

INSTITUTIONS AND MANDATES FOR CLIMATE CHANGE ADAPTATION IN BULGARIAN RURAL AREAS

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Abstract

Climate change is undeniably the leading challenge in the 21st century (IPCC 2022). Agriculture is simultaneously a major driver of climate change and is seriously affected by it (EEA, 2019). The adaptation efforts and the level of readiness to adapt to climate change vary between regions, countries and sectors (e.g. agriculture and environment). The overall goal of the research is to assess the level of readiness for climate change adaptation of the agricultural and environmental institutions in Bulgaria. The specific objective of the paper is to analyse their institutional setups and mandates for adapting to climate change in the Bulgarian rural areas. The research findings and results will support the identification of enabling conditions and key barriers to stronger institutional adaptation capacities of the main agricultural and environmental institutions in the country. The assessment is based on documentary analysis of the national climate adaptation strategy and the legal acts, regulating the institutions' mandates and functions. The methodological approach is motivated by the conceptual model developed by Ford and King (2015) for assessing the climate adaptation readiness by governments at various scales. The focus is on three of their adaptation readiness factors – political leadership on adaptation, institutional organisation for adaptation and adaptation decision making. The results indicate a reactive rather than proactive political leadership on climate adaptation in Bulgaria. The institutional organisation for adaptation suffers serious understaffing in the Ministry of Environment and Water and in the relevance sectoral ministries. The Strategy on Climate Change and Adaptation stated the need for increased capacities and training in sectoral institutions and stakeholders in 2019. In 2023, there is only one environmental institution with an official mandate on climate change – the Climate Policy Department in the Ministry of Environment and Water. Its mandate is on policy development at the global, European and national level addressing both mitigation and adaptation needs; and it is the smallest unit in the ministry in terms of staff numbers. The other environmental institution with a mandate on climate change is the Executive Environmental Agency which monitors the greenhouse gas emissions and the related permits and registers, with no explicit mandate on climate adaptation. As regards the agriculture and rural development institutions, the Rural Development Directorate in the Ministry of Agriculture has a mandate to propose measures addressing climate change needs during the programming of the Common Agricultural Policy Strategic Plan 2023-2027. The identified needs (i.e. introduce climate adapted breeds and plant species) relate to the farming sector and not to the rural areas. Overall, the key weakness of the Bulgarian climate adaptation approach in rural areas is its reactive and ad-hoc basis. It either is driven by EU regulations and requirements or is implemented when project opportunities arise, without systemic planning and ownership of responsibility in the agriculture or environmental institutions.

Key words: climate change governance, adaptation readiness, agriculture

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Introduction

Climate change is undeniably the leading challenge for the global community in the 21st century (IPCC, 2022). The efforts to limit the climate disrupting emissions (mitigation) while at the same time, prepare for the adverse effects from the ongoing weather extremes (adaptation) strain political and institutional capacities at different governance levels. Agriculture is an exemplar sector for both being a major driver of climate change and for being seriously affected by it (EEA, 2019).

Overall adaptation efforts have increased significantly but are still „unequally distributed across regions“ and „fragmented, small in scale, incremental, sector-specific, designed to respond to current impacts or near-term risks, and focused more on planning rather than implementation“ (IPCC, 2022). The largest adaptation gaps exist among lower income population groups, among which small-scale agriculture producers and rural inhabitants.

Both the scientific community and practitioners aim to contribute to the understanding of the adaptation needs and gaps of the enabling capacities and institutional readiness across sectors and governance levels, e.g. national adaptation capacity frameworks (Berrang-Ford et al., 2019; Dixit et al., 2012; Ford & King, 2015), local adaptation capacity framework (Aguiar et al., 2018; Jones et al., 2010;), agriculture and forestry adaptation (Ignaciuk, 2015; Vizinho et al., 2021; Zhao et al., 2022) and the interaction between them (Barr & Lemieux, 2021; Darjee et al., 2021; Ford et al., 2017; Huitema et al., 2016; Olazabal et al., 2019).

The overall objective of the research is to assess the level of readiness for climate change adaptation of the agricultural and environmental institutions in Bulgaria. The specific objective of the paper is to analyse their institutional setups and mandates for adapting to climate change in the Bulgarian rural areas. The research findings and results will support the identification of enabling conditions and key barriers to stronger institutional adaptation capacities of the main agricultural and environmental institutions in the country. This is the first step of assessing the level of readiness for climate adaptation in the rural areas in Bulgaria.

Methodological Approach

The study of climate adaptation mandates is motivated by the six adaptation readiness factors, developed by Ford and King (2015). They proposed a conceptual model „to assess readiness with regard to planned adaptation by governments at various scales“ by six factors that were „essential for adaptation to take place and without which adaptation was unlikely to occur“ (Table 1).

The assessment of the Bulgarian governance set up and mandates is based on documentary analysis of the national climate adaptation strategy and the legal acts, regulating the institutions' mandates and functions. The focus is on three of the adap-

tation readiness factors – political leadership on adaptation, institutional organisation for adaptation and adaptation decision making and stakeholder engagement. Thus, the scope of the analysis is at the national level.

Table 1. Factors relevant to adaptation readiness

Factor	Assessment options
Political leadership on adaptation	Statements from leaders on the importance of adaptation, creation of national adaptation strategies, development of legal mandates, including in departments and governmental plans.
Institutional organisation for adaptation	Existence of political and administrative structures that foster or limit adaptation.
Adaptation decision making and stakeholder engagement	Proactive inclusion of stakeholders and communities in decision-making about planning, implementation and monitoring.
Availability of usable science to inform decision-making	Quality, timely and reliable science available to inform decision-making and implementation of actions.
Funding for adaptation planning, implementation and evaluation	Specific funding and resources dedicated to adaptation efforts, including capital, maintenance and human resources for both research and actions.
Public support for adaptation	Public opinion and perception of risks as an influence on decision making and implementation
Interlinkages among factors	Factors that are contingent on other factors or reinforce each other. Tension between factors, limit or override each other.

Source: Adapted from Ford and King (2015), and Ford et al. (2017)

National adaptation governance set up and institution's mandates

1. Political leadership on adaptation

In Bulgaria, the ultimate responsibility for climate policy is with the Parliament, as stipulated in the Climate Change Mitigation Law. The Council of Ministers has the overall responsibility of any policy implementation. The climate policy is within the competences of the Ministry of Environment and Water (MoEW). The Bulgarian Climate Coalition² advocated for over a decade the need for recognising the high priority of climate policy and action. The first indication of the high level of political importance of climate change was given at the end of 2021, when a deputy prime minister on climate was appointed. However, the government was short-lived

² <https://climatebg.org/en/documents/stanovishta/>

(13 December 2021 – 22 June 2022) and the next government did not renew either the priority or the position. Thus, climate remained one among equal policy topics in MoEW; the ministry not even (re)named as ministry of environment (water) and climate.

The Climate Change Mitigation Law, adopted in 2014 and amended several times after that, was the only legal act on climate. Its focus was on climate mitigation as its title indicated. Nevertheless, climate adaptation was referred to in several articles aiming to „*ensure the long-term planning of measures on climate change adaptation*“.

The availability of national strategy and/or action plan, which is another indicator of political importance, was prompted by the European Union (EU) climate policy. Bulgaria was among the last EU states to adopt a National Climate Change and Adaptation Strategy and Action Plan in 2019. For comparison, 20 EU member states had adopted national climate adaptation strategies by 2015 (Aguiar et al., 2018). The Climate Change and Adaptation Strategy provided a baseline assessment and sectors' prioritization (agriculture among them).

In 2023, Bulgaria was one of the only four EU member states (the other three were Germany, Hungary and Slovenia) that provided only the mandatory reporting with no additional information on climate adaptation³.

The delays in developing and adopting climate adaptation policies and the lack of high-level political positions on climate change indicate a reactive rather than proactive political leadership on adaptation.

2. Institutional organisation for adaptation

MoEW established a Climate Policy Directorate with a broad climate mitigation and adaptation policy mandate. The responsibilities comprised developing legal acts, coordinating the development and implementation of the national climate policy as well as coordinating the work of other ministries and institutions in relation to the national climate policy (art.38, RCM 208/2023). However, it is the smallest specialised unit in the MoEW with only 11 staff members. In comparison, the Air Quality Directorate has 13 staff, the Water Management and Waste Management Directorates have respectively 24 and 23 staff, and the Nature Conservation Directorate – 32. At the same time, none of the subordinate MoEW institutions – the Regional Inspectorates, the River-Basin Management Directorates or the Executive Environmental Agency received an official climate adaptation mandate (Table 2). The Climate Change Mitigation Law and the Third National Plan on Climate Change Mitigation 2013-2020 (3rdNPCCM) planned for the setting up of dedicated climate units in the related ministries, including in the Ministry of Agriculture (MoA). In 2022, the final implementation report of the 3rdNPCCM disclosed that the MoA declined the setting up of such unit. The justification provided was the

³ <https://climate-adapt.eea.europa.eu/en/countries-regions/countries>

„cross cutting character of climate change affecting the work of multiple units in the MoA system“ (p. 32). The MoA stated that the „existing structure was sufficient to ensure a good coordination of issues requiring a complex approach and complementarity“. The functional structure regulations of the agriculture institutions revealed that there was only one unit in the MoA with official climate related functions. This was the Rural Development Directorate, which was responsible for the programming of the Common Agriculture Policy (CAP) support. One of its over 15 other functions was to „program appropriate measures and schemes to combat climate change, to protect soils, biodiversity and water resources, through which to ensure the fulfilment of commitments related to the environment and climate, arising from the applicable European legislation for the European Structural and Investment Funds“ (art. 38(1) p. 11), RCM 260/2019). Again, climate change was one of four environmental issues to be addressed.

The other MoA institution with climate related responsibilities was the Executive Forestry Agency. Its Forest Management Directorate had two functions related to climate change mitigation – to participate in intra-institutional meetings and working groups and to develop and implement projects on climate change mitigation in forests. None of the functions mentioned explicitly climate adaptation responsibilities.

Table 2. Climate mandates as regulated in the legal acts on the institutions' functioning

Institution	Climate	Mitigation	Adaptation	Directorate	Legal act
1	2	3	4	5	6
Environment institutions					
Ministry of Environment and Water	x	x	x	Climate Change Policy	RCM 208/2017, 2023*
Executive Environmental Agency	x	x	.	Environment Monitoring, Permits	RCM 331/17.10.2022
Regional Inspectorates Environment and Water	.	.	.	.	MoEW, SG 54/2020
River-basin Directorates	.	.	.	.	MoEW, SG 54/2020

Continue

1	2	3	4	5	6
Agriculture Institutions					
Ministry of Agriculture and Food	x	.	.	Rural Development	RCM 260/2019
State Fund Agriculture	.	.	.	.	RCM 151/2012, 2020*
District Directorates on Agriculture	x	.	.	Agriculture Development	MoA, SG 41/2022
National Agriculture Advisory Service	.	.	.	.	MoA, SG 25/2022
Exec Agency Fisheries & Aquaculture	.	.	.	.	RCM 95/2010, 2020*
Food Risk Assessment Center	.	.	.	.	RCM 231/2016, 2020*
Bulgarian Agency on Food Safety	.	.	.	.	RCM 35/2011, 2020*
Executive Agency for Combating Hail	.	.	.	.	RCM 85/2000, 2021*
Agriculture Academy	.	.	.	.	RCM 151/2018, 2022*
Executive Forestry Agency	x	x	.	Forest Management	RCM 173/2011, 2022*

*Notes: Resolution of the Council of Ministers (RCM)/ Order of respective minister in State Gazette (SG); * year of latest change*

Source: Own compilation

The 2019 Climate Change and Adaptation Strategy assessed the institutional capacity on climate change adaption as needing improvement „at all levels and in all sectors“. The proposed focus was on „building expertise, training of the administration and stakeholders, the knowledge base, monitoring and research to enable and support adaptation actions“ (CCAS, 2019). The current review underlines that before building expertise there is an urgent need to build up the institutional mandates on climate adaptation and to strengthen the only existing institutional unit with a dedicated mandate on climate mitigation and adaptation policy as well as to establish the units in the relevant ministries and institutions.

3. Adaptation decision making and stakeholder engagement

The public bodies' decision-making on climate issues was regulated in the Climate Change Mitigation Law. It stipulated that a National Expert Council on Climate Change supported the Minister of Environment and Water. Thus, the Council was established as a consultative body. Its members comprised representatives of nine other ministries, the Executive Environmental Agency, the Bulgarian Academy of Science, the Association of Municipalities as well as other non-governmental bodies. The Ministry of Agriculture and Food was one of the members.

The operation of the Consultative Council was regulated by an Order of the Minister of Environment and Water. The draft text of the order (the only available version on the MoEW website) stipulated that its operating principles were transparency, publicity and equality among its members. An assessment by Climate Action Network in Europe stated that it *„does not function with transparency and accountability since neither its members nor its decisions or protocols of meetings are available or accessible online“* (Peev, 2022). Indeed, not even the approved rules of procedure of the Council were published.

Conclusion

The institutions' approach to climate change positions adaptation secondary to mitigation – the law is focused on mitigation; there are already three action plans focused on mitigation, and only one on adaptation. There is a single institution with a mandate on climate change adaptation – the Climate Policy Department in the MoEW. Two other institutions have specific climate change mandates but they are focused on mitigation – the Executive Environmental Agency and Executive Forestry Agency. The Rural Development Directorate has a rather general mandate for developing climate change measures with no specific focus on adaptation.

Coordination on climate change adaptation seems to be one-sided. The 2019 Climate Change and Adaptation Strategy indicated the necessary actions in terms of institutional setting and capacity building, but the MoA declined the dedicated unit. Nevertheless, certain adaptation measures were planned and activities implemented. The CAP Strategic Plan 2023-2037, coordinated by the MoA and the Rural Development Directorate, identified needs of very high priority, some of which directly related to climate change adaptation such as the introduction of climate-adapted species and varieties and sustainable forestry, implementation of conservation, integrated and organic farming and soil carbon sequestration.

The National Agriculture Advisory Service trained several hundred farmers on certain aspects of climate adaptation actions in the framework of non-climate related projects.

The weakness in this approach is its ad-hoc basis – it is driven either by EU requirements or by opportunity projects and on the good will of the staff in the public

administration and not on clear official mandates. If it was not in the EU Regulation on CAP Strategic Plans or the project funding was not available, there would not have been either of the positive outcomes.

Research indicates, „*The most effective adaptation efforts usually happen where there is a single coordinating body leading the adaptation process*“ (Ford et al., 2017). If the individual ministries decline the responsibility, then the higher-level decision-making should make sure that climate change adaptation in rural areas and agriculture is addressed properly.

References

- Aguiar, F. C., Bentz, J., Silva, J. M., Fonseca, A. L., Swart, R., Santos, F. D., & Penha-Lopes, G. (2018). Adaptation to climate change at local level in Europe: An overview. *Environmental Science & Policy*, 86, 38-63.
- Barr, S. L., & Lemieux, C. J. (2021). Assessing organizational readiness to adapt to climate change in a regional protected areas context: lessons learned from Canada. *Mitigation and Adaptation Strategies for Global Change*, 26, 1-21.
- Berrang-Ford, L., Biesbroek, R., Ford, J. D., Lesnikowski, A., Tanabe, A., Wang, F. M., Chen, C., Hsu, A., Pringle, P., Grecequet, M. & Heymann, S. J. (2019). Tracking global climate change adaptation among governments. *Nature Climate Change*, 9(6), 440-449.
- Darjee, K. B., Sunam, R. K., Köhl, M., & Neupane, P. R. (2021). Do national policies translate into local actions? Analyzing coherence between climate change adaptation policies and implications for local adaptation in Nepal. *Sustainability*, 13(23), 13115.
- Dixit, A., McGray, H., Gonzales, J., & Desmond, M. (2012). *Ready or not: Assessing national institutional capacity for climate change adaptation*. World Resources Institute (WRI).
- EEA (2019) *Climate change adaptation in the agriculture sector in Europe*. EEA Report 04/2019, ISSN 1977/8449
- Ford, J. D., & King, D. (2015). A framework for examining adaptation readiness. *Mitigation and Adaptation Strategies for Global Change*, 20, 505-526.
- Ford, J. D., Labbé, J., Flynn, M., Araos, M., & IHACC Research Team. (2017). Readiness for climate change adaptation in the Arctic: a case study from Nunavut, Canada. *Climatic Change*, 145, 85-100.
- Huitema, D., W. N. Adger, F. Berkhout, E. Massey, D. Mazmanian, S. Munaretto, R. Plummer, and C. C. J. A. M. Termeer. (2016). The governance of adaptation: choices, reasons, and effects. Introduction to the Special Feature. *Ecology and Society* 21(3):37.
- Ignaciuk, A. (2015). Adapting agriculture to climate change: a role for public policies. OECD

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- IPCC (2022). *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II, Sixth Assessment Report of the Intergovernmental Panel on Climate Change
- Jones, L., Ludi, E., & Levine, S. (2010). Towards a characterisation of adaptive capacity: a framework for analysing adaptive capacity at the local level. *Overseas Development Institute*.
- Olazabal, M., Galarraga, I., Ford, J., Sainz De Murieta, E., & Lesnikowski, A. (2019). Are local climate adaptation policies credible? A conceptual and operational assessment framework. *International Journal of Urban Sustainable Development*, 11(3), 277-296.
- Peev, P. (2022) *Bulgaria*: in CAN Europe (2022) „Climate Laws in Europe. Essential for achieving climate neutrality“. May 2022. Climate Action Network (CAN Europe)
- Vizinho, A., Avelar, D., Branquinho, C., Capela Lourenço, T., Carvalho, S., Nunes, A., Sucena-Paiva, L., Oliveira, H., Fonseca, A.L., Duarte Santos, F. and Roxo, M.J. (2021). Framework for climate change adaptation of agriculture and forestry in Mediterranean climate regions. *Land*, 10(2), p. 161.
- Zhao, J., Bindi, M., Eitzinger, J., Ferrise, R., Gaile, Z., Gobin, A., Holzkämper, A., Kersebaum, K.C., Kozyra, J., Kriauciūnienė, Z. and Loit, E. (2022). Priority for climate adaptation measures in European crop production systems. *European Journal of Agronomy*, 138, p. 126516.