “from farm to table”, in close partnership with the branch organizations from the entire country. BAFS is involved in the formulation of the BSS and certification controls on producers of foods under the BSS mentioned above.

MAF is carrying out regular periodic audits on the operations of BAFS to ensure that the official controls on the implementation of the requirements of Aquis, the Food Act, the Animal Feed Act, the Veterinary Medicine Act, the Plant Protection Act as well as the detailed requirements in the implementing ordinances, are adhered to and are enforced effectively in an appropriate manner to achieve the objectives of the relevant legislation and in accordance with the Common Multi-Annual National Plan on Controlling Food, Feed, Animal Health, Animal Welfare and Plant Protection.

## 5. SWOT Analysis

### 5.1. SWOT of agricultural policy and support services

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | THREATS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | OPPORTUNITIES                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Agricultural policies and support services</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                       |
| <p>Existing policies in agriculture of Bulgaria are aligned to the CAP and farmers are gaining experience in complying with the relevant legislation or to benefitting from them.</p> <p>Sufficient administrative capacity is achieved both in enforcing Aquis and providing agriculture monetary support.</p> <p>The National Agriculture Advisory Service has a network of regional offices to make it easier for farmers' access to information, advice and consultancy. The NAAS been successful in its contribution to the implementation of three of the BGRDP 2007-2013 measures: M111, M141 and partly M214 (See attachment 2 for the names of the measures)</p> | <p>Several different farmer support instruments are not aligned to the achievement of the same macroeconomic and socio-economic and environmental goals.</p> <p>BGRDP implementation is lagging behind. Important measures, which were available in the 2007-2013 period, will not be implemented.</p> <p>SAPS implementation is distorting the production structure towards mono-agriculture where arable crops of low added value dominate the produce. This has negative socio-economic repercussions and makes the economy even more vulnerable to global economic shocks and adverse climatic conditions.</p> <p>Direct support reaches only a section of farm holdings. The same applies for the support by BGRDP, which quantified objectives will be far from fulfilled.</p> | <p>Transferring models for Direct Support (especially CAP I Pillar) and Social Dialogue in the next programming period without optimizing them for more balanced sectoral and territorial development, and more transparent monitoring and reporting of the policy interventions in the sector.</p> <p>Insufficient preparation for climate changes will have varying adverse effects both in scope and severity on farms depending on in which sectors the farms are operating and in which geographic regions of the country they are located.</p> <p>Insufficient advisory capacity in the areas; of adding value to primary products; using renewable energy sources and adapting to unfavorable climate changes.</p> <p>The continued loss of active population from the rural areas – will affect both the workforce in the sector and the general rural economy.</p> | <p>Increasing support from CAP I Pillar. Changing CAP scope of objectives and implementing rules.</p> |

| STRENGTHS | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | THREATS | OPPORTUNITIES |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------|
|           | <p>The NAAS does not have sufficient advisory capacity to reach the peripheral areas and offer full-year-round advice beyond only to a fraction of the 350,000 holdings counted in Agricultural census 2010.</p> <p>The level of social dialogue in the sector is unsatisfactory – farmers and their associations are not sufficiently represented during the formulation of the national positions on CAP reforms; neither are they participating in the formulation of direct support measures. The enforcement of support schemes and measures especially under CAP I instruments are not transparent and are not preceded by preliminary socio-economic impact assessment, including within the different geographic regions of the country.</p> <p>None of the implemented CAP I instruments have been assessed and reported in view of their socio-economic and environmental impacts; hence their modification for achieving better results is impossible.</p> <p>The socio-economic and environmental performance of BGRDP is assessed only occasionally – only during obligatory external evaluations – this makes the work of the Monitoring Committee less effective.</p> |         |               |

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                     | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                           | THREATS                                                                                                                                                                                                                                                                                               | OPPORTUNITIES                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Agricultural education</b>                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                             |
| <p>There is a network of 80 secondary schools and 5 universities which offer specialized secondary and higher education in agriculture, food production, etc.</p> <p>Some of the 570 centers for professional education offer vocational training and profession in agriculture.</p>                                                                                                          | <p>The number of the graduates is not sufficient to cause massive rejuvenation in the sector.</p> <p>The practical skills of the graduates do not meet the requirements of the modern technologies; they need additional on the job training.</p> <p>Even though all the major players are in place, there is not yet symbiosis achieved between education, vocational training, research and transfer of innovation in agriculture, food industry and forestry.</p> | <p>Lack of concerted national policies encouraging the transfer of innovation through education and vocational training in agriculture and forestry, particularly in the areas of adding value to primary products, using renewable energy sources, and adapting to unfavourable climate changes.</p> | <p>Specific measures of the BGRDP 2014-2020, financed by CAP II (EAFRD) and targeting the innovation and the improvement of the human potential will be obligatory for implementation in the next programming period.</p>                                                   |
| <b>Research and Innovation</b>                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                             |
| <p>Long traditions in science and research – established academy of agrarian Sciences and regional network of 27 research institutes working in different fields of the agrarian sciences; most of the institutes are also equipped with stations for on-situ trials of agricultural experiments before the release of technological innovations in the respective agricultural branches.</p> | <p>The research and innovation infrastructure dates from when they were serving the big state cooperatives. Its link at present with the farm holdings is weak as only the bigger farms have easy access to their services. The interaction of the institutes with the smaller semi-subsistence farms requires intermediaries for promotion of their innovations.</p>                                                                                                | <p>The research by the institutes will not be effective in helping farmers become more competitive on the domestic and international markets, nor to adapt more successfully to the adverse effects of climate changes.</p>                                                                           | <p>Specific measures of the BGRDP 2014-2020, financed by CAP II (EAFRD) and targeting the transfer of innovation will be obligatory for implementation.</p> <p>NAAS could become an effective intermediary between the institutes and smaller semi-subsistence farmers.</p> |

## 5.2. SWOT analysis of agriculture structure

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | WEAKNESSES                                                                                                                                                                                                                                                                                                                       | THREATS                                                                                                                                                                                                                                                                                                                                                                           | OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Resources</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>Agricultural land covers more than 50% of the country.</p> <p>The deindustrialization of the economy has allowed for “self-cleaning” of the natural environment, and, thus, allows for production of organic foods.</p> <p>Long-term traditions in plant production and animal breeding have created local plant varieties and breeds of high quality and, thus, allow for the production of foods eligible for registration under the CAP food quality schemes. These plant varieties and animal breeds are also best suited to local climate and soil conditions.</p> | <p>Significant amounts of former agricultural land have been abandoned.</p> <p>Products from local varieties and animal breeds are labour intensive and not suited for mass production and marketing via large wholesale/retail chains.</p> <p>Loss of soil organic matter/ soil productivity due to wind and water erosion.</p> | <p>Climate changes, especially the resulting droughts together with the associated entry of pests and diseases for which the local population, flora and fauna have no natural defenses.</p> <p>Loss of soil productivity due to wind and water erosion (i.e. because of deforestation, flooding), or soil compaction because of inappropriate plant production technologies.</p> | <p>Reformed CAP 2014-2020 - changing CAP implementation rules and conditions for support.</p> <p>Expiry of grace periods for full implementation of the Good agriculture and ecological conditions (GAEC) under CAP I Pillar will further contribute to the preservation of the soils productivity.</p> <p>Using waste biomass for improving the organic content of the soils.</p> |

| STRENGTHS                                                                         | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                          | THREATS                                                                                             | OPPORTUNITIES                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Workforce and Employment in Agriculture</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |                                                                                                                                                                                                                                |
| <p>Long tradition in rural areas and practical experience in family holdings.</p> | <p>The deindustrialization of the rural economy resulted in the loss of rural jobs. The restructuring of the agricultural sector towards heavily mechanized monoculture production causes additional unemployment. The majority of the holdings are family holdings with part time employment - the family workforce is aging, lacks appropriate education levels, modern knowledge and entrepreneurial skills.</p> | <p>Insufficient skilled workforce as factor for competitiveness, especially in the rural areas.</p> | <p>Increasing incomes from increased direct support to farmers will increase the attractiveness of work within the sector.</p> <p>Education, training and information activities financed under measures of RDP 2014-2020.</p> |

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                     | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | THREATS                                                                                                             | OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Production structures (Size classes, Mechanization, Productivity and Competitiveness)</b>                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>A significant number of the family holdings are of mixed production to reduce economic risks from fluctuating market demand for agricultural goods.</p> <p>Production methods are extensive and this adds to the natural quality of the products in particular branches.</p> <p>Family holdings preserve some valuable genetic resources both in plant production and animal breeding.</p> | <p>The production structure in most of the sectors are highly fragmented – e.g. fruit and vegetables, sheep and goats, tobacco, berries, and cattle especially in the semi-mountainous and mountainous LFAs.</p> <p>Productivity is low. Added value is also low.</p> <p>The level of mechanization is low. The access to irrigation water is economically Unattractive; water is not used and this hurts productivity.</p> <p>The bargaining power of the producers is low. This is because the level of co-operation among small farmers is low – they refuse to unite in producers groups with perspective for the establishment of Producer organizations.</p> | <p>Further limitation of the farmers' direct sales and the general access to final consumers of their products.</p> | <p>Most of the small producers can easily convert to organic production and/or participate in food quality schemes, but will need support to pay for the certification, and processing enterprises for organic produce- willing to offer them fair a price.</p> <p>Further on-farm diversification to ensure year-round employment, including production of herbs, spices, essential oil plants, medicinal plants, fibre plants, etc.</p> <p>Further adding value to their own produce - including via primary processing of materials for alternative value adding –chains in the light industry (i.e. for textiles, cosmetics, pharmacy, etc.).</p> <p>Use of CAP 2014-2020 schemes especially:</p> <ul style="list-style-type: none"> <li>Short marketing chains</li> <li>Support to small producers</li> <li>Diversification on-farm and off-farm economic activities</li> <li>Using RES to cut down energy costs – e.g. hot underground water, wind, waste biomass both for energy purposes and for soil improvement –to increase the organic content and productivity of the soils.</li> </ul> |

| STRENGTHS                                                                                                                                                                                                                                                                              | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | THREATS                                                                                                                                                                   | OPPORTUNITIES                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Value adding chains</b>                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                        | <p>Despite 13 years of CAP support integrated value adding chains are still not established in the various branches of the agricultural sector. No producer organizations have managed to build processing facilities or market outlets for their products.</p>                                                                                                                                                                                                                                                              | <p>Still prevailing bargaining power of the trade intermediaries and the big wholesale and retail market chains.</p>                                                      | <p>Establishment of farmers markets selling locally produced foods.</p> <p>Creation of producer groups, producer organizations and support for their processing and marketing facilities to be able to sell to the final customers.</p> |
| <b>Rural and specific agriculture related infrastructure</b>                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                                                                                         |
| <p>Well-developed social (kindergartens, primary and secondary schools, community centres, postal offices) and technical infrastructure (roads, rails, bridges, electricity and water provision, irrigation, collection points for agricultural goods, etc.) in the socialist past</p> | <p>Both social and technical infrastructures have degraded, and now the rural areas offer much a lesser quality of life to people. This together with the loss of jobs has made the families of young, economically active and educated people abandon their homes in the rural areas.</p> <p>Lack of irrigation makes the development of plant production a risky business in view of the climate changes.</p> <p>Lack of drainage and anti-fire infrastructure will increase accidental deaths from natural disasters.</p> | <p>Further depopulation of rural areas.</p> <p>Climate changes will pose greater risks to plant production and greater threats to the health of the rural population.</p> | <p>CAP support and support from other EU funds can be used in areas where there is still some potential for economic development.</p> <p>The irrigation infrastructure can be optimized to meet the needs of smaller farm holdings.</p> |

### 5.3. SWOT analysis of livestock, meat and milk

| STRENGTHS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | THREATS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The system for keeping the genetic resources in animal breeding is functioning.</p> <p>Institutions in research and development as well as in veterinary medicine are functional.</p> <p>The quality of the products is good.</p> <p>There are local and traditional breeds which are best suited to local geographic and climatic conditions.</p> <p>There is great potential for extensive pasture based cattle and sheep production in the semi-mountainous and mountainous areas of the country.</p> | <p>Animal breeders do not have long term access to the same land plots (fragmented land ownership; short term leases for 1 year period), and hence, they have limited interest in improving the pastures.</p> <p>Low productivity, low level of added value (processing) to animal produce, low competitiveness in conventional animal breeding methods.</p> <p>Difficult to access to the final customers.</p> <p>Lack of adequate direct support schemes both from CAP and from national budget.</p> <p>Difficult to access bank credits.</p> <p>Unfair competition from imports of cheap milk and meat substitutes harmless to the health of the final customers but of low nutritional value.</p> | <p>Further depopulation of the semi-mountainous and mountainous areas, degrading social and technical infrastructure.</p> <p>Lack of adequate support from the state for smaller animal production farm holdings.</p> <p>Continuing market dominance by trade intermediaries, processing enterprises and big market chains. Continuing use of cheap substitutes to milk and meat in the dairy and milk processing industries.</p> <p>Continuing of operations in the shadow economy.</p> | <p>On farm and off-farm diversification, adding value to products and establishing legitimate links with final consumers on the “white market”.</p> <p>Use of RES to cut energy costs.</p> <p>Start of organic production, and/or direct sales of final products via internet to reach final customers.</p> <p>Establishment of adequate monetary support and risk reduction mechanisms.</p> <p>Participation in cooperatives based on producer groups and Pos and participation in food quality schemes.</p> |

## 5.4. SWOT analysis of fruits and vegetables

| STRENGTHS                                                                                                                                                                                                                                                    | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | THREATS                                                                                                                                                                                                                                                                                                                                                                                                                                          | OPPORTUNITIES                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Availability of traditional local varieties producing fruit and vegetables of good quality, still preferred by the Bulgarian population and marketable abroad.</p> <p>Growing demand for organic products both in the domestic and the global market.</p> | <p>The produce from traditional varieties is not easily marketable (cannot currently travel long distances)</p> <p>Producers do not have long term access to the same land plots (fragmented land ownership; short term leases for 1 year period), hence they cannot establish irrigation equipment, sorting and packaging machinery and equipment, etc.</p> <p>Fragmented production. Lack of irrigation or expensive water for irrigation. Low productivity, low level of adding value (processing) to the produce, low competitiveness in the conventional plant growing methods.</p> <p>No participation in PGs and PO, low level of cooperative production and marketing of standard produce, low bargaining power.</p> | <p>Unfair competition from contraband “tax-free” imports of “fresh” fruit and vegetables or from processed products (e.g. tomato puree from China used in the production of “traditional ljutenitza”).</p> <p>Lack of adequate direct support schemes.</p> <p>Climate changes.</p> <p>Further depopulation of rural areas.</p> <p>Continuing market dominance by trade intermediaries.</p> <p>Continued difficult access to final consumers.</p> | <p>Continuous efforts for better information to the final customers.</p> <p>Participation in organic production and food quality schemes.</p> <p>Participation is PGs and POs.</p> <p>Establishment of farmers’ markets.</p> <p>Direct sales of finished goods to final producers.</p> |

## 5.5. SWOT analysis of new products, modification type of products

| STRENGTHS                                                                                                                                                                  | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | THREATS                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Organic production</b>                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Farmers interest in growing organic goods is rising, demand and consumption for organic products is rising.</p> <p>Exports of organic raw materials are increasing.</p> | <p>The level of adding value to organic produce is limited; the consumed finished goods are mainly imported from abroad.</p> <p>The training in organic production and appropriate information activities to farmers and promotion campaigns to final consumers are not sufficiently developed.</p> <p>Land ownership fragmentation and the short term of land leasing are barriers to the development of organic production especially of organic animal breeding in the LFA.</p> <p>Organic products are concentrated exclusively in the food chain; no developments yet in the related production of eco-friendly clothes, etc.</p> | <p>Diminishing purchasing power of the population both in Bulgaria and in the countries accepting organic produce from Bulgaria.</p> <p>Sector continues to be un-recognized appropriately as the leading sector offering most sustainable development in agriculture and the most healthy diet for the population.</p> <p>Climate changes and associated droughts, floods, changing pattern of seasons and rainfall, entry of new kinds of pests and diseases, etc.</p> | <p>Support from BDGRDP 2014-2020, participation in food quality schemes, participation in PGs and then in POs with common processing and marketing channels.</p> <p>Direct sales to final consumers.</p> <p>Places on specialized farmers markets.</p> <p>Further continued rises of energy sources will make more and more expensive the conventional methods of agriculture</p> |

### New products

Due to changing lifestyle, especially in the cities, Bulgarian market responds well to the provision of new products – e.g. cooled or frozen chopped vegetables or fruits ready for cooking, ready to serve foods, etc.

Even though new products are emerging in the food chain, there is no information for such development in the alternative value adding chains of the light industry – e.g. in the production of cosmetics, pharmacy, plant protection materials, textiles (wool, linen, hemp, silk, cotton), hides and leather production, which in turn can be used in cloths production and shoemaking industries. This is because the integration of the value adding chains in these sectors is still weak.

The link between research and development and the farms is not yet strongly established, the transfer of innovation for alternative uses of the same raw materials is still weak.

Further decrease in the animal breeding sector, and in the farms producing fibres of plant and animal origin.

Support from BGRDP 2014-2020 for transfer of innovations for short marketing chains, for PGs (and POs under CAP I Pillar).

Integration of alternative agricultural branches in alternative value adding chains. Use of the same raw materials for alternative uses, including for production of RES and renewable fuels.

This should be at the heart of a rural reindustrialization.

## 5.6. SWOT of external macro- and micro-environmental actors

|                         | OPPORTUNITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | THREATS                                                                                                                                                                                                                        |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Demographic/economic    | <p>Growing needs for food on international markets.</p> <p>Diversification of agricultural produce including via production for light industry.</p> <p>Increasing self-sufficiency of the economy via reindustrialization of rural areas by creating and reinforcing the economic potential of enterprises operating in the light processing industry.</p> <p>Wise use of CAP instruments.</p> <p>Better functioning of the economic multiplier of the rural economy and the rural areas.</p> | <p>Aging population.</p> <p>Decreasing purchasing power and quality of life especially in the rural areas.</p> <p>Further depopulation of rural areas, loss of development potential.</p> <p>Climate change.</p>               |
| Knowledge/technological | <p>Production of finished goods.</p> <p>Production of quality products, best meeting the needs of modern families.</p> <p>Production of new products utilizing waste from the food industry and the light processing industry.</p> <p>Innovation transfer from research bodies to producers.</p> <p>Wise use of CAP instruments, as well as the instruments financed by the other ESIF.</p>                                                                                                   | <p>Insufficient funding for research and innovation, for education and training.</p> <p>Poor links among research bodies and producers.</p>                                                                                    |
| Political/legal         | <p>Ensuring wider representation of producers in the policy making process, based on social/ economic and environmental impact assessments and regional characteristics.</p>                                                                                                                                                                                                                                                                                                                  | <p>Lack of balanced representation of agriculture producers from various sectors in policymaking and analysis of policy implementation.</p> <p>Lack of decentralization of government, strengthening of local authorities.</p> |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                       |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Social/cultural      | Take advantage of local varieties and breeds to produce quality food and drink. Use traditional eco-friendly production methods to produce and market via direct sales of produce bearing the green label.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>Conservative thinking may prevent the faster introduction of innovations including the ones associated with waste utilization and use of renewable energy sources.</p> <p>The same may hinder the establishment and operations of joint assets and processing facilities managed by Producer groups or Producer Organizations.</p> |
| Competitive clusters | <p>Producer groups or Producer Organizations may serve as the basis for competitive clusters both in the food and in the light processing industries as they can establish standardized production for quality foods or for other inputs for the light processing industry (textiles for the clothing industry, plants and animal extracts for the pharmacy and cosmetics, hides for the leather industry, etc.).</p> <p>They can also take advantage of the utilization of waste, use of RES, etc. and could draw expertise and innovation from research bodies and leading science institutions.</p> <p>LAGs under LEADER support may speed up the formation of the PGs and POs as well as their links with international expertise, including in the areas of waste utilization and use of RES.</p> | Competitive clusters should be run by local people and local people do not always have the necessary managerial abilities and skill-sets for running complex organizations.                                                                                                                                                           |
| Major customers      | Listening to the needs of the families with higher purchasing power will improve the competitiveness of the producers and processors of primary agricultural products. This will be particularly necessary for selling produce via direct sales short marketing chains                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Big wholesale/retail chains dominate the markets for foods and beverages and put trade barriers in the way of smaller producers.                                                                                                                                                                                                      |

## 5.7. SWOT of market opportunities /internal strengths and weaknesses

|                         | STRENGTHS                                                                                                                                                                                                                             | WEAKNESSES                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Demographic/economic    | The role of consumer preference is strengthening. The market for quality and especially for organic foods is increasing.                                                                                                              | Depopulation. Aging population. Poverty. Low and decreasing purchasing power.<br>The country is de-industrialized, especially its rural areas.<br>Unfair competition to farmers produce from imported contraband produce or surrogates of low nutritional qualities.                                                                                                                                                                                                         |
| Knowledge/technological | The relevant education, training, information and advice infrastructure is in place and operating.                                                                                                                                    | Decreasing quality of education. Lack of modern practical skills in the graduates from specialized agriculture schools.<br>Non-competitive workforce lacking modern knowledge and skills. Low managerial skills. Low degree of mechanization.                                                                                                                                                                                                                                |
| Organizational          | The controlling system, the support bodies and the research and innovation institutions are in place.<br><br>There is experience within farmers and local communities, including in community mobilization under the LEADER Approach. | Farmer associations are fragmented, there is no Chamber of agriculture producers in Bulgaria, the level of social dialogue in policymaking, monitoring and modification is unsatisfactory both at central and local levels.<br><br>Value adding chains are not integrated.<br><br>Low bargaining power of the producers in most of the branches. Barriers to trade for small producers.<br><br>Lack of processing enterprises for organic products/quality foods and drinks. |
| Political/legal         | All legislation is harmonized with the Aquis requirements.<br><br>Both administration and farmers have gathered experience with all CAP support instruments.                                                                          | Support instruments are not currently reaching the majority of holdings.<br><br>The majority of the holdings are not fully familiar with the legislative requirements for the activities.                                                                                                                                                                                                                                                                                    |
| Social/cultural         | Still preserved taste for traditional quality foods made from local plant varieties or animal products                                                                                                                                | Difficult for local products to access the population of the big cities.                                                                                                                                                                                                                                                                                                                                                                                                     |

## 5.8. SWOT of critical actors

|                                                                                  | OPPORTUNITIES                                                                                                                                                                                                                                                                                                         | STRENGTHS                                                                                                                                     |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Farmers (and their associations)                                                 | <p>New CAP instruments in the 2014-2020 period. Formation of PGs or POs, and adding value to their products via the PGs or the POs. Europe 2020.</p> <p>Start on-farm and off-farm diversification of production and economic activities.</p> <p>Cut energy costs via utilization of waste/using RES.</p>             | Traditions. Experience. Fortitude.                                                                                                            |
| Processors                                                                       | Start processing of organic/quality foods. Utilize better the byproducts and waste. Use RES to cut energy costs and increase competitiveness.                                                                                                                                                                         | Modernized enterprises. Meeting all EU requirements. Flexible to meet diverse specifications.                                                 |
| Markets (Market outlets)                                                         | <p>Increasing purchasing power will increase the demand for traditional products of locally produced raw materials.</p> <p>Establishment of farmers' markets as an alternative to the regular market chains.</p>                                                                                                      | Big chains dominate the wholesale and retail markets.                                                                                         |
| Customers                                                                        | Customers in the urban areas are increasingly concerned with ensuring healthy diets for their families.                                                                                                                                                                                                               | Their awareness of food chain issues is increasing.                                                                                           |
| Institutions (policy making, policy implementation, support bodies and services) | <p>CAP reforms are associated with stronger integration with other programmes financed by EU funds.</p> <p>CAP reforms include simplification of the implementing rules and stronger monitoring and evaluation arrangements based on stronger partnership among the Managing Authorities and the Social Partners.</p> | All necessary bodies and institutions for the next programming period are available and operational, and have gathered sufficient experience. |

| THREATS                                                                          |                                                                                                                                                                                                                                                              | WEAKNESSES                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Farmers (and their associations)                                                 | Farm holders – conservative, not willing to innovate, to establish and join Producer Groups. Poor quality of life in the rural areas. Climate changes/natural risks to production.<br><br>Associations – insufficiently represented in policymaking process. | Farm holders - aging, lack necessary knowledge and skills, they manage small non-competitive holdings.<br><br>Associations – still weak in policy formulation for balanced development of all kinds of agriculture. |
| Processors                                                                       | Too influential in negotiations with the farmers. Too weak in negotiations with big wholesale and retail chains. Causing unfair competition to locally produced raw materials.                                                                               | Have difficulties in using processing capacities because of lack of quality raw materials.<br><br>Do not process organic foods.                                                                                     |
| Markets (Market outlets)                                                         | Further imposition of unfavorable trading terms to smaller farmers and processors.                                                                                                                                                                           |                                                                                                                                                                                                                     |
| Customers                                                                        | Further collapse of the rural economy.                                                                                                                                                                                                                       | Weak purchasing power to afford only quality foods.                                                                                                                                                                 |
| Institutions (policy making, policy implementation, support bodies and services) | There may be insufficient human capacity if the governments decides to launch mass reindustrialization accompanied with fast age restructuring of the workforce in the agricultural sector.                                                                  | Implementing rules are too rigid, the requirements too demanding and the punishments too heavy.                                                                                                                     |





## 6. Conclusions and policy recommendations

An overview of Bulgaria's macroeconomic performance indicated that the country is stable in its fiscal and budget policies, but because of the imported economic crisis, they are failing to address and remedy the loss of jobs, unemployment, and an increase in poverty and depopulation especially in rural provinces.

These developments coincide and are partly due to the developments in the agricultural sector, which is still uneven and chaotic, but rapid transformation of the productive structure is taking place, fueled by the need to gain conventional competitiveness, based on economies of scale by specialization in factory-like mass production of limited numbers of agricultural raw materials.

This transformation is associated with pushing small family farm businesses with diverse agricultural production<sup>54</sup> out of the primary sector of the economy, thus cutting their additional income, diminishing their purchasing power, limiting local demand and consumption rates, and hence, restricting the overall economic potential for development and growth in the rural areas.

.....  
<sup>54</sup> Usually producing all of the major types of agriculture outputs: vegetable and fruits, eggs, milk, meat, honey.

Several drivers are causing this rapid transformation processes. Some of them have been in place since the early years of the transition to democracy and the market economy, including:

- The deindustrialization of the country which pushed back into agriculture people who were formerly working in the state industrial enterprises, and who lacked the understanding, the knowledge and the skills to create competitive family farms
- The deindustrialization of the rural provinces closed enterprises in the light processing industry, who because of greater competition, would offer better prices to the local producers
- Unsuccessful land restitution, which fragmented the ownership of agricultural lands
- The liquidation of state cooperatives, the scattering of their assets and resources into non-competitive family farms, and the loss of genetically based productive potential, e.g. in the cattle breeding sector.

Other drivers closing down the operations of family farms are more recent. Some of them are imported, e.g.:

- Globalized speculative markets in energy resources are causing ever increasing prices of all petroleum and gas based agricultural inputs; the price shocks, however, are not absorbed evenly throughout the various value-adding chains in agriculture as the international demand for grain is growing and thus its prices are kept higher
- Dissolving border protection against imported agricultural products within the WTO framework of negotiations
- Technological requirements in the agricultural sector imposed by the respective EU Aquis in food and feed safety, animal health and welfare, etc., require massive investments by the farmers; these are hard to make by farms operating in an economic sector with the lowest profit margins, who, hence, have to plan and achieve significant economies of scale in their production units and specialize in the particular production of raw materials

Other more recent drivers are of local origin and are the result of deficits in the decision making processes for policy formulation and implementation, policies which could have ensured sustainable development of the entire agrarian economy and the rural areas. **These deficits result from poorly established social dialogue,** and include:

- Poor design of national and CAP support in Bulgaria, and poor non-concerted implementation of SAPARD, BGRDP 2007-2013 and CAP I instruments to secure balance among social, economic and environmental aspects of the interventions on the wider rural economy and quality of life in the rural areas
- The shrinking rural economy, the decreasing quality of life and the ensuing depopulation of the rural areas made the real estate in these areas hard to trade and the banks are refusing to accept them as collateral against extending investment credits. Additionally, the interest rate on credits is high for agribusinesses with and already low rate of return
- Rising rates of “petty” crime – mainly small-scale thefts of productive assets, agri-produce and animals in rural areas eventually cause family holdings in the more isolated rural areas to stop their production
- Uneven monetary support caused different level of mechanization of family holdings compared to the industrial holdings; this has resulted in different degrees of mechanization across the entire agricultural sector, as the production structure in most of the plant production and animal breeding branches remains dominated by family holdings
- Barriers to free trade with family produce established down the value adding chain by the processing enterprises<sup>55</sup> –, as well as the big wholesale and retail market chains. This has emerged as the result of two developments. The first is associated with limiting the amount of direct sales which a farm holding can realize to final customers; this made the farmers heavily dependent on the trade policies of the local processing enterprises. The second is the imposition by big retail and wholesale chains of hard-to-meet trade conditions for farmers and processors of agricultural produce, where only big quantities of standardized produce are accepted and the payments to the farmers and processors are delayed for several months, while taxes and dues to enter the chain’s market stalls are paid in advance
- Dismantling of the ineffective irrigation system designed for large production cooperatives in the socialist past; irrigation however, is crucial for the development of the plant production sectors, and especially for the operation of more labour intensive agriculture associated with the production of vegetables, technical cultures and fruits, which continue to be dominated by family holdings

.....  
<sup>55</sup> Which sometimes act as quasi-oligopolies and have been fined by the national Commission for Protection of the Competition.

- Unfair competition/price dumping of farmers' output due to contraband imports of agriproducts and finished products
- Unfair competition/price dumping of farmers' output from imports of cheap "but harmless to the health" substitutes to be used as inputs in the finished good of the food processing industry – e.g. palm oil and milk powder to be used in the dairy products, meat byproducts and soya to be used in the meat products, potato starch instead of pepper paste in the canned "traditional Ljutenitza", artificial sweeteners in the compotes and juices, gelatin in the jellies and jams, etc. [These are not only hurting the competitiveness of the local family holdings but the rights of the consumers in the urban centers to quality nutrition based on a healthy diet.]

The rapid and chaotic transformation of the productive structure in the Agriculture sectors is not only hurting rural areas, but has wider nationally significant economic repercussions associated with:

- The competitiveness of the food industry and the light processing industry which reflects on the Gross Value Added of the entire Bulgarian economy
- The unemployment levels and the general level of poverty and crime
- The trade balance from agricultural trade, integration on the Common Market and the participation of the country in the global specialization for production and perspectives for development
- The overall prospects for sustainable socio-economic development in view of the supranational European policies in the next programming period where the goals and objectives of EUROPE 2020 can be achieved only in strong and competitive economies able to support national investments in research and constant innovation, as well as in the knowledge and practical skills of the local people.

The overall conclusion is that the agricultural sector is underperforming<sup>56</sup> and is losing its development potential in most of its sectors. This threatens the functioning of the entire economy, which because of the collapse of the heavy industry built in the socialist era, can now only rely primarily on the sectors of the light processing

.....  
<sup>56</sup> In gross assessments, also supported by World Bank and FAO databases, present Bulgarian agriculture produces less than 50% of the agri output produced during the ineffective planned economy of the socialist past. In some of the branches – i.e. in the production of fibre plants and pulses the decrease is even higher.

industry which depend on the quantity and quality of various raw materials originating mostly from agriculture, but also from forestry and fishery.

In view of the abundant natural resources, the built infrastructure, the increasing CAP contribution for agricultural modernization, the present scientific and innovation potential, the existence of all the bodies necessary for implementing the requirements of the Aquis, as well as the support bodies necessary for delivering CAP support to the farmers and the rural population, there are still possibilities to restore agriculture towards a more socially and environmentally sustainable development path.

To achieve this, it is necessary to provide a more favourable economic and legislative environment for more socially responsible family agriculture to act as the ground for upgrading long-neglected branches of light industry and the rural economy in general.

In order to achieve this, it is necessary to consider the pathways for establishing an alternative agricultural economy running parallel to the already established, and in some sectors large-scale, agriculture based on conventional methods.

The alternative agricultural sector should be based on small family holdings run by families with children, of mixed plant and animal production in order to ensure not only year-long employment for at least one of the parents, using eco-friendly production methods, and producing quality raw materials as a prerequisite for the competitiveness of the processing enterprises producing quality food and drinks<sup>57</sup>, but also ensuring the competitiveness of other subsectors of light industry, including the ones where micro and small enterprises are producing textiles, pharmaceutical products, cosmetics, hides and leather.

Family-based agriculture will also maintain the steady production in the agricultural branches in which the EU remains a net importer – e.g. sheep and goat milk, tobacco, essential oil and medicinal plants, herbs and spices, etc.

.....  
<sup>57</sup> Participating in the Quality schemes for PDO, PGI, TSG.

Such an alternative agrarian economy will require somewhat alternative credit systems for improving/modernizing their production assets, for collection and marketing of their products, for ensuring the knowledge and skills of the workforce, for transferring of innovations in their production methods, for bringing down the risks associated with the globalization of the markets for agricultural products and the adverse effects from the climate changes.

Furthermore, to ensure that the local economic market is working satisfactorily, and generating enough jobs in the tertiary sector<sup>58</sup>, it is imperative that most of the value added from processing the raw materials should be retained by the producers of the raw materials in the respective settlements or at least in the same rural municipality. The fastest way will be to continue the support from the 2007-2013 period for the establishment of Producer Groups and help them to obtain the necessary production/processing assets while also improving the public infrastructure<sup>59</sup> as preconditions for competitive business operations.

The development of the alternative to mass tourism in the rural areas is also a precondition for the restoration of the wider rural economy. Its appropriate development will not only increase the demand for locally produced food and drinks, and entertainment related services, but will also boost local construction and furniture production businesses, as well as the market for public and private transport, electricity and heat. Again, if the local economic market were working in the interests of the local people, most of the financial benefits would be retained by the local communities and not by outsider investors which are reaping the profits to spend them outside the respective settlement and thus outside the respective economy of the particular rural municipality.

The improvement of the quality of life in rural areas is of paramount importance to launch and operate an alternative agrarian economy serving as the basis for the restoration of rural economies. If young families miss the minimum level of public services for their children and themselves they will not be willing to remain in the

.....  
<sup>58</sup> While also keeping jobs in the public services sectors providing training and education, health, social services, security, etc.

<sup>59</sup> Water, sewage, road and communications network

rural areas and act as actively contributors to the local socioeconomic fabric. This means that the quality of local training, education and health should meet some acceptable minimum standards of quality just as much as the levels of local water provision, energy provision, road networks and communications should be kept operating in an acceptable manner.

All of the above should be happening simultaneously and this requires the concerted effort of all people living in the local communities. Therefore, the methods, the scope and the levels of the social dialogue should be modified, deepened and fortified. The most efficient way to achieve this on the local level will be via the operations of the LAGs financed by the LEADER Approach of the RDPs, or via the FLAGs financed under the Fishery Programme 2007-2013. These organizations already have the necessary experience in mobilizing local communities towards the implementation of local development strategies that in turn complement the attainment of objectives of the municipal development strategies 2007-2013.

LAGs and FLAGs can and should serve as the arenas within which the interests of local farmers and their organizations, as well as businesses outside of agriculture and different social groups of the local population are meeting and converging towards the balanced achievement of common goals for balanced socio-economic and environmental development of the rural communities.

LAGs and FLAGs can and should be among the key players which attract the knowledge, expertise and skills necessary to restart the reindustrialization of local rural economies, and increase the local quality of life. It is foreseeable that the local communities will be in great need of the expertise of applied economists, of scientist and researchers to convey innovations, particularly in production technologies, the utilization of waste, the use of renewable energy sources, methods for environmental sustainability and the production and processing of quality commodities. Engineers will also be needed to calculate and oversee the construction of particular facilities of public interest, and qualified technicians will be needed to upkeep the operations of the already established facilities.

Thus social dialogue on a local level will improve to contribute to the local and national development goals including the ones set under the Europe 2020 goals and objectives.

This will be insufficient if the social dialogue on the *intermediate* level – EU Programmes Monitoring Committee and the *upper* – National government level are not modified and fortified to ensure greater transparency in policy formulation and policy evaluation. Social dialogue should be based on exhaustive socio-economic and environmental impact assessment before any enforcement of political decision with potential to affect various groups of farm-holders and or regions or sub-regions of the country. The implementation of the formulated policies should then be ensured no matter which particular political party is ruling the country, and the socio-economic and environmental impacts from the implementation of the policies should be monitored in a comprehensive and most transparent way, so that the policy instruments can be modified effectively in due time. This, among other things requires that:

- All the instrumentation available under CAP I and CAP II Pillars is coordinated for faster achievement of the alternative family based agrarian economy described above
- As fast as possible, reindustrialization of the rural economy is achieved with the help of all EU-funded instruments in the 2014-2020 via support for locally managed micro and small processing enterprises
- As fast as possible, improvement of the quality of life in rural areas is achieved with the help of all EU cofinanced programmes to cut down the exodus of rural families with young children.
- As transparent and effective decision-making as possible is introduced in order to ensure the efficiency of public funds in the achievement of the goals regardless of the origin of the funds – EU or the national budget.

These necessities should also reflect on which CAP I and II instruments should be enforced as early as possible and, which should be implemented at a later stage, when all the actions and investments have been agreed on at a local level.

This means that in the first instance should be launched the implementation of:

- Measures which create capacity based on (a.) self-organization (e.g. producer groups), (b.) acquiring knowledge (transfer of innovations) and (c.) acquiring knowledge and skills (education, training, information activities)
- Measures which mobilize the local communities for the achievement of local development objectives via planning the implementation of local projects which

bring benefits to wider groups of producers, processing businesses or wide social groups (e.g. pupils, unemployed youth, women, etc.).

- Measures supporting young farmers and small holdings to promote the shortening of the market chain, or improve the irrigation facilities should be within this first group of implemented measures

- Measures which will provide easier and cheaper access to small-scale credit for the modernization of family farm holdings and add value to products on the farm, or in the Producer Group they participate.

- Measures which reduce the economic or natural risks for small holdings operations

Their implementation should be shortly followed by the launch of measures which improve the local quality of life for families with young children – these should improve both the local technical infrastructure but also the facilities for better education, training and health services, as well as providing access to fast and reliable internet.

It should be considered whether the present maximum size of support for farm modernization should be preserved in the future. The MidTerm Evaluation of the Rural Development Programme 2007-2013 has concluded that the provision of investment support to big farms is associated with big deadweight effects, which means that they are able to make the investments in increasing productivity without the support of the programme.

However, such limitations should be considered carefully as there may be other non-fulfilled requirements imposed by the legislation, which are expensive to achieve compliance with.

In all cases, it is clear that in the next programming period (a.) small family farms run by families with young children, and (b.) locally operated and managed enterprises from the food industry and the light processing industry should become the focus and priority for interventions.

The support for all productive business or for improvement of the public facilities should be accompanied with a horizontal requirement that the businesses or public services will achieve greater energy efficiency or become energy independent after

the support. This will be a great contribution to the competitiveness of businesses in the medium and long term, but will also open and preserve green jobs associated with the planning, construction and upkeep of the respective facilities.

The success of CAP interventions is heavily dependent on the formulation and sustainable fulfillment of “durable” national policies especially in the areas of:

- Sound management of the municipal and state lands which can be used for agricultural production (these should be leased for long term periods to allow the leasing farmers to invest in their upkeep and improvements and to participate in organic production and/or food quality schemes under PDO etc.)
- Border protection against contraband imports of raw materials and food stuffs;
- Protection of the interests of the customers via appropriate labeling on the marketed items
- Provision of quality public services associated with education, health, social services and security in all areas of the country
- Upkeep of acceptable public infrastructure both meeting the needs of businesses and families throughout the entire country
- Provision of supporting services (information, training, advice)
- Reduction of the administrative burden on micro and small business, as well as on the micro and small family farms
- Balancing the prospects for development of all kinds of agricultural production, all geographic regions and all social groups including by the establishment of appropriate safety nets for farmers, their businesses and ultimately – for their families
- Improving social dialogue in the policy-making process including the establishment of wider and more balanced farmer representation in the political process, as well as ensuring greater fiscal decentralization at the district or municipal government level.

It should be underlined that the last two governments made the right steps in some of the policy areas above by strengthening border controls, introducing national standards for foods and establishing and enforcing specific national state aid schemes to farmers, etc.

The preservation of the achievements made up until today as well as further progress in the above areas will be crucial for the sustainable development of the agriculture forestry and fishery sectors, the wider rural economy and rural areas at large.

## References and Data Sources:

AGRARIAN REPORT 2012, MAF

PROSPECTS FOR AGRICULTURE MARKETS 2012, EC

Website of NSI: <http://www.nsi.bg/>

Website of Agristatistics department, MAF: <http://www.mzh.government.bg/MZH/bg/ShortLinks/SelskaPolitika/Agrostatistics.aspx>

Website of Eurostat, agriculture database: <http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/introduction>

Website of BAFS: <http://babh.government.bg/>

Website of AAS: <http://www.agriacad.bg/> (offers also links to each of the 27 institutes)



# Attachments

## Attachment 1. Terms of Reference for the Report

The study should have a length of 60 pages, including an executive summary with policy recommendations

The following terms of reference can vary from this outline, but any variation should be consulted with Roland Feicht, Director of the FES-Regional Project for Labour Relations and Social Dialogue in SEE, Belgrade ([feicht@fessoe.de](mailto:feicht@fessoe.de)).

### Terms of reference of the analysis of the agro-food-sector in Bulgaria:

1. Executive Summary and policy recommendations
2. Recent Development and Outlook of the agro-food sector
  - Macroeconomic indicators
  - Agro-Food Outlook
    - External trade and competitiveness
    - Social issues, employment, social dialogue
  - Organic production
    - Organic land, certified producers and products
    - Organic market
    - Support bodies and services
3. Agro-Food Policy support
  - Agricultural Policy and Budgetary Support
    - Agricultural policy measures
    - Market and direct producer support measures
    - Structural and rural development measures
    - General measures related to agriculture (and food industry)
    - Budgetary support to agriculture (and food industry)
  - The Agricultural Knowledge and Information Systems
  - Research and Innovation

#### 4. Challenges

- Related EU-directives and implementation
- Climate Change and environmental risks
  - Domains of countries response to risks
  - Climate change and environmental risks mitigation
- Free trade agreements, food safety and standards
  - Free trade agreements
  - Food safety rules, standards and implementation

#### 5. SWOT Analysis

- SWOT of agricultural policy and support services
- SWOT analysis of agriculture structure
- SWOT analysis of livestock, meat and milk
- SWOT analysis of fruits and vegetables
- SWOT analysis of new products, modification type of products
- SWOT of external macro- and micro-environmental actors
- SWOT of market opportunities /internal strengths and weaknesses
- SWOT of critical actors

#### 6. Conclusions and policy recommendations

## Attachment 2. Implementation of BGRDP 2007-2013 by 1st August 2013

| N  | Measures                                                                                                                                                                               | Program-med Public Budget | Paid Public Budget | Paid investment projects | Paid applications accumulated |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------|--------------------------|-------------------------------|
|    |                                                                                                                                                                                        | MEUR                      | MEUR               | Num                      | Num                           |
| 1  | 111. Training, information and diffusion of knowledge                                                                                                                                  | 13.9                      | 3.3                | 126                      |                               |
| 2  | 112. Setting up of young farmers                                                                                                                                                       | 137.3                     | 104.1              | 8 461                    |                               |
| 3  | 114. Use by farmers and forest holders of advisory services (years 2010-2013)                                                                                                          | 0.5                       | 0.0                |                          | 0                             |
| 4  | 121. Modernisation of agricultural holdings                                                                                                                                            | 494.0                     | 288.3              | 2 603                    |                               |
| 5  | 122. Improving the economic value of the forests                                                                                                                                       | 11.6                      | 0.3                | 7                        |                               |
| 6  | 123. Adding value to agricultural and forestry products                                                                                                                                | 347.3                     | 84.5               | 332                      |                               |
| 7  | 141. Semi-subsistence farming                                                                                                                                                          | 55.5                      | 20.3               |                          | 13 654                        |
| 8  | 142. Setting up producer groups                                                                                                                                                        | 0.3                       | 14.6               |                          | 1                             |
| 9  | 143. Provision of farm advisory and extension services in Bulgaria and Romania (According to Annex VIII Section I D of the Act of Accession of Bulgaria and Romania (years 2007-2009)) | 6.0                       | 4.1                | 20                       |                               |
| 10 | <b>211. Natural handicap payments to farmers in mountain areas</b>                                                                                                                     | 233.2                     | 99.1               |                          | 156 831 <sup>6</sup>          |
| 11 | <b>212. Payments to farmers in areas with handicaps, other than mountain areas</b>                                                                                                     | 38.9                      | 31.0               |                          | 63 965                        |
| 12 | <b>213. Natura 2000 payments and payments linked to Directive 2000/60/EC (WFD)</b>                                                                                                     | 108.8                     | 6.2                |                          | 5 710                         |
| 13 | 214. Agri-environmental payments                                                                                                                                                       | 279.2                     | 50.3               |                          | 8 084                         |

|    |                                                                                                                     |               |              |           |  |
|----|---------------------------------------------------------------------------------------------------------------------|---------------|--------------|-----------|--|
| 14 | 223. First afforestation of non-agricultural land                                                                   | 40.4          | 2.2          | 58        |  |
| 15 | 226. Restoring forestry potential and introducing prevention actions                                                | 29.5          | 3.1          | 67        |  |
| 16 | 311. Diversification into non-agricultural activities                                                               | 96.2          | 27.7         | 262       |  |
| 17 | 312. Support for the creation and development of micro-enterprises                                                  | 134.6         | 65.9         | 681       |  |
| 18 | 313. Encouragement of tourism activities                                                                            | 30.7          | 11.9         | 171       |  |
| 19 | 321. Basic services for the economy and rural population                                                            | 694.9         | 352.5        | 511       |  |
| 20 | 322. Village renewal and development                                                                                | 197.3         | 103.8        | 506       |  |
| 21 | 41 Implementation of the local development strategies                                                               | 53.9          | 0.0          | 0         |  |
| 22 | 421 Inter-territorial and transnational cooperation                                                                 | 5.1           | 0.0          | 0         |  |
| 23 | 431-1 Running costs, acquisition of skills and animation for recognized LAGs (having local development strategies)" | 7.2           | 8.6          | 342       |  |
| 24 | 431-2 Running costs, acquisition of skills and animation for potential LAGs (for preparation for LEADER Approach)   | 10.8          |              |           |  |
| 25 | 511 Technical Assistance                                                                                            |               | 20.6         | 425       |  |
| 26 | 611 Complements to Direct Payments                                                                                  | 181.8         | 154.7        | NA        |  |
| 27 | <b>Scheme for Financial Engineering</b>                                                                             | <b>3279.0</b> | <b>121.5</b> | <b>NA</b> |  |

\* **Source:** MAF, from the site of BGRDP 2007-2013: <http://prsr.government.bg/index.php/bg/>

### Attachment 3. BGRDP measures which will not be implemented

| Axis /Measure                                                                           |     | Indicative implementation period                                                                                        | Indicative public expenditure (EUR) |            |
|-----------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------|
| <b>Axis 1 - Improving the competitiveness of the agricultural and forestry sector</b>   |     |                                                                                                                         |                                     |            |
| 1.                                                                                      | 124 | Cooperation for development of new products, processes and technologies in the agricultural and food sector             | 2009-2013                           | 24 097 000 |
| 2.                                                                                      | 125 | Improving and developing infrastructure related to the development and adaptation of agriculture and forestry           | 2013                                | 90 365 000 |
| 3.                                                                                      | 126 | Restoring agricultural production potential damaged by natural disasters and introducing appropriate prevention actions | 2009-2013                           | 12 048 000 |
| <b>Axis 2 - Improving the environment and the countryside</b>                           |     |                                                                                                                         |                                     |            |
| 4.                                                                                      | 224 | Natura 2000 payments – forests                                                                                          | 2009-2013                           | 15 548 000 |
| <b>Axis 3 - Quality of life in rural areas and diversification of the rural economy</b> |     |                                                                                                                         |                                     |            |
| 5.                                                                                      | 341 | Skills acquisition and animation with a view to preparing and implementing a local development strategy                 | 2010-2013                           | 61 437 000 |

\* **Source:** MAF, from the site of BGRDP 2007-2013: <http://prsr.government.bg/index.php/bg/>

**Note:** The budgets of the above measures have been redistributed and will be utilized under the already implemented measures above