Meeting of the Ministers of Agriculture of the Visegrad Four countries in Znojmo in September 2023 (Photo: MoA archive)

Interview with Mgr. Mark Výborný, Minister of Agriculture

Mr Výborný is participating in preparations for the construction of new reservoirs in the Czech Republic and is planning to build new pumped storage waterpower stations. According to the Minister, the priority in the field of water management is mainly the development of water supply and sewerage infrastructure, including drinking water treatment plants and wastewater treatment plants, technological measures to retain water in the landscape, construction and restoration of small water reservoirs and ponds, development of water supply systems, and also the modernization of existing irrigation systems. Mgr. Marek Výborný told VTEI about his first year as Minister of Agriculture and the objective he would like to achieve in this position.

Minister, last June the President of the Czech Republic appointed you Minister of Agriculture. What vision and plans did you come to the Ministry of Agriculture with?

One of the fundamental topics was the new EU Common Agricultural Policy, for which we had to evaluate the first year of its operation. It was clear to me that we would come across things that would have to be adjusted; and that the changes we will come to must be for the benefit of Czech farmers and the Czech landscape. After all, the support of organic farming, which I also focus on, is for its benefit as well; it is also agriculture which makes it possible to carefully manage the precious soil in the countryside. If we want to pass it on to future generations in good condition, we must start here and now before it is too late. The same applies to conditions for farmers and food producers; they must have the most favourable working conditions. We have to be competitive with other countries. Some steps cannot be taken from day to day, month to month or year to year, but we must be able to prepare; if only because the preparation of another new Common Agricultural Policy began this year and we, as the Czech Republic, want to be among the leaders of the debates.

In an interview shortly after your appointment, you said that a minister does not have to be an expert in a given issue. You said then that the key for a minister is to have a strong political mandate and to be able to communicate. Have you changed your opinion after a year of being a minister?

Even before joining the Ministry, I emphasized that I wanted to focus on changing the communication style. Nothing has changed since then; on the contrary, I think the ability to communicate well has become even more important. I am still convinced that the Minister and the entire Ministry must communicate very actively not only with the professional but also with the lay and agricultural public. I am a person who can listen to others and is ready to help in dealing with problems. I am aware of the fact that it is not always possible to find a solution that satisfies everyone. It is always about finding a compromise, agreeing, explaining – in short, working together for the benefit of this important field.

Water management is divided between several ministries, especially between the Ministries of Environment and Agriculture. How problematic do you perceive the division of these competences between several ministries, e.g. in the field of flood protection?

Allow me to correct the statement that water management is divided. It is a matter of sharing competences, which in itself suggests that it is not about creating different attitudes on different topics, but about cooperation in finding

the most appropriate solution to any problem related to water management. Competencies are shared by the Ministries of Agriculture, Environment, Transport, and Defence. In the case of the question about protection against floods, the situation is completely obvious – within the framework of shared competences, flood prevention is under the responsibility of the Ministry of the Environment while, for example, anti-flood measures are implemented by watercourse managers, the Povodí state enterprises, and Forests of the Czech Republic. The current European approach to watercourse modification, hydraulic structure construction, and water management is based on an effort to limit the negative effects of technological measures and modifications (both current and historical) of water bodies on water ecosystems and their quality; the goal is to improve the condition. That is why, for example, when discussing proposals for new hydraulic structures, especially reservoirs, there is a communication between the Ministries to find ways to limit negative impacts on the environment during the construction of technological measures, including the possibility of using the situation in the affected locations to support landscape and water ecosystems. Until recently, the situation of shared competences in the Czech Republic was criticized with reference to, for example, Austria, where a single ministry concentrated the top state administration for agriculture, forestry, water management, and the environment under one roof. Currently, there are also two Ministries in Austria, namely the Federal Ministry for Agriculture, Forestry, Regions and Water Management, and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology. It is evident that the issue of water management affects both Ministries, and even if the economic and environmental protection responsibilities are more clearly separated, they cannot work without close cooperation.

In 2023, the Ministry of Agriculture allocated over 20 billion crowns to combat drought. Can you tell our readers what specific measures these funds are intended for?

The "allocation" of funds resulted from the implementation of the Concept of Protection against the Effects of Drought for the Czech Republic 2023–2027, which contains 35 adaptation measures to limit the effects of drought and water shortages. The Ministries of Agriculture, Environment, Industry and Trade, Interior (represented by the Fire and Rescue Service), and Regional Development are responsible for the measures. It is a continuation of the Concept adopted in 2017, which the government decided on based on the evaluation of activities between 2017 and 2022. The adaptation measures are generally long-term, time-consuming to implement, and it is necessary to keep implementing them. This involves, for example, the construction of reservoirs for water supply, limiting the extent of erosion, and strengthening the content of organic matter in the soil. In no case can they be described as a "fight" against drought; they are measures to reduce the consequences of climate change, which manifests itself in rising air temperatures, which primarily affects water resources and water management. Unfortunately, global targets for reducing greenhouse gas emissions, which are the cause of global warming, cannot be met in such a way that by 2050 they reach the level from the beginning of the industrial age, i.e. 1850–1900. It is already obvious that it will not be possible to ensure that the increase in air temperature does not exceed the maximum by plus 1.5 degrees Celsius. An increase in temperatures above the mentioned limit – I will just mention that it is expected to be at least 2.5 to 3 degrees Celsius after 2050 – will increase water evaporation and will result in more significant impacts, in particular on water ratios, agriculture, landscape ecosystems and their biodiversity. Therefore, the importance of adaptation measures to limit these impacts is increasing, and the fulfilment of the measures contained in the Concept is becoming a priority of the aforementioned Ministries.

Priorities in the field of water management are mainly the development of water supply and sewerage infrastructure, including drinking water treatment plants and wastewater treatment plants, technological measures to retain water in the landscape, to accumulate water in the landscape through the construction or renovation of small reservoirs and ponds, development of water supply systems, preparation and construction of conduits to reservoirs, as well as modernization of irrigation systems. Over four billion crowns of support went to these measures. Examples of implemented measures are the connection and strengthening of water supply systems (seven pilot projects were completed with the support of 1.7 billion crowns), the implementation of 128 kilometres of water pipes, and 59 wastewater treatment plants. The preparation of reservoirs, such as at Vlachovice, Kryry, Senomaty, Šanov, and the conduits from the Ohře is underway; land is being bought. The implementation of agro-environmental measures is significant, for which approximately 4.5 billion crowns were allocated; for example for grassing over arable land and areas of concentrated runoff, for the treatment of grasslands, even for the protection of the northern lapwing, as well as for compensation in areas with special ecosystem protection. Land improvement projects are significant, allowing a comprehensive approach to improving the landscape structure and, in addition, through so-called joint measures they strengthen the retention of water runoff from agricultural land and contribute to the reduction of erosion. Last year, they were financially supported to the amount of 2.2 billion crowns.

One of the measures to combat drought is the construction of reservoirs. A long-standing evergreen is Nové Heřminovy hydraulic structure. What stage is this project at now?

Let me react to the word "evergreen". We can agree that the design of Nové Heřminovy reservoir is without a doubt a major intervention in any valley and river continuum and in the life of municipalities, especially Nové Heřminovy, which is affected by the construction in its lower open part. Therefore, since the catastrophic flood in 1997, an optimal solution for the protection of the inhabitants living in the Opava river valley from Nové Heřminovy through the villages of Zátor, Brantice, and Holasovice, and the towns of Krnov and Opava has been sought for about ten years. In the end, a compromise solution was agreed upon; the reservoir will be smaller, and to achieve the expected flood protection effects, adjustments will be made in the basin above the dam site as well as in the riverbed and valley floodplain below the dam. This approach includes the government resolution from 2008, which started the preparation of measures against floods in the upper Opava. In addition to the key element of the Nové Heřminovy reservoir, other measures are being carried out in the catchment, namely the construction of small reservoirs and polders, the modification of the Opava riverbed, the establishment of gauging stations to monitor precipitation and flow, as well as complex land improvements. This shows that the preparation is complex and time-consuming. So, the question is whether it is "evergreen" or the current progress of the preparation of a large-scale hydraulic structure for effective protection against floods, which starts in the village of Nové Heřminovy, ends below the town of Krnov, and concerns the border stream with Poland.

However, I can state with pleasure that a zoning decision has been issued for the Nové Heřminovy hydraulic structure, as well as a zoning decision for the realignment of road I/45 along the future flooding of the structure, which is a necessary prerequisite for implementation of the dam. It is also important that relationships with the municipality and communication with its current managers have been restored and are at a very good level.

The Nové Heřminovy reservoir is a complex measure. On the one hand, it will protect over 15,900 inhabitants and roughly 1,900 buildings, which are now in the floodplain of the 100-year flood, and on the other hand, the reservoir will raise the flow in the river and improve the water management balance of the river Opava between the towns of Krnov and Opava, which lies in the so-called precipitation shadow of the Jeseníky Mountains. Another

positive fact is that as an investor, the Povodí Odry state enterprise proposes for this hydraulic structure, among other things, a number of modern and unique compensatory measures, such as a bypass channel around the reservoir, which will replace the interruption of the Opava riverbed flow caused by the structure, a solution for an alternative method of sewage flow with areas for their storage above the flooding, and their flooding below the dam. Furthermore, a migration passage through the dam, but also through the Opava valley, is proposed for otters and other animals. Part of the concrete gravity dam is filled with soil for aesthetic reasons and for better integration into the landscape and the Opava valley. The flooding of the hydraulic structure will bring mitigation of extreme climatic effects during hot weather, and the end of the flooding deals with natural development with the gradual creation of habitats.

I can say that a number of planned anti-flood measures in the upper Opava basin have already been completed. These are gauging stations, small reservoirs, and modifications of the Opava riverbed. Preparation of the Nové Heřminovy hydraulic structure continues and I assume that its construction will begin in 2028 with permanent operation starting by 2033 at the latest.

Within the Czech Republic, several dozen locations have been identified as potentially suitable for the construction of new reservoirs. Are there locations you want to focus primarily on?

The General of Areas Protected for Surface Water Accumulation, which was updated in 2020, currently contains 86 sites. Reservoirs are now being prepared from this General in Nové Heřminovy, which I mentioned, as well as in Vlachovice in Zlín district and Kryry in Rakovník district. The plan for Kryry reservoir is expanded to include the construction of the smaller Senomaty and Šanov reservoirs and, in particular, it is supplemented by the construction of a water conduit from Ohře, taken under Nechranice reservoir. This newly built water management system will ensure sufficient and sustainable water resources for the future, even in the event of continued adverse climate change developments. The possible further use of locations from the General will result from the evaluation of the security of existing water abstraction from reservoirs, which is carried out in all Povodí state enterprises. The obtained data will also be assessed from the point of view of the availability of water supply abstractions from groundwater and, in the event of an insufficiency after 2050, it will be possible to proceed with the search for the most suitable solution. It does not always have to be a new reservoir, but the connection of water supply and water management systems. It is obvious that the water resources threatened by the unfavourable development of the water management balance are mainly in the Dyje basin, where 12 sites are protected. The list of protected sites undoubtedly fulfils its purpose, and the choice of sites for implementation will always be based on a careful evaluation of the availability of water resources in relation to the development of the impact of climate change for the situation in individual sub-basins.

In March of this year, very interesting information regarding the selection of suitable locations for the construction of pumped-storage power stations was published on the Ministry of Agriculture website. What will be the next steps? And do you already have a specific schedule?

Yes, at the turn of February and March, the Ministry of the Environment together with our Ministry presented locations where it would be possible to build new pumped-storage hydroelectric power stations (PSH). These are sites where construction does not significantly conflict with nature and landscape protection. The indisputable advantage of PSH is that they can supply electricity to the network almost immediately in case of an acute need, strengthen the stability of the transmission system, and are therefore one of the sources of "green" energy. It is another step on the path to energy independence and security for the Czech Republic, as evidenced by the already existing pumped-storage

Press conference after the inauguration of Minister Marek Výborný on 29 June 2023 (Photo: MoA archive)

hydroelectric power stations, such as at Štěchovice dam, Mohelno, and especially Dlouhé stráně in Moravia.

The list of six potential PSH sites was based on the original study of the Ministry of Industry and Trade from 2010, supplemented by the Ministry of the Environment and assessed by Povodí state enterprises. Among the six sites selected for the possible development of new pumped-storage hydroelectric power stations, which are Orlík, Slapy, Pastviny, Libochovany, Vinice, and Slezská Harta, there are two in which the Povodí state enterprises could be a potential investor. For the remaining four, the investors may be different, especially ČEZ, which operates the existing hydroelectric power stations. With their installed capacity of 1,222 megawatts, the potential of these six sites will double the current capacity of pumped-storage hydroelectric power stations in our country.

This year, the Ministry of Agriculture amended the conditions for a subsidy to reduce the content of harmful substances in drinking water, or the conditions for the use of pesticides in protective zones of water resources on arable land. Please tell us about the benefits of this amendment.

The issue of reservoir pollution has long been followed by both experts and the lay public. It is a sensitive topic because the quality of the water we drink is a public interest for all of us, since the quality of drinking water has a direct effect on human health. Given that the Czech countryside is very intensively farmed, which entails, among other things, frequent applications of plant protection products (PPP), i.e., vernacularly speaking, spraying against pests, it is necessary to make a direct connection between the applied PPP substances and the subsequent residues of these substances detected in reservoirs. These are primarily pesticides and their metabolites. As it is in the interest of society to improve the quality of drinking water for the inhabitants of the Czech Republic, it is necessary to motivate economic entities in the catchment area of reservoirs to limit the application of PPP only to the necessary extent, ideally so that agricultural activities are carried out completely without the application of PPP.

The Ministry of Agriculture has prepared a pilot project to reduce the application of PPP in the Švihov protection zone for vulnerable water resources on the Želivka River, which supplies around 1.5 million inhabitants in Prague and Central Bohemia. This pilot project was implemented between 2019 and 2023, with

interim results showing a positive trend in the reduction of applied PPP, and it was decided to expand it to other reservoirs at Římov, Vrchlice, and Opatovice. Římov reservoir serves as a source of drinking water for approximately 350,000 inhabitants in South Bohemia, Vrchlice reservoir supplies drinking water to about 60,000 inhabitants in Kutná Hora and Čáslav districts, and Opatovice reservoir to around 42,000 inhabitants in Vyškov district. The purpose of the project is to limit the application of PPP on agricultural land in the protection zones of these reservoirs, where intensive agricultural management leads to an increased occurrence of pesticides and their metabolites. An essential part of the project is the "*Methodology for the management in the protection zones for vulnerable water resources*" (OPVZ) of the affected reservoirs. This document regulates, within the framework of plant production, the possibility of applying only PPP which, in the Register of Plant Protection Products, are not excluded from use in OPVZ II and sanitary protection zones (PHO) of level II of surface water resources, while the maximum limit per hectare of the applied area is strictly set for permitted PPP. Compliance of the management in accordance with the methodology will be checked by the Central Institute for Supervising and Testing in Agriculture through on-site inspections of all involved entities. In compliance with the farming conditions fully in accordance with the Methodology, the involved entities will be entitled to financial compensation as damages for the limited production of commodities, which the farmers will implement as a result of the limited possibility of applying PPP. In the event of any violation of management, i.e. violation of the Methodology, compensation will be reduced by 100 per cent. Although this is a very strict approach, it is essential for our Ministry that the rules are followed 100 per cent for the duration of the pilot project, because only then will we be able to evaluate the impacts of this project in a relatively short period of time. In order to be able to measure and evaluate the given goals, the relevant Povodí managers will monitor both surface and drainage waters in a targeted manner. Continuous monitoring of water quality in the reservoirs in various sections will be a matter of course. I wish and believe that this measure will significantly contribute to improving the quality of drinking water, and therefore the health of the population, which is undoubtedly in the interest of all of us.

The amendment to the Urban Wastewater Treatment Directive (UWWTD) is a current topic in water management. What will the adoption of this amendment mean for Czech water management?

The amendment to the Directive will have a very significant impact on Czech water management. Its implementation will, among other things, reduce the pollution of both surface water and groundwater, which are a source of drinking water, thanks to the tightening of limits for the discharge of wastewater and the introduction of the collection of new substances such as micropollutants, i.e. mainly products of the pharmaceutical and cosmetic industries. Another contribution will be the obligation for municipalities with more than 1,000 inhabitants to have their sewers ending at an appropriate wastewater treatment plant. Until now, this limit was 2,000 inhabitants, so this obligation will now apply to about another 750 municipalities with approximately one million inhabitants.

Simultaneously, the amendment brings opportunities for the introduction of new technologies and innovations in this area, but also in the area of renewable energy sources in connection with the energy neutrality of wastewater treatment plants and sewers.

We must also take into account the fact that all these measures, which as a result will lead to the mitigation of the impact on the environment and human health, will cost a considerable amount of money and will have to be reflected in the future sewage charge.

The amendment to the UWWTD Directive introduces the so-called producer responsibility, where producers should bear part of the costs of breaking down substances contained in their products at wastewater treatment plants. What are your plans and ideas about fulfilling this obligation?

We do not yet have specific ideas about the introduction because the detailed conditions for the introduction of the so-called extended producer responsibility (EPR) are not known. The European Commission should present recommendations and guidelines for implementation in individual Member States before final approval of the Directive, which we expect this autumn. One of the possible guidelines could be the introduction of EPR within the framework of waste management, where manufacturers have responsibility for their products, including their packaging, from the production process through their distribution and sale to the final ecological disposal. For the time being, the responsibility of manufacturers will only concern the pharmaceutical and cosmetic industry, and this system will need to be set up in cooperation with other Ministries – the Ministry of Health, the Ministry of Industry and Trade, and the Ministry of the Environment, in order to ensure the necessary financial resources for fulfilling the EPR with no subsequent restriction on the availability of certain medicines.

You have completed a year in the "chair" of the Minister of Agriculture. Is there anything you would do differently? And what specifically would you like to achieve at your position?

It is confirmed to me again and again that the problem needs to be dealt with constructively and without delay at the negotiating table. We have been dealing with the flood zone decree for almost a year now, which I consider a drawback. I think that in this case we should have been more forceful from the beginning and demanded clear and unchanging opinions from the Ministry of the Environment. The problem now falls on local governments, which I am very sorry for.

And what would I like to achieve? We must certainly focus on the issue of completing the construction of sewers (or domestic sewage treatment plants), the issue of drought and water accumulation in the landscape must be addressed, which is also related to sufficient financial resources for large water management structures, such as the Nová Heřminovy, Kryry or Vlachovice hydraulic structures. I definitely want to continue the debate with the Povodí state enterprises, so that we can direct effective measures on watercourses not only to conventional "concrete" solutions, but also to the semi-natural restoration of streams.

Minister, thank you for the time you have devoted to our interview.

Ing. Josef Nistler

Mgr. Marek Výborný

Mgr. Marek Výborný was born on 10th July 1976 in Chrudim. He studied theology at St. Cyril and Methodius Faculty of Theology, and history at the Faculty of Arts of the Palacký University in Olomouc. Initially, he worked as a teacher of history, social sciences, and Latin at the Pardubice Secondary School, and between 2012 and 2018 he was its headmaster. He has been a member of KDU-ČSL since 2005 and was its chairman in 2019–2020. He has been a member of the Chamber of Deputies of the Parliament of the Czech Republic since 21st October 2017 and was appointed Minister of Agriculture on 29th June 2023. He is also a member of the Scout organization, the Czech Christian Academy, and the secretary of the Vlastislav Heřmanův Městec choir.