PROCEEDINGS OF PAPERS

Policy and Economics for Sustainable Agricultural and Rural Development

AAEM 10th International Conference

12-14 May 2016, Ohrid, Republic of Macedonia



Association of Agricultural Economists of the Republic of Macedonia

Policy and economics for sustainable agricultural and rural development

Publisher:
Association of Agricultural Economists of the Republic of Macedonia (AAEM)
President of AAEM:
Dr. Nenad Georgiev
President of Scientific Committee:
Dr. Mile Peshevski
AAEM, 2016
CIP - Каталогизација во публикација Национална и универзитетска библиотека "Св. Климент Охридски", Скопје
631.95(497.7)(062) 332.1:911.373(497.7)(062)
INTERNATIONAL Conference (10; 2016; Ohrid) Policy and economics for sustainable agriculture and rural development: proceedings of papers / 10 International Conference 12-14 May 2016, Ohrid, Macedonia Skopje: Association of agricultural economics of Republic of Macedonia, 2016 278 стр.: табели; 24 см
Библиографија кон трудовите

ISBN 978-9989-2358-7-0

а) Земјоделство - Одржлив развој - Македонија - Собири б) Рурален економски развој - Македонија - Собири COBISS.MK-ID 101102602

Members of organizational committee:

- Prof. Nenad Georgiev, PhD President
- Prof. Dragi Dimitrievski, PhD
- Prof. Risto Elenov, PhD
- Mile Jakimovski, PhD
- Konstantin Kocev, PhD
- Simeon Milevski, PhD
- Sanja Stojoska, MSc

Members of scientific committee:

- Prof. Mile Peshevski, PhD, Macedonia President
- Prof. Dragan Gjoshevski, PhD, Macedonia Vice President
- Prof. Etleva Dashi, PhD, Albania
- Prof. Aleksandra Despotovic, PhD, Montenegro
- Prof. Emil Erjavec, PhD, Slovenia
- Prof. Ivo Grgic, PhD, Croatia
- Prof. Ana Kotevska, PhD, Macedonia
- Prof. Aleksandra Nikolic, PhD, Bosnia and Herzegovina
- Prof. Dimitre Nikolov, PhD, Bulgaria
- Prof. Agatha Popesku, PhD, Romania
- Prof. Zorica Vasiljevic, PhD, Serbia
- Prof. Agnieszka Wrzochalska, PhD, Poland

Secretariat

- Vasko Hadzievski, MSc
- Asst. Prof. Ivana Janeska-Stamenkovska, PhD
- Asst. Prof. Marina Nacka, PhD
- Asst. Prof. Emelj Tuna, PhD
- Verica Nikolovska

Contents

an AHP approach
Development and implementation of a sustainable system of management adjusted to
the rural economy
Agro-eco-managment – the case of Bulgaria
Standard results of FADN research in Serbia
Role and importance of public relations in the state administration - the Ministry of Agriculture and Environmental Protection
The significance of healthy-safe food in development of the rural tourism of Serbia 42 Cvijanovic Drago, Mihailovic Branko, Cvijanovic Gorica
Definition of Women's Role in Agriculture Markets in Albania
The importance, role and application of innovation in agriculture
Plantation age effect on making revenue in cultivation lavender flower
Croatian competitiveness in the production of pig meat before joining the EU
Optimization of dairy farm in function of rural development of South-eastern part of Serbia
Jandric Mersida, Rajic Zoran, Milovancevic Zoran
Application of the agricultural policy measures (APM) tool: Evidence from Macedonia
Kotevska Ana, Janeska Stamenkovska Ivana, Dimitrievski Dragi
Prerogatives and importance of derivative securities development for agribusiness sector in Serbia
Kovačevic Vlado, Vasiljevic Zorica, Rajic Zoran, Zakic Vladimir
The contribution of ICT sector in the national economy
Determinants of rural development support use in Macedonia, Serbia, and Bosnia and Herzegovina
Martinovska Stojceska Aleksandra, Kotevska Ana, Bogdanov Natalija, Nikolic Aleksandra, Simonovska Ana, Dimitrievski Dragi, Uzunovic Mirza
Carp production profitability: A comparative analysis in Macedonia and Serbia

Application of the agricultural policy measures (APM) tool: Evidence from Macedonia

Kotevska Ana¹, Janeska Stamenkovska Ivana², Dimitrievski Dragi³

Abstract

The differences in the budgetary support of agriculture among countries, but also among years, hinder the process of evaluation of the harmonization with the Common Agricultural Policy (CAP). Agricultural Policy Measures (APM) tool enables uniform classification of the agriculture policy measures combining the pillar concept of the CAP and the OECD classification. This paper presents the application of the APM for the Macedonian agricultural policy for the period 2008-2014. The findings confirm the commitment for gradual harmonization with the CAP, but also identify the needs for further adjustments of the policy and the applicability of this database for conducting policy analysis and impact evaluation.

Key words: agricultural policy measures, Macedonia, policy analysis

Introduction

The agricultural policies in Western Balkan countries are under continuous reforms in the process of market liberalization and harmonization with the Common Agricultural Policy (CAP) of the European Union (EU). The reforms require continuous evaluation of this process, supplemented with an application of international standards in terms of level and type of support.

The versatility in number and type of agricultural policy measures among countries impede the process of impact evaluation, policy analysis and its comparison with other countries. Therefore, different methodologies for classification of the policy measures are developed. The most widely used are the methodology according the EU program support and the methodology developed by OECD.

Agricultural Policy Measures (APM) tool, developed by the Rednak and Volk (2010), combines both the pillar concept of the CAP and the OECD classification. The CAP concept allows

¹ Ana Kotevska (PhD), Associate Professor, Faculty of Agricultural Sciences and Food, University of "Ss Cyril & Methodius" in Skopje, Blvd. Aleksandar Makedonski bb, Skopje, Macedonia (ana.kotevska@fznh.ukim.edu.mk)

² Ivana Janeska Stamenkovska (PhD), Assistant Professor, Faculty of Agricultural Sciences and Food, University of "Ss Cyril & Methodius" in Skopje, Blvd. Aleksandar Makedonski bb, Skopje, Macedonia ³ Dragi Dimitrievski (PhD), Full Professor, Faculty of Agricultural Sciences and Food, University of "Ss Cyril & Methodius" in Skopje, Blvd. Aleksandar Makedonski bb, Skopje, Macedonia

evaluation of the level of policy harmonization, whereas the OECD classification allows estimation of the OECD indicators for measuring the level of budgetary support. This tool has already been successfully applied in the comparative study of the agricultural policies in the Western Balkan countries (Volk 2010; Volk, Erjavec and Mortensen 2014), describing the overall similarities and differences among them. The *aim* of this paper is to present the application of APM tool for classification and evaluation of the Macedonian agricultural policy, covering the agricultural policy measures and budgetary transfers for the period 2008-2014.

Following the introduction, the paper gives brief description of the tool, its application and the outputs. The main outputs and benefits are presented and illustrated as part of the results and discussion, whereas the conclusions are given at the end.

Method and data

The Agricultural Policy Measures (APM) tool enables building a database on the budgetary payments in the country per year of realization. The APM classification combines the EU classification by pillars and axis for the higher levels of aggregation, whereas the OECD criteria are used for the groups and subgroups at the lowest level of classification (Volk, Rednak and Erjavec, 2014). According to the APM classification, all agricultural measures are grouped into three main pillars: (1) market and direct producers measures; (2) structural and rural development measures; and (3) general measures to agriculture. Additional section 'miscellaneous transfers to agriculture' is added to those three pillars, but also a subgroup in each of them, to grasp the items for which there are not available information for classification (*ibid*). The groups and subgroups are based on information about the beneficiary, programmed continuity of the payment and the specificities in terms of commodity or services. For the second pillar, the structure is as the structure of the EU rural development policy 2007-2013. The classification up to the forth level of hierarchy is presented in Table 1.

The Macedonian APM database classifies the national agricultural policy measures according to this common (uniform) template, enabling comparative analysis of the agricultural policy with the other EU or EU candidate countries. In addition, due to the continuous changes of the Macedonian agricultural policy, it allows comparability of the national agricultural policy along the years. Since the very first systematic and structural changes for adjusting national agricultural policy towards CAP are established with the Law of agriculture and rural development in 2007, the Macedonian APM database covers the period since 2008.

Data used for building the APM database are obtained from the Agency for financial support of the agriculture and the rural development. Data are provided per year of realization of the payment for the programs for direct payments and rural development (2008-2014), aquaculture (2012-2014), organic production and tobacco production (2008). The national currency is converted in Euros to enable comparability among countries.

PILLAR

Group (Sub-groups)

MARKET AND DIRECT PRODUCER SUPPORT MEASURES

Market support measures (Export subsidies; Market intervention (intervention buying-in; private storage aid; food aid to third countries); Operational costs for public stockholding; Consumers support; Other and miscellaneous market support measures)

Direct producer support measures

Direct payments and variable input subsidies (Direct payments to producers (based on output (price aids); based on current area/animal; based on fixed criteria (decoupled); Other); Variable input subsidies (for seeds and seedlings; for breeding animals; for fuel, fuel tax rebates; for fertilizer and pesticides; interests concessions for short run loans; insurance subsidies; other variable input subsidies; subsidies for on-farm services))

Disaster payments and other compensations to producers (based on output; based on area/animal; based on resource retirement; for input purchase; other)

Miscellaneous - direct producer support

STRUCTURAL AND RURAL DEVELOPMENT MEASURES

Improving the competitiveness of the agricultural sector

On farm restructuring support (On farm investment support (modernization of agricultural holdings; restructuring of permanent crops plantations; land improvement; irrigation; land consolidation; restoring agricultural production potential damaged by disasters); Other on farm restructuring support (setting up of young farmers; adapting to demanding standards; participating of farmers in food

quality schemes; other on farm support)

Agri-food restructuring support (General support to agricultural sector (improving infrastructure related to agriculture; early retirement; other support to agriculture); Food processing support, marketing and promotion (investments in food processing; marketing and promotion; supporting producer groups; other support to agri-food industry))

Forestry support

Miscellaneous (competitiveness)

Improving the environment and the countryside Environment and landscape targeted payments to producers (Payments to farmers in LFA (based on output; based on area/animal; other); Payments to farmers in protected areas (based on output; based on area/animal; other); Agri-environmental and animal welfare payments to farmers (based on output; based on area/animal; other; based on non commodity criteria; first afforestation of agricultural land))

Environmental payments not directly linked to agriculture (environmental payments to forestry; other payments with environmental objectives)

Supporting rural economy and population
Support to rural population directly linked to farms (Support to on farm diversification into non-agricultural activities; Other on farm support to rural population

General support to rural economy and population (Business creation and development; Rural infrastructure and village development (basic infrastructure and services for rural population; village renewal and development); Other measures to support rural areas

Building local capacity (LEADER)

Miscellaneous rural development measures

GENERAL MEASURES RELATED TO AGRICULTURE

Research, development, advisory and expert services (research and development projects; extension and advisory service; infrastructure related to vocational training; expert

Food safety and quality control (veterinary control; plant health control; quality control) Other general support measures (farmer's and other non-governmental organizations support; information systems; technical assistance; other)

MISCELLANEOUS AGRICULTURAL POLICY MEASURES

OTHER TRANSFERS (not to agriculture): (Social transfers to agricultural sector; Budgetary transfers to other sectors (forestry, fishery); Administrative and other costs (ministry; paying agency; inspectorate; veterinary and phyto-sanitary administration); Unspecified non agricultural budgetary transfers)

Source: Adopted from Volk, Rednak and Erjavec (2014)

Results and discussion

Planning vs. realization. Planning is not always equal with the realization. The deviations from the planned budgetary support and paid transfers are due to many factors. Some of them come from the long procedures, so the payments occur in the next calendar year or, as in the case of the rural development program, in few successive years, depending on the scale of the investment or the type of measure. The number of protocols and approval criteria set by the paying agency, and the frequent amendments and adjustments on the regulation made by the Ministry, additionally complicate the process. Other crucial factors refer to the farmers' experience, education, and skills to manage the administrative labyrinth to collect and prepare all necessary documentation. The APM current database presents the payments in the year of realization, as a function of all these factors. By producing data on injected funds per sectors into the economy, it allows an impact evaluation of specific measures. The APM database cannot be used to assess the utilization of the planned budget, but may serve as an illustration of the set priorities in supporting agriculture and the rural development.

Harmonization with the CAP. The EU integration process has brought positive changes in the legislation and the institutional capacities, with a systemic establishment of policy through set of laws, strategies, programs and long-term plans, with an increased budget for agriculture to achieve the goals set in line with the CAP objectives. APM output confirms the Macedonian commitment for adjustment of its agricultural policy towards the CAP, by showing the increased budget and harmonized structure of the applied agricultural policy, but also detects the needs for further adjustments of some policy measures.

The process of allocation of budgetary transfers in the APM tool reveals that in the first years of the implementation of the CAP-like agricultural policy some of the measures were included in the Program committed to an improper pillar. For instance, the establishment of new orchards and vineyards and support of the agro-food processing industry, which are investments in its nature, as well as additional payments related to agro-environmental and LFA conditions, have been supported through the Program for financial support of the agriculture. This has been overcome, thus increasing the level of harmonization of the Macedonian agricultural policy towards CAP.

Budgetary transfers to agriculture. The first obvious notice is the significantly increased available budget since 2008 (Figure 1). Although the total budget is increased, there is not considerable change in its general structure. Direct payments are the main instruments of the agricultural policy, whereas rural development measures and general support to agriculture take only smaller share of the agricultural budget. A small increase in the rural development budget occurs after 2010, although the increased budget for direct producer support compensates this increase and results with only a small shift in the budget structure.

Direct payments are distributed per unit of agricultural product and per area of agricultural land or head of livestock, conditioned with cross-compliance measures to ensure safe and healthy food production and environmental protection. During the last years, the share of direct payments per capacity is increased on behalf of the support per output (Figure 2). Main supported sectors per output are tobacco and milk, whereas cereals and grape as per area support and sheep and cattle production per head support (Figure 3). Input subsidies are almost negligible in size (with less than 1% of direct production support budget), and market measures have not been applied in the whole period.

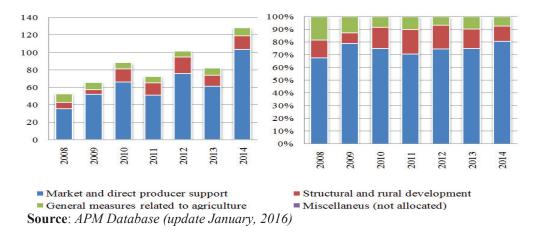
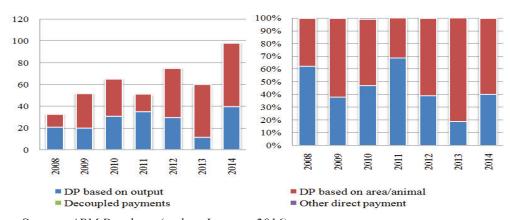
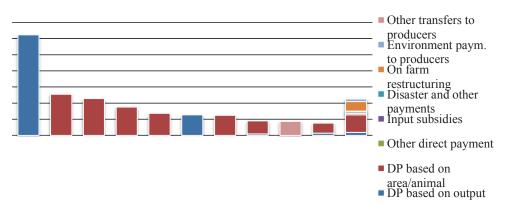


Figure 1. Budgetary support to agriculture and rural areas (mil.EUR and %, 2008-2014)



Source: APM Database (update January, 2016)

Figure 2. Direct payments to producers (mil.EUR and %, 2008-2014)

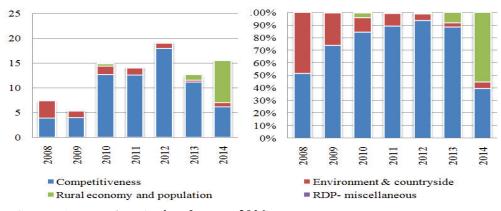


Source: APM Database (update January, 2016)

Figure 3. Budgetary transfers to producers (Top 10 commodities in 2014, mil. EUR)

From the point of rural development, the increase of the competitiveness, either as on-farm investments or agro-food restructuring support, has been the major focus of the support (Figure 4). A significant increase in the support of basic infrastructure, services and village renewal is noted in the last year. The agro-environmental and the LFA support measures are less represented, accounting only 5% of the rural development budget.

Rural development is additionally supported by IPARD funds; however due to the unavailability of detailed input data, the current APM database includes only aggregate values for the measures 101 (under the heading 'modernization of agricultural holdings') and 103 (under the heading 'investments in food processing') for the years 2011 and 2012, without detailed allocation per commodity. Although the EU funds take only 1% of the total budget transferred to agriculture, detailed allocation of these funds will produce clearer picture of the support per commodity.

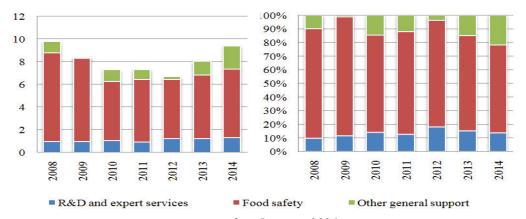


Source: APM Database (update January, 2016)

Figure 4. Structural ad rural development measures (mil.EUR and %, 2008-2014)

The budget related with the general support in agriculture is incomplete, since it does not include the budget of some administrative bodies of MAFWE (Phyto-sanitary body and laboratory, or Inspectorate for agriculture), the budget from other institutions (such as the Ministry of Environment and Physical Planning, the Bureau for Regional Development, as a body within the Ministry of Local Self-Government, Ministry of Economy, etc.), neither the budget for agricultural education. The database could be further improved with the budgets of the activities and projects financed by other national institutions or foreign donors.

The current APM database includes the budget for veterinary and food quality control that takes the largest share, and the budget for extension service that is less represented (Figure 5). This budget is stable but low during the whole period, not following the increase of the total agricultural budget. Beside the low budget for extension, previous study and report reveals the positive opinion farmers have on the role of the national extension agency in delivering information and helping them about the supporting programs and measures (Kotevska and Martinovska Stojceska, 2015; Pringle, Burlini, and Schiessl, 2014). Due to lack of information on the general support to agriculture, the fourth indication for improvement of the Macedonian agricultural policy is the need for a higher budget for extension.



Source: Macedonia APM Database (update January, 2016)

Figure 5. General Support to agriculture (mil. EUR and %, 2008-2014)

The main aspects for improvement and adjustment of the Macedonian policy towards the CAP have been also identified in National Strategy for Agriculture and Rural Development 2014-2020 (MAFWE 2014). They refer to the increasing the rural development support, gradual 'decoupling' of the direct payments, increasing the agro-environmental measures, as presented previously, but also supporting young farmers and the establishment of cooperatives and vertical integration, introducing market boards and minimum quality standards, mitigating the impact of climate change, and improving waste management and energy efficiency. The adjustment of the national agricultural policy with the CAP would continue up to their full compliance and full EU membership, but the dynamics and scope of this process depends on progress in the accession process and the beginning of accession negotiations (*ibid*).

The use of APM tool. Besides the already presented outputs and benefits, APM enable estimation of the level of support in the countries by calculating PSE, CSE, TSE, and GSSE indicators, and calculation of input data for many econometric and mathematical models for policy analysis (for instance, AGMEMOD and IFM-CAP).

Such comprehensive quantitative description of the agricultural policy with exact allocation of the budget transfers per measures and commodities is needed for conducting impact analysis of particular measures or conducting sector analysis as a basis for designing development strategies. These analyses are important tools supporting the process of policy cycle, especially the phases of problem identification and policy evaluation. In addition, such detailed allocation of the budgetary transfers enables application of the principles of democracy, transparency and accountability in the agricultural policy and budgetary transfers.

Conclusions

The application of the APM tool for the Macedonian agriculture shows gradual harmonization towards CAP. It also points out some aspects that need to be further adjusted, as increasing the budget for rural development and its utilization. A special focus should be put on the measures for improving the rural economy and the environment protection, as well as on the share of the coupled measures. Not having a clear picture of the funds spent in agriculture confirms the lack of transparency among the institutions and the need for one umbrella institution to cover all aspects of the agriculture. So far, the outputs have been used to analyse the policy development along the years and to compare it with the other Western Balkan countries. The next step is the use of this database for more advanced policy and impact analyses.

References

- 1. Kotevska, A. and Martinovska Stojceska, A. [eds.]. 2015. The impact of socio-economic structure of rural population on success of the rural development policy. Skopje: Association of Agricultural Economists of the Republic of Macedonia.
- 2. Macedonia APM Database. 2016. Agricultural Policy Measures Database compiled for Macedonia under the SWG Projects (Update January, 2016; unpublished data)
- 3. MAFWE. 2014. National Agricultural and Rural Development Strategy (NARDS) 2014-2020. Skopje: Ministry of Agriculture, Forestry and Water Economy.
- 4. Pringle, R., Burlini, E. and Schiessl, M. 2014. Evaluation on the IPARD programme and the aid for the agricultural sector and the rural development in Republic of Macedonia. (unpublished)
- 5. Rednak, M., & Volk, T. 2010. Agricultural policy measures template A tool for classifying and analyzing agricultural policy measures. In: Volk, T. 2010. Agriculture in the Western Balkan Countries. Halle (Salle): IAMO. pg. 219-245
- 6. Volk, T. [ed.]. 2010. Agriculture in the Western Balkan Countries. Halle (Salle): IAMO.
- 7. Volk, T., Erjavec, E., and Mortensen, K. [eds.]. 2014. Agricultural policy and the European integration in Southeastern Europe. Budapest: FAO, 2014.
- 8. Volk, T., Rednak, M., & Erjavec, E. 2014. Cross country analysis of agriculture and agricultural policy of Southeastern European countries in comparison with the European Union. *In:* Volk, T., Erjavec, E., and Mortensen, K. 2014. Agricultural policy and the European integration in Southeastern Europe. Budapest: FAO, 2014.