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NOTE

From:	General Secretariat of the Council
To:	Council
Subject:	Outcome of the meeting of the Ministers of Agriculture of the Visegrad Group extended by Bulgaria, Romania and Slovenia (GV4 + 3) on 26 October 2016 in Warsaw - Information from the Polish delegation

Delegations will find in Annex an information note from the Polish delegation on the above subject to be presented under "Any other business" at the Council ("Agriculture and Fisheries") on 14-15 November 2016.

ANNEX

Outcome of the meeting of the Ministers of Agriculture of the Visegrad Group extended by Bulgaria, Romania and Slovenia (GV4 + 3) on 26 October 2016 in Warsaw

On 26 October 2016, the meeting of the Ministers of Agriculture of the Visegrad Group extended by Bulgaria, Romania and Slovenia was held, under the Polish Presidency of the Visegrad Group.

The meeting was devoted first of all to the discussion on the Common Agricultural Policy in the context of the mid-term review of the current EU multiannual financial framework and the European Commission's proposals of simplifications for the draft Omnibus regulation. In order to focus the discussion, the Polish presidency asked the individual delegations to provide earlier the answers to questions concerning the evaluation of the EC communication on the MFF review in the context of the current and future role of the CAP, as well as the evaluation of the draft Omnibus regulation and proposals of supplements. Based on the information provided, the Presidency prepared a document summarising the discussion in this area, which was agreed and adopted during the meeting.

In the further part of the meeting, the delegations presented their positions on the possibility of changing the rules of the so-called hygiene package, aimed at allowing farmers to slaughter animals in the holding and facilitating direct sales of derived meat on the local market. Poland also provided information on the current epizootic situation regarding the ASF virus and the measures undertaken aimed at preventing the spread of this disease in Poland and European Union.

In the course of the talks, the issues related to trade in agricultural real properties were raised and the views on the market mechanisms in the sugar and cereal markets were exchanged.

At the end of the debate, the Ministers signed a Common Declaration for the stronger inclusion of the research potential of the Central and Eastern European countries (EU-13) into the implementation of projects under the Horizon 2020 programme in the field of agriculture, including bioeconomy.

The delegations will attached:

1. Conclusions of the meeting of Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia (GV4+3) on 26 October 2016 in Warsaw

2. Polish V4 presidency's non-paper on the CAP in the context of the MFF 2014-20 mid-term review/revision and simplification proposals in the omnibus draft regulation

3. Common Declaration of the Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including the bioeconomy

Conclusions of the meeting of Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia (GV4+3) on 26 October 2016 in Warsaw

The Ministers of Agriculture of the Visegrad Group (Czech Republic, Hungary, Poland, Slovakia) and Bulgaria, Romania and Slovenia (GV4+3) gathered on 26 October 2016 in Warsaw, have discussed the following topics and agreed on the following:

- **CAP in the context of the MFF review (including „Omnibus") and the future of the CAP**

In the context of the initiated discussion on the MFF after 2020, to UNDERLINE that the CAP is a policy that brings value for money and STATE that the CAP, including its EU financing, should be continued. Moreover, the CAP should accomplish the objectives set out in the Treaty and ensure equal conditions of competition.

APPRECIATE the "Omnibus" draft regulation as an important step in the CAP simplification process. However, they ARE OF THE OPINION that some of the Commission proposals do not seem to bring reduction of administrative burden and simplification. UNDERLINE that simplification effect depends on individual factors in the Member States.

PERCEIVE the need to amend the draft regulation with the several points raised by the Member States, as well as the need to analyse carefully these proposals in future works on the regulation. The amendments should be adopted by the EU Agriculture and Fisheries Council (AGRIFISH).

INDICATE the will to cooperate in the works on the "Omnibus" draft regulation and in the context of the MFF review (as stated in the attached the Polish V4 presidency's non-paper on the CAP in the context of the MFF 2014-20 mid-term review/revision and simplification proposals in the omnibus draft regulation).

CALL on the European Commission to prepare an effective CAP for the next programming period so it will be able to respond to the increasing challenges of the agricultural markets and to maintain the European Model of Agriculture.

- **African Swine Fever (ASF)**

AGREE that the African Swine Fever (ASF) is a serious problem for EU farmers, for Polish farmers in particular and other affected countries, as well as a threat for the whole European Union. Past experience shows that fighting this disease may be long-term and require multi-directional actions and significant financial expenses.

URGE the European Commission to reinforce dialogue with affected countries outside the EU, in order to ensure that they effectively halt the spread of the swine fever on their territory.

EMPHASIZE the need for an EU financial support to assist Poland and the other affected countries to deal effectively with the consequences of the African Swine Fever, and therefore to halt the spread of the African Swine Fever in the European Union. Countries bordering the infected countries also need to be financially supported in their efforts to prevent the further spread of the disease.

- **Trade in agricultural properties**

DISCUSSED the current legal situation in the field of trade in agricultural properties in GV4+3.

- **Agricultural markets**

Sugar: CALL on the European Commission to take adequate measures aimed at reliable analysis of the situation on the sugar market in order to work out solutions enabling to ensure the future EU market stability after the production quota system is abolished.

Cereals: PERCEIVE the necessity to cooperate on the control of imports from third countries. They CALL on the European Commission to take measures aimed at adjusting or reviewing the intervention price for cereals so that the intervention instrument becomes more effective.

- **Horizon 2020 Programme**

ADOPT the Common declaration of the Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including bioeconomy (attached the Common declaration).

CALL on the European Commission to take efficient measures aimed at ensuring an appropriate participation of the Central and Eastern European countries in creating and functioning of the European Research Area (ERA) in the field of agriculture, bioeconomy and rural areas.

Polish V4 presidency's non-paper on the CAP in the context of the MFF 2014-20 mid-term review/revision and simplification proposals in the omnibus draft regulation

This non-paper summarises discussion of ministers of agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia on the CAP in the context of the MFF 2014-20 mid-term review/revision and simplification proposals in the omnibus draft regulation. The discussion took place at the meeting in Warsaw on 26 October 2016.

- The meeting took place at the important time of debate on mid-term review/revision of the current Multiannual Financial Framework 2014-20 (MFF). All participating ministers believe that the review of the MFF is a good opportunity to adapt the EU budget to the new challenges in Europe. In this context special emphasis should be put on strengthening investment, competitiveness and employment, including those in rural areas, with the ultimate objective of ensuring convergence across the European Union by maintaining the proper financing of policies set out by the Treaties including the Common Agricultural Policy (CAP) and cohesion policy.

- The review of the MFF is perceived as a starting point for discussion on the future of the EU polices. Decisions concerning next MFF after 2020, its size and features, shall be based on fair and solid assessment of the effectiveness of not only the CAP and cohesion policy but all important policies financed by the EU budget. The MFF after 2020 shall take into account broad scope of challenges the EU is facing, including tasks related to trade liberalization or implementation of the energy and climate policy and their influence on agricultural sector. Important changes that have been initiated in the MFF 2014-2020 deserve to be finalised in the forthcoming financial perspective, for example full convergence of the direct payments between Member States .

- The CAP should continue to be strong and adequately funded EU policy. It is essential that the CAP shall remain fully financed from EU budget in order effectively pursue treaty objectives and to avoid disruption in the sector in times of increased challenges for agriculture and the broad scope of requirements to be met by farmers. The CAP fits well into the broader concept of European Added Value and continues to be relevant and justified.

- The omnibus draft proposal presented by the European Commission (EC) as a part of the mid-term review package is a welcomed initiative in the simplification process. Introducing changes to the CAP basic acts is a long expected step necessary to reduce administrative burden and to provide for a simpler and more effective implementation of the policy. Many of the proposed changes could be supported and accepted, some however pose doubts as to their simplification effects. Further work on the proposed changes is required and the agricultural Council and its working fora should have a decisive role in this process. Leading role of the General Affairs Council in decision making process on the omnibus regulation shall not be a precedent to any future CAP reforms.

- In the context of amendments proposed by the EC for the rural development regulation it is important to emphasize, that farmers should be the ones who are benefiting from CAP subsidies. Only those socio-economic aspects including sudden demographic changes should be financed from the CAP, which affect the social and demographic status of EU farmers.

- Proposed changes of the provisions concerning financial consequences of the non-recovery of debts and cancelation of the 50/50 rule are considered as a violation of the agreement struck during negotiations of the 2013 reform. This change could lead to important financial consequences for the Member States which is not acceptable.

- The financial discipline mechanism could be made less burdensome. The procedure could be simplified by carrying out of the unused part of the crisis reserve for a financial year to the crisis reserve for the next financial year.

- Changes to the provision on maximum acceptable national assistance to the producer organisations (Article 35 of the common market regulation) is another proposal which brings opposition. Modification presented by the EC will lead to unacceptable decrease of support for producer organization in Member States where degree of organisation of the fruit and vegetable sector is low It is important to maintain at least the current level of support for those Member States whose degree of organisation is below the Union average.

- The proposed amendments in the financial instruments, income stabilisation tools (under the RDP regulation) as well as in the implementation of the support to young farmers and changes to the voluntary coupled support (in the direct payment regulation) should be carefully analysed, taking into account that the simplification effect depends on specific circumstances of each Member State and on advanced process of implementation of the current MMF; therefore they should be voluntary for Member States.

- Simplification effects of the omnibus proposal could be enhanced by additional changes in the CAP basic acts. With this regard the EC is encouraged to analyse carefully simplification proposals and comments presented by the Member States to the Slovak Presidency of the Council.

Information from the Polish delegation concerning outcome of the meeting of the Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania, Slovenia countries held in Warsaw on 25-26 October 2016 - COMMON DECLARATION OF THE MINISTERS OF AGRICULTURE OF THE VISEGRAD GROUP AND BULGARIA, ROMANIA AND SLOVENIA for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including the bioeconomy

Context

The challenge

The Horizon 2020 is gaining in importance in the current financial perspective. The programme plays an important role in achieving the objectives of the Europe 2020 strategy for smart, sustainable and inclusive growth through research and innovation also in the field of agriculture.

The European Commission completed the work related to the Long-term EU strategy in the field of agricultural research and innovation that should provide the guidelines and the contribution to the programming of the Horizon 2020 for the years 2018-2020. In parallel, the European Commission is preparing the Work Programme 2018 -2020 under the Horizon 2020 Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy), and started the Horizon 2020 Interim Evaluation, which provides an opportunity to consider the needs indicated by the Central and Eastern European countries.

Despite of the increasing budget for the programme and structural changes implemented so far by the European Commission (widening package, simplification of measures, actions towards synergies with ESIF instruments), low participation of the EU-13 countries is still persistent. An analysis of the existing participation of the EU-13 countries in the Horizon 2020 indicates a geographical imbalance in use of its resources to the detriment of the Central and Eastern European countries. The UE-13 countries account less than 5% of the total budget spent so far under the Horizon 2020.

Meeting of the Ministers of Agriculture of VG 4+3

On the initiative of the Polish Presidency of the Visegrad Group, the Ministers of agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia adopted the Common Declaration for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including the bioeconomy. The Common Declaration (attached) has been signed during the Ministers of Agriculture meeting of the Visegrad Group countries and Bulgaria, Romania and Slovenia, that was held under the Polish Presidency of the Visegrad Group, on 25-26 October 2016 in Warsaw.

Conclusions of the meeting

The Ministers agreed that there is a need to find effective solutions to ensure a stronger involvement of the research needs and potential of the Central and Eastern European countries in co-creating and functioning of the European Research Area (ERA) in the field of agriculture, bioeconomy and rural areas. The Ministers committed to work together and to contribute to the further development of the European Research Area and call on the European Commission to introduce instruments reducing a geographical disproportions in participation of the EU-13 countries in the Horizon 2020 Programme. The support from all the member states and the European Commission is crucial. The Ministers proposed to introduce into the Work Programme 2018-2020 under the Horizon 2020 Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy) the common developed proposals of the topics in order to increase the use of the research potential of the Central and Eastern European countries.

COMMON DECLARATION OF THE MINISTERS OF AGRICULTURE OF THE VISEGRAD GROUP AND BULGARIA, ROMANIA AND SLOVENIA

for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including the bioeconomy.

The European Commission is currently preparing the Work Programme 2018 -2020 under the Horizon 2020 Societal Challenge 2 (*Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy*). At the same time, the European Commission completed the work related to the *Long-term EU strategy in the field of agricultural research and innovation* that, in accordance with the European Commission information, should provide the guidelines and the contribution to the programming of the Horizon 2020 for the years 2018-2020.

An analysis of the existing participation of the EU-13 countries in the Horizon 2020 still indicates, that the widening participation principle of the present programming period has not been reached yet. The EU-13 countries account for less than 5% of the total budget spent under the Horizon 2020 until now.

The Ministers of Agriculture of the Visegrad Group and of Bulgaria, Romania and Slovenia:

APPRECIATE the efforts undertaken by the European Commission. However UNDERLINE that, despite the increasing budget for the programme and structural changes implemented so far (widening package, simplification of measures, actions towards synergies with ESIF instruments), low participation of the EU-13 countries is still persistent.

BELIEVE that in case of many research areas the EU-13 countries perspective is part of the scientific excellence and without EU-13 countries knowledge and involvement the basic principle of scientific excellence is seriously constraint.

UNDERLINE a need to find effective solutions to ensure a stronger involvement of the research needs and potential of the Central and Eastern European countries in co-creating and functioning of the European Research Area (ERA) in the field of agriculture, bioeconomy and rural areas.

COMMITED to work together and to contribute to the further development of the European Research Area by organizing joint programming exercises. The support from all the member states and the European Commission is crucial. In the frame of the already existing tools, like research and innovation actions, collaborative and support actions, pilot and flagship initiatives, joint programming initiatives should be found solutions to focus the common efforts for a successful co-construction.

REQUEST the European Commission to take urgent measures aimed at the stronger use of the research potential of all Member countries in the process of building the single European Research Area (ERA).

CALL ON the European Commission to introduce instruments reducing disproportions in participation of the EU-13 countries in the Horizon 2020 Programme, *inter alia*, by:

- considering the needs and possibilities of the EU-13 countries, related to the climatic and social specificity of the agri-food, bioeconomy and rural areas of the EU-13 countries;
- flagging certain topics as requiring research scope from across all the macro-regions of the EU;
- supporting the macro-regional cooperation actions, e.g. the BIOEAST Initiative;
- enhancing incentives for new participants;
- introducing research and innovation actions, coordination and support actions and joint programme initiatives for the EU-13 countries in the order to increase their activity in creating and functioning of the European Research Area (ERA);
- strengthening the efforts foreseen in the Horizon 2020 regulations i.e. balance between small and large projects and geographical balance of evaluators;
- considering further simplification of rules within the Horizon 2020, including remuneration schemes for participants.

PROPOSE to introduce into the Work Programme 2018-2020 under the Horizon 2020 Societal Challenge 2 the common developed proposals of the topics in order to increase the use of the research potential of the Central and Eastern European countries. Joint proposals of the topics (attached) have been formulated in the following thematic areas:
(i) development of regional, national and European Bioeconomy in the Central and Eastern European countries,
(ii) sustainable agri-food sector,
(iii) rural renaissance.

Warsaw, 26.10.2016

On behalf of

- Poland: .....
  Krzysztof Jurgiel, Minister of Agriculture and Rural Development
- Czech Republic: .....
  Jiří Šír, Deputy Minister of Agriculture
- Hungary: .....
  Sándor Fazekas, Minister of Agriculture
- Slovakia: .....
  Gabriela Matečná, Minister of Agriculture and Rural Development

Bulgaria: .....
Vassil Groudev, Deputy Minister of Agriculture and Food

- Romania: .....
  Teodor Mihalcea, State Secretary in the Ministry of Agriculture and Rural Development
- Slovenia: .....
  Tanja Strniša, State Secretary in the Ministry of Agriculture, Forestry and Food

Annex to *the COMMON DECLARATION OF THE MINISTERS OF AGRICULTURE OF THE VISEGRAD GROUP AND BULGARIA, ROMANIA AND SLOVENIA for the stronger inclusion of the research potential of the Central and Eastern European (EU-13) countries into the implementation of projects within the Horizon 2020 in the field of agriculture, including the bioeconomy.*

The Ministers of Agriculture of the Visegrad Group and Bulgaria, Romania and Slovenia proposals of topics for the Work Programme 2018-2020 under the Horizon 2020 of the Societal Challenge 2 (Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy), in the following thematic areas: (i) Development of regional, national and European Bioeconomy in the Central and Eastern European countries, (ii) Sustainable agri-food sector, (iii) Rural Renaissance.

Table No 1. ***Proposals of topics particularly important to the development of regional, national and European Bioeconomy in the Central and Eastern European countries.***

Proposals of topics particularly important to the development of regional, national and European Bioeconomy in the Central and Eastern European countries				
	Proposed topic	**Specific challenge (problem, justification)**	**Scope (definition of the objective, of the scope of measures within the project)**	**Expected impact (expected, key results of the project to be achieved; recipients)**
1.	Use of waste and by-products of the agri-food industry as raw materials in the subsequent production cycles according to the standards of the circular economy.	The content of the document on the circular economy indicates that the research related to using waste and by-products of the agri-food industry and reducing the amount of food waste has been taken. These projects relate mainly to technological issues, while the „zero waste" issue requires the reference also to the economic or social factors. Given the complexity of this issue, we need a measure consisting in an integrated approach to the entire food chain, which would give a possibility of reducing losses of raw materials and food throughout the life cycle of food. One of the purposes of the circular economy is to	Proposals should enable the development of new, modified or improved products, processes and services. In this regard, an analysis could also cover the social aspects (e.g. cultural or behavioral) and conditions related to the organisation of supply chains and market structures. An additional benefit would be to introduce a possibility of comparing the effectiveness (including benefits for buyers) of various solutions in this regard and to introduce the standards to assess the effectiveness at the various stages of the supply chain. The proposals should enable the identification of microbiological and chemical hazards in waste and by-products resulting from the food	Bearing in mind support for the circular economy, the expected results are: - wider and faster application of innovative, low-waste and energy-efficient technologies in the food chain; - identification and determination of possibilities of applying the innovative low-waste and energy-efficient technologies in the food chain; - support for the transition from the linear to circular economy; - support for the process of communication and acceptance on the part of the industry and consumers for the „zero waste" policy;

		include the product life cycle into the sequence „production-use-use of waste in the next production cycle". This approach aims at reducing food losses and food waste throughout the supply chain. The essence of this approach is to reduce the consumption of raw materials, reduce the amount of landfilled waste and increase the stream of waste used as part of recovery and recycling.	production process and intended for the subsequent production cycles. The proposals will be aimed at identifying, evaluating the use and developing the technologies reducing food waste as well as supply chain monitoring systems.	- reducing the negative externalities related to food waste; - strengthening the EU position in the agri-food industry, diversification of production and employment growth in the food sector, especially in the SME sector; - development of standards and norms determining sanitary safety of waste and by-products of the agri-food industry determining the implementation of the United Nations development goals for the years 2015-2030 - as part of seeking to provide sustainable consumption and production patterns (Objective 12), it is assumed to reduce, by 2030, food waste by 50% at the stage of sale and consumption and to reduce losses at the stage of agriculture and processing.
2.	Integrated biomass production for the multi-directional use taking into account management of land with the fragmented agrarian structure and marginal areas.	Undertaking the research in this area is very important as the global demand for biomass used for food and non-food purposes is constantly growing. On the other hand, the area of used land is decreasing, especially in the developed and developing countries. Therefore, it is necessary to break structural barriers reducing the effectiveness of the biomass production. An important issue on an European scale is also to restore to the production and to improve the effectiveness of management in marginal land.	Proposals should specify the conditions for producing and using biomass in a closed cycle as well as the conditions for developing the non-food use of agricultural products. It should allow to develop the selection of relevant species and agricultural technology for the biomass production in certain regions of Europe, depending on the local soil and climate conditions. It should also indicate the directions of the biomass production depending on the local market conditions and the agrarian structure.	The effect of the work will be: - diversification of the agricultural production, - increase in the production effectiveness, - improvement in and stabilisation of farmers' income, - reduction in negative pressures on the environment, e.g. by reducing the consumption of fossil fuels.
3.	Development of modern research methods, modelling and receiving the high-efficient and functional components from	Due to the promotion of the sustainable production of the agri-food sector, it is important to put into practice the latest solutions as regards the new forms of the use of biomass in human nutrition. Better cooperation between researchers, advisors, farmers and food industry operators in	Development of technologies aimed at producing new generation food, including functional food and nutraceuticals for health prevention and supporting the therapy of lifestyle diseases, especially senior diseases. Implementation of the widely understood health	The measures within the framework of the projects should contribute to the effective implementation of the latest scientific knowledge and to the dissemination of the best practices on this subject, including: - implementation of new solutions into the

	biomass as a source of a new generation of dietary supplements and nutraceuticals meeting the modern expectations of consumers and combating lifestyle diseases.	the entire supply chain in order to stimulate the exchange of technological innovation and knowledge, so as to optimise the use of resources and move to the knowledge-based economy in the field of nutrition and the use of functional food components.	prevention through the modern nutrition system using innovative food products of natural origin. Preparing pilot solutions and scalable/ replicable implementation solutions.	economic practice, - improvement in the knowledge sharing process to the economic practice, - use of collected solutions and the intensity of their dissemination among the end users.
4.	Research, analysis of the potential and structural conditions of agriculture as a source of biomass in the eastern and central part of the EU, and determining the strategic directions of development in the bioeconomy.	Agriculture in Eastern and Central Europe still does not use its full production potential. The importance of this region as a source of biomass for the economy may, however, increase in the following years, thanks to the use of new technologies and research achievements. In relation to the EU-15, the use of the potential with regard to the bioeconomy of the EU-13 countries affects adversely the achievement of the objective of the Europe 2020 strategy. The EU activities in this area should lead to developing models of action to strengthen the economic and social effectiveness of the bioeconomy in the countries of the Central and Eastern part of the EU.	Proposals should specify the production potential of agriculture in Central and Eastern Europe and define its constraints as well as opportunities and directions of development of the agricultural production in the region. It should allow to indicate the possibilities of management of produced biomass. These measures should focus on knowledge and transformation of conventional products and industrial processes into resource- and energy-efficient bioproducts and bioprocesses, development of integrated second and subsequent generation biorefineries, optimisation of the use of biomass from the primary production, including residues, biowaste and by-products of the bioindustry. By supporting the standardisation and certification systems for bioproducts, new outlet markets should be opened for both the primary production and products derived from it. It is also necessary to implement the measures with regard to regulation and demonstration/field tests, taking into account the impact of the bioeconomy on land use and changes in the way of land use. These measures should affect opinions and knowledge of the civil society about the bioeconomy .	Determining the objective factors underlying the economic and social effectiveness of the development of the bioeconomy in the countries of the eastern and central part of the EU, using the projection methodology, allowing to make international comparisons. This will enable the practical application of the indicators in defining the policy objectives and tools in this regard. The objective of the implementation of the projects will also be to develop and promote low carbon, resource-efficient and sustainable technologies and the bioindustry sectors competitive for the Euroregion. The research results should indicate the more rational directions of the development of the agricultural production in the region and the solutions improving the effectiveness of the biomass production in Central and Eastern Europe. Consequently, this should lead to reducing the development disproportions in Europe, as aimed at by the EC.

5.	Analysis of the Environmental Life Cycle Assessment (LCA) of key products of the agri-food industry.	The Environmental Life Cycle Assessment (LCA) is a methodological basis for so-called Product Environmental Footprints (PEF). It is aimed at standardising the market of organic products and developing common methods for measuring environmental performance in the life cycle of products and companies. Currently, for the calculation of the impact of the agricultural production in the EU, we use the pan-European databases (e.g. AGRIFOOTPRINT). Unfortunately, the accuracy of this database recommended by the EC for some Member States (particularly the Central and Eastern European countries) is low - due to the fact that the proposed indicators/converters/suggested values have been obtained by means of rather general applications of the Western European conditions to this group of countries. One should adjust the available methodology study to unify it for the countries of the EU Therefore, for the actual calculation of the environmental impact of the agricultural production (agricultural processes) throughout the life cycle, it is necessary to acquire data representative of the most important unit processes and to update them on a permanent basis.	Proposals should allow to develop new, or to modify the existing, methodologies for measuring environmental performance. The proposals should be based on in-depth research and process analysis so as to implement the concept of the life cycle in environmental terms, including the development, adjustment of the methodologies of the adequate for EU countries, including Central and Eastern European countries to acquire data representative of the most important unit processes, which will enable the comparability at the EU level.	Bearing in mind support for the concept of the life cycle in environmental terms (LCA), the applications should: - clearly determine the most important unit processes, - identify the existing methodologies and possibilities of using them, - aim at developing the European standard with regard to determining and communicating the environmental information.
6.	Increasing the value added use of agricultural- and forestry biomass.	The gap is that there are several critical points to improve use of agricultural and forestry biomass in less developed EU regions. Economically viability often conflict with ethical and sustainability aspects. A game changer would be to perform research on how to unlock the great and mostly unutilized potential for biomass production and added value utilization in the less developed EU regions and especially CEE countries with respecting the sustainability requirements and increasing the economic	The first objective of the project is building a detailed knowledge base on biomass volume can be sustainable collected under different Central European conditions. The second objective of the project is to rank different technologies, different utilization pathways concerning there environmental and economical performances. Circularity, farm structural and regional aspects should also be clarified.	A comprehensive analysis of biomass pathways will be given. Results of the research and the ranking will provide decision makers with the knowledge, how to regulate and support efficiently biomass utilisation without disrespecting sustainability aspects.

		advantages in the production regions. Since biobased industries and especially non-traditional higher value added biomass utilisation will depend on support at least in mid-term, policies must find solution for the conflicting aspects. Some sort of hierarchy of use must be developed for particular biomass forms, and for various conversion platforms adaptable to different conditions.		

Table No 2

Proposals of topics particularly important to the sustainable agri-food sector (Sustainable development of the agri-food sector).

Proposals of topics particularly important to the sustainable agri-food sector (Sustainable development of the agri-food sector).				
	Proposed topic	**Specific challenge (problem, justification)**	**Scope (definition of the objective, of the scope of measures within the project)**	**Expected impact (expected, key results of the project to be achieved; recipients)**
1.	Development of new products – functional food products with the high nutritional and health value.	Improvement in the quality of raw materials of plant and animal origin creates possibilities of obtaining food products with the enhanced dietary and health values. This is a response to the increasing interest of the society in the value of food products.	Development of new methods to assess the technological value of plant raw materials and farm animals taking into account new characteristics, including the occurrence and quality of health components present in raw materials of agricultural production. It is also advisable to conduct the research aimed at determining the optimal processing technology to guarantee maintaining the consumer and health values of substances present in food products made using raw materials of plant and animal origin.	The better use of new varieties and crops of plants and of the genetic potential of animals. Conducting the selection towards the development of new functional features, obtaining the information about new properties of raw materials of plant and animal origin. The results of the project will be addressed to breeders and producers of agricultural crops and farm animals and further to processing plants.
2.	Possibilities of shortening supply chains while meeting the safe food requirements, including technologies extending the durability of products at all stages of the supply chain as well as supply chain monitoring systems as part of the circular economy.	Local food solutions may support the key elements of the sustainable rural economy. This phenomenon is still poorly recognised in the EU dimension, in particular regarding the safe food requirements. Development of short chains entails economic, environmental, cultural-ethical and social benefits. Shortening the supply chains enables an increase in added value of the producer by, *inter alia*, eliminating certain intermediaries, enabling direct sales to consumers or reducing the production-related risk. Environmental benefits of shortening the supply chain result from the reduced costs of transport, storage and distribution.	The objective will be to seek solutions in terms of the possibility of developing short food chains. The scope of the project should include proposals to standardise the regulatory criteria and make them more flexible. The projects will aim at the identification, assessment of the application and development of technologies to extend the durability of food products and supply chain monitoring systems. Proposals should focus on extending „product shelf life" so as to reduce food losses and waste in the light of resource-efficient management of raw materials. They should look for methods to increase the use	The expected result will be the indicated economic, environmental, cultural-ethical and social benefits for rural producers as well as rural and urban consumers. The research conducted should ensure the introduction of beneficial regulatory systems for shortened supply chains while meeting the safe food requirements. Bearing in mind support for the circular economy, the expected results should: - identify the existing technologies and their potential for use in the food sector, bring them to the level of readiness which means that they can be used by the food sector across the EU, and promote

		Also taking into account the measures for the circular economy, which in the food production and marketing is a key issue for its rational use. With regard to cultural-ethical benefits, they include, first of all: help in preserving cultural heritage or increased involvement of the community, but also the implementation of high standards regarding animal welfare. In turn, social benefits of shorter supply chains may be, on the one hand, increased access to healthy and fresh food for urban residents and, on the other, rural development.	of new technologies in the food industry, including production-related biodegradable food packaging, processes affecting „product shelf life", collection of data, information and monitoring the process of the compliance with the rules. These proposals should be based on the state-of-the-art research findings contained in the EU and other projects financed in this area. Participation of SMEs which will benefit from intellectual property and from the commercial use of the project results is desirable.	their use by end users (SMEs); - develop the standards and norms for products, packaging towards extending „product shelf life"; - include SMEs from the UE into active cooperation so as to acquire data, knowledge and generate solutions for their implementation.
3.	Innovative, sustainable solutions for reducing environmental pollutants resulting from production cycles of the agri-food sector.	The sources of emissions of pollutants for environment occur virtually in all types of business. Hence, the sources of its emissions should also include the agricultural production, including, in particular, the animal production. In the animal production, the major sources of emissions are animal farms where these emissions occur as a result of the digestive processes of breeding animals, their excrements, application of feedstuffs and the operation of equipment and technological processes, storage of excrements in solid or liquid form and their application as fertilisers. Agricultural holdings involved in the animal production are currently facing a difficult challenge. Given the perspective of increasing the level of ambition as regards reducing greenhouse gas and air pollution compounds emissions in the EU by of 2030 or even 2050, there is therefore a need for them to look for modern solutions, which, on one hand, would allow them to maintain their competitive capacity, and on the other hand – would reduce environmental costs of production.	Advisable is to assess the possibility of reducing emissions of pollutants for environment (i.e. waters, air, soil) from the agricultural production, in particular from the animal production. The currently proposed reduction methods are, in fact, beneficial from the point of view of the environmental protection, however, they may often have a negative impact on the competitiveness of agricultural holdings. The majority of commonly proposed reduction methods may increase their production costs, with the absence of a positive impact on the individual performance of farm animals. These methods may generate not only additional operating costs (*inter alia*, the costs of preparing feedstuffs and applying feed additives) but also investment costs. In addition, it is advisable to introduce solutions/ measures which will contribute to reducing the negative impact of the agricultural production on the widely understood environment, while minimising	The effect of the work will be: - identification of emissions of pollutants at the individual stages of the agricultural production, including the animal production, taking into account the organic production; - assessment of the economic situation of agricultural holdings reducing emissions of pollutants for environment, taking into account organic holdings. The research results will be used in making decisions on indicating the possibilities for the agricultural sector, including, in particular, the animal production, to participate in the efforts to reduce emissions of environmental pollutants by 2030 and 2050.

			the costs which must be incurred for this reason by the agricultural sector. These solutions must take into account the need to maintain the competitiveness of national agriculture in the European market.	
4.	Development of system technological and technical solutions addressed, in particular, to small and medium-sized production enterprises and processing of agricultural products in the holding.	The economy of the EU countries depends on the operating conditions, first of all, of micro, small and medium-sized enterprises. The need to support these entities in terms of energy self-sufficiency as part of the so-called prosumer model should guarantee their further development. In micro and small holdings, there is a need to intensify the (specialised) production or to take environment-oriented measures. In medium-sized holdings, it is required to increase the intensification of the production with respect for the environment in the regions with a high production potential. Also, the logistics of trade in mass goods should be improved.	The objective of the project is to develop dedicated technological and organisational solutions. Development and calibration of simulation models should allow to: - assess the changes in the production system, land use and diversification of production (food – energy) in small and medium-sized holdings; - assess the environmental effects, including greenhouse gas emissions and carbon sequestration in the soil (LULUCF); - analyse the implementation of systemic technological and technical solutions into potential socio-economic benefits in the global and regional terms.	The expected result will be testing dedicated technological and organisational solutions within the framework of case studies. The direct implementation by the deliberate commercialisation of results, which should guarantee: - creation of new opportunities (technical, economic, specific support, etc.) in implementing the processing technologies for agricultural products and RES in small and medium-sized holdings; - dissemination of knowledge as regards new technologies; - creation of support centres for the administration at various levels.
5.	Technologies to improve the structure, sorption properties and resources of organic carbon in the soil (organic matter management, rational management of resources, including water).	Agriculture is this branch of the economy that is severely affected by the effects of progressive climate change. An increase in its frequency and intensity of occurrence increases the risk of conducting the agricultural production and adversely affects the economic situation and development possibilities of agricultural holdings. A specific risk to the effectiveness of the functioning of agricultural holdings are the more and more frequent periods of water scarcity and , consequently – drought. Therefore, an important determinant of obtaining, by holdings, the beneficial production and economic effects is to use practices resulting in the accumulation of organic matter in the soil profile.	The objective is to assess the development of methods regarding agricultural science, production technology and organisation of crops so as to reduce the degradation of soils used for agricultural purposes. The above-defined main objective will be achieved in the project through the following specific objectives: evaluation of the effectiveness of using the selected way of mulching of fertilisers and soil improvers; development of methods to protect soils against surface erosion and drought using treatments restoring their biological activity, development of crop rotation methods to optimise the process of soil protection	The key results of the project should be: - development of designs of equipment and functional models to cultivate soil so as to reduce the surface load; - determination of opportunities as regards introducing into the soil the products improving the sorption properties (types of products for specific types of soils and crops); - development of crop rotation systems to reduce the degeneration of organic matter in the soil. In addition, the assessment of the real needs of holdings as regards rational water resources management should affect:

		The increase in the content of organic matter improves the soil structure, increases the content of water, nutrients available for plants, resistance to erosion and physical and chemical degradation of the soil. In addition, the climate zone of Central Europe is characterised by frequent weather anomalies causing droughts or inundations, even intensified by climate change. This situation requires system solutions, with particular consideration given to non-technical solutions. Allowing to keep the good hydromorphological condition of waters, in accordance with the decisions of the Water Framework Directive. Therefore, the research is necessary to identify the most effective methods to counteract the negative effects of excessive soil mineralisation and rational water resources management in agricultural holdings.	against erosion and to preserve the effectiveness of the production in diversified environmental conditions and economic environment. In addition, improving the state of knowledge about the impact of water resources on the condition of soils will help to improve soil conditions and water management rules in agricultural catchments based on „in situ" water resources in agricultural holdings.	- ecologisation of water management, - creation of foundations for supporting farmers managing water in a proper manner, - mitigation of the effects of drought. - reduction in the size of flood and inundations.
6.	Emerging diseases of farm animals and methods to reduce microbiological and chemical threats in food of animal origin.	Climate change, liberalisation of trade in animals and migration situation in Europe, create new opportunities and threats of diseases of farm animals, so far unprecedented in the EU, e.g. ASF, PEDV, LSD. The transmission paths of these pathogens are unknown, there are no available diagnostic methods and possibilities of prevention. The food production in conditions of sustainable agriculture requires research on the occurrence of new threats in food, risk analysis of the occurrence of these threats and introduction of systems to reduce or eliminate their occurrence.	Proposals should be aimed at learning the biology of new pathogens, methods of their spreading, potential biological vectors, risk analysis and development of diagnostic methods. It is advisable to take into account cooperation of various communities – scientists, representatives of agribusiness, breeders, decision-making centres. The measure should be holistic, taking into account many factors and various communities involved in the food chain. It should take into account the monitoring studies identifying new microbiological and chemical threats in food, studying the mechanisms of antimicrobial resistance and its monitoring.	Learning the mechanisms of spreading of these diseases. Development of effective diagnostic tools. Reducing economic losses in animal breeding. Increasing food safety and food security of the EU countries. Learning new threats in food of animal origin. Reducing the occurrence of these threats.
7.	Analysis of the water footprint and improvement in water	The Environmental Life Cycle Assessment (LCA) is a methodological basis for so-called Product Environmental Footprints (PEF). An important	Improvement in knowledge allowing to enhance water management in agricultural catchments based on „in situ" water	Assessment of the real needs of the agri-food sector in the conditions of structural transformations taking place in the Central European countries.

	management in rural areas and in the agri-food sector with particular consideration given to the potential of so-called small retention.	element of the circular economy, including the environmental footprint, is the analysis of water consumption of the agricultural production. The climate zone of Central Europe is characterised by frequent weather anomalies causing droughts or inundations, even intensified by climate change. This situation requires system solutions, allowing to keep the good hydromorphological condition of waters, in accordance with the decisions of the Water Framework Directive. There is a particular need for proper water management at the level of the agricultural holding. It is necessary to assess properly water needs of the agri-food sector in the light of dynamic changes in its structure and organisation.	resources in agricultural holdings and in food industry plants. The final assessment of the amount of water necessary to produce one unit of a product of both the agricultural holding and products necessary for its operation (e.g., animal feed, fertilisers, etc.) and the processing-related activity in the food industry is of key importance for the balance of process water for the agri-food sector.	Rationalisation of the measures to manage water resources for the agri-food sector. Creation of foundations for supporting farmers and food industry operators managing water resources in a proper manner. Determining the method of calculating the amount of water necessary to produce one unit of a product in the individual agri-food sectors. Mitigation of the effects of drought. Reduction in the size of flood and inundations. Ecologisation of water management. Recipients: agricultural holdings, food processing plants.
8.	Sustainable, efficient and competitive freshwater fish production in the changing climate of the Continental and Pannonian Bio-geographical Region.	The gap is the EU wide acknowledgement of the fact that freshwater aquaculture represents 21% of total EU aquaculture production and is still an unexplored opportunity while on the other hand struggles with the consequence of the changing climate. The freshwater fishing sector mainly located in the Continental and Pannonian Bio-geographical Region is facing the problem of how to maintain a sustainable and efficient production. Limited resources such as water scarcity and ecosystem services of feeding certain wild animals (e.g. bird Phalacrocorax carbo or otter Lutra lutra) represents an increasing challenge of maintaining competitive position for fish farmers. A game changer would be to perform research on how to unlock the potential in freshwater aquaculture to promote rural economy and to provide ecosystems services. Thus it is important to gain knowledge on how to improve the economic viability of the freshwater fisheries with increasing environmental sustainability.	The objectives of the project are building detailed standardized databases by collecting missing and additional supplementary data and analysing production performance by evaluating potential fish production and efficiency under various pond conditions taking into account the expected effects of different climate scenarios and sustainability.	The results of the comprehensive analysis will support farmers in making decisions on implementing improved management practices to adapt to climate change and market conditions in a sustainable manner. Which will result in sustainable intensification: a form of production where yields are increased without affecting the environment. Also will help the creation of multi-functional systems (i.e. including angling, tourism).

Table No 3 .

Proposals of topics for the area of Rural Renaissance .

Proposals of topics for the area of Rural Renaissance				
	Proposed topic	**Specific challenge (problem, justification)**	**Scope (definition of the objective, of the scope of measures within the project)**	**Expected impact (expected, key results of the project to be achieved; recipients)**
1.	Development of model concepts for development of peripheral and problem rural areas in the EU using the existing endogenous potential.	In the EU, and particularly in the new Member States, there are still development disparities between urban and rural areas, in such categories as, e.g.: GDP, employment/ unemployment level, development of social and technical infrastructure, access to public services, as well as, to a large extent, they are affected by the process of depopulation, in particular due to definitive migration of the younger generation. At the same time, the issues of rural development refer to the society as a whole, as sustainable urban development is, in functional terms, closely dependent on the viability of rural areas. Rural areas may offer cities many public goods unavailable in cities and may become their rightful partner in building the prosperity of the society as a whole.	The project is interdisciplinary. Its main objective is to develop innovative solutions aimed at improving the quality of life in rural areas and making the non-agricultural economic development of peripheral and problem rural areas more dynamic. Within the framework of the project, the model solutions will be developed for peripheral and problem rural areas using the existing and unique endogenous resources, which may become the flywheels of the local economy. Good practices/examples of solutions already existing in various EU countries and in third countries will be used.	The expected key results are: a) Sustaining and then strengthening the viability and vitality of rural areas; b) Economic strengthening by means of the activation of local communities and more efficient use of endogenous resources, resulting in the increased level of prosperity of the population; c) Implementing the principles of good governance, based on knowledge and innovative solutions, resulting in improved management of rural development; d) Promoting and initiating the creation of pilot partnerships of the city: rural areas (rurban), for the purpose of joint problem solving and overcoming development challenges , using an integrated approach taking account of and respecting the environment. Main recipients are: policy-makers/decision makers from the EU level, through the national, regional and EU levels, who may use the

				proposed solutions in the programming and planning work.
2.	Developing a participative foresight method for rural areas.	The assessment of future challenges in the regions resulting from the globalisation, demographic change, climate change, change in ecosystems, rate of economic development in the regions (type: rural, semi urban, urban), etc. The wider perspective will be obtained by conducting parallel studies in the regions of other Member States. Conducting the first foresight study in rural areas in various regions of the EU. Participation of stakeholders is essential. They will properly define the upcoming challenges on a regional scale. They will join the formulation of the challenges and solutions, will participate in the development of regional strategies.	Creation of a methodology for the interdisciplinary foresight study so as to conclude on future phenomena. Identification of challenges in the regions. Development of the relevant policy mix for the regions. The studies based on, inter alia, interviews, focus groups.	A tool for the administration and policy-makers supporting the development policy of the regions. For the specific challenges, the solutions will be developed within the framework of various scientific disciplines (economic and social sciences, geography, ecology, climatology, etc.). After the completion of the project, the models and recommendations based on the developed assumptions in the analysed regions will remain available to local researchers, administration, policymakers. Improvement in spatial planning in rural areas. Creation of a group of stakeholders which, in a participative manner, will take part in the process of defining the challenges and creating recommendations for the development policy. They will possess the knowledge.
3.	Motivating knowledge-based modern farming and cooperation among farmers.	The gap is that the contribution of family, small and young farmers in less developed EU regions to agricultural output represents a much lower level of production value than that of their western European counterparts. One of the reasons is the limited flow of information, lack of knowledge and cooperation. A game changer would be to perform research on how to involve	There is a need for research to understand the mechanisms of knowledge sharing and innovation among farmers in less developed EU regions. Proposals should include different fields of research regarding the barriers and the stimulating factors for farmers in these countries toward changing their patterns of behaviour in the areas of	The results will give important input to improve the current agricultural knowledge and innovation systems in the less developed region, especially CEE countries.

		young farmers in the adaptation of good practices, boost innovation and cooperation, create possibilities for expanding farming and support knowledge sharing so that a complex and transparent AKIS could be established. The same shall apply to both data usage and adequate machine service. Also the deepening of cooperation would be crucial and the understanding and overcoming trust barriers would be important.	knowledge sharing, cooperation and innovation. It is also important to know how to handle these factors in order to encourage the development of knowledge-based modern farming and the more effective cooperation between relevant stakeholders of the research, public, business and civil spheres.	
4.	Supporting the generation change of the first enterpreneurs in the agri-food sector.	The gap is that in the less developed EU regions workplaces in the agricultural sector are not attractive for potential employees due to physical work, low wages and seasonality. A game changer would be to perform research on how to support successfully the generation change of the entrepreneurs in the agri-food sector which is made extremely difficult by the fact that there are no family or social patterns to follow as this is the first significant generation change since the regime change.	The age structure of the farm managers is characterized by the high and increasing share of older generation, while the proportion of young is decreasing in the CEECs. One driving force of the growth of enterprises is the long-term opportunity to hand over and operate accumulated resources. If the issues of generational renewal in an enterprise and the labour reinforcement are solved, the probability of longer term profitable and large-scale investments is increasing. Therefore, researches inspiring the effective generational change in the agri-food enterprises have key role in the future of the whole agri-food sector.	Comprehensive analysis of the subject area can help in the long run by the generational renewal in the agriculture and the food industry, thus the number of farms operated by young entrepreneurs opened to innovative solutions and sustainable use of natural resources can increase.