



## **Audit Report**

**18/27**

### **Measures implemented by the Ministry of Agriculture and the Ministry of the Environment to mitigate the effects of drought and water scarcity**

The audit was included in the audit plan of the Supreme Audit Office (hereinafter the “SAO”) for 2018 under number 18/27. The audit was managed and the Audit Report drawn up by SAO Member Mr. Pavel Hrnčíř.

The objective of the audit was to examine the implementation of measures by the Ministry of Agriculture and the Ministry of the Environment to mitigate the negative impacts of drought and water scarcity and to examine the provision of funds in relation to the set objectives and their fulfilment.

The audit was carried out at the audited entities between November 2018 and June 2019.

The audited period was 2013-2018; both the previous and subsequent periods were also considered for contextual reasons.

**Audited entities:**

Ministry of Agriculture (hereinafter the “MoA”);

Ministry of the Environment (hereinafter the “MoE”).

***The Board of the SAO***, at its 14th (XIV) session held on 30 September 2019,

***approved by*** Resolution No. 10/XIV/2019

the ***Audit Report*** as follows:

## Key Facts

<b>CZK 25,974 million</b>	<b>27</b>	<b>CZK 1,810 million</b>	<b>10</b>
Funds reported to combat drought at the MoA	Number of MoA subsidy programmes reported to combat drought	Funds reported to combat drought at the MoE	Number of MoE subsidy programmes reported to combat drought

### Insufficient legislation

The Water Act mentions drought only marginally and no amendment to the Act has so far been passed. The anti-erosion decree, which is supposed to refine the rules for farming on erosion-prone land, has not been approved either.

### Failure to adapt subsidy programmes to drought

The MoA and the MoE have been implementing the same subsidy programmes for a long time. They have launched almost no new programmes to mitigate the impacts of drought and water scarcity, or have disbursed only negligible amounts.

### Conflicting subsidy programmes

The MoA financed technical improvements to the beds of small watercourses. The MoE promoted the removal of inappropriate technical improvements and the return of watercourses to a nature-based state.

### Undemonstrable effects

Most of the MoA and MoE programmes did not have drought management as a main objective and did not include specific and measurable targets to mitigate the negative impacts of drought and water scarcity. Their contribution to combating drought is difficult to measure, as is the achievement of the relevant objectives.

### Growing damage caused by drought

According to the MoA, the estimated total damage caused by drought in agriculture and forestry was approximately:

- CZK 3.0 billion in 2015,
- CZK 7.7 billion in 2017,
- CZK 24.0 billion in 2018.

## I. Summary and Evaluation

The SAO audited the implementation of measures by the Ministry of Agriculture and the Ministry of the Environment to mitigate the negative impacts of drought and water scarcity. The audit covered the provision of funds at the Ministry of Agriculture and the Ministry of the Environment to take measures to mitigate the negative effects of drought and water scarcity. The audit focused on the interrelationships between the national subsidy programmes of the MoA and the MoE, the *Rural Development Programme for 2014-2020* (hereinafter the “RDP”), the Operational Programme *Fisheries 2014-2020* (hereinafter the “OPF”) and the Operational Programme *Environment 2014-2020* (hereinafter the “OPEn”), and their continuity with strategic and conceptual documents and the objectives to be achieved by the implementation of the programmes. Furthermore, it was examined whether the objectives set were being met through the funds provided.

### Overall evaluation

**The audit found that there was no legislation to mitigate the negative impacts of drought and water scarcity. The whole issue was strategically managed mainly on the basis of two Government-approved documents. The fulfilment of the tasks of the MoA and the MoE in the field of drought management was verified. Although most of the tasks had been completed, many of them were not followed up by the implementation of actual measures to mitigate the negative impacts of drought and water scarcity.**

**For the period of 2016-2018, the MoA and the MoE reported subsidy programmes related to drought issues in a total amount of almost CZK 28 billion. However, these were mostly programmes that the aforesaid Ministries had been implementing in the long term and whose main objective was not to solve the drought problem. Not all subsidy programmes directly and clearly contributed to mitigating the negative impacts of drought and water scarcity. Most of the programmes did not include specific and measurable objectives to mitigate the negative impacts of drought and water scarcity, so the benefits of those programmes and the achievement of objectives in the area cannot be assessed.**

**New programmes, whose main objective is to be, according to the *Concept of Drought Protection for the Czech Republic*, to address the negative consequences of drought and water scarcity, have not been launched by the MoA yet, and the MoE has paid only negligible amounts under those programmes. In order to mitigate the impacts of drought and water scarcity, efficient and long-term sustainable solutions need to be promoted, and the removal of contradictions and narrow department-limited perspectives needs to be achieved.**

The overall evaluation is based on the following shortcomings:

## **1. Insufficient legislation**

The Water Act<sup>1</sup> mentions the issue of drought only marginally, and an amendment to the Act with a specific section on drought has not yet been passed. The lack of definition of statutory rights and obligations of individual stakeholders complicates the implementation of measures to mitigate the impacts of drought and water scarcity. Furthermore, there is no anti-erosion decree to refine the rules for farming on erosion-prone land.

## **2. Formal fulfilment of tasks set by the Government of the Czech Republic**

The MoA and the MoE were supposed to ensure the implementation of Government Resolution No. 620 of 2015, which contains 49 tasks related to drought. However, many of the tasks were only to carry out an analysis, prepare a proposal and assess the potential, not to implement actual measures. Examples include the tasks of preparing a draft amendment to the Water Act on rational pricing of raw water abstractions from groundwater and surface water sources, the task of reviewing sites for surface water storage that are important for securing water resources in the future, and the task of preparing a fund for hard-to-insure risks that could also cover drought damage, which has not even been set up yet. Although most of the tasks were completed, no implementation followed up on them.

## **3. Shortcomings of the concept**

The basic strategic document for mitigating the negative consequences of drought and water scarcity is the *Concept of Drought Protection for the Czech Republic* (hereinafter the "Concept"). A total of 30 measures are listed in the Concept. However, there are no specific, measurable, realistic and time-bound targets for those measures. The text of the Concept itself does not specify who is responsible for the implementation of the individual measures. For some of the measures, the MoA and the MoE proceed in contradiction with the Concept (the measure entitled *Change of agricultural policy in the area of support for energy crops*).

## **4. Lack of specific and measurable targets and indicators for drought**

Almost all the subsidy programmes implemented by the MoA and the MoE in the context of drought and water scarcity issues have not had drought management as their main objective and purpose. This corresponds to the targets and indicators applied, which serve to evaluate the set objectives of the programme, but not to monitor and evaluate the contribution of the subsidy programmes to mitigating the impacts of drought and water scarcity. The benefits of the funds spent in relation to the drought issue are not demonstrable.

## **5. New subsidy programmes not implemented**

Almost no new subsidy programmes to mitigate the impacts of drought and water scarcity were launched by the MoA and the MoE, or the use of funds in these programmes was low. The MoA and the MoE have been implementing the same subsidy programmes, which do not have combating drought as the main objective, in the long term.

---

<sup>1</sup> Act No. 254/2001 Coll., on waters and on amendments to some acts (the Water Act).

In the Concept, the MoA listed 15 national subsidy programmes under the MoA financing measures to mitigate the negative impacts of drought, five of which had not been launched as at 31 December 2018 – these are new subsidy programmes (e.g., a programme focused on the construction of dams).

At the MoE, a new approach to dealing with drought and water scarcity is the Rainwater Management Programme, under which CZK 42 million was drawn from national resources in the period of 2016-2018.

## **6. Billion-worth reporting errors**

In its documents for the Government, the MoA reported a total amount of CZK 29 billion spent on combating drought. However, the audit found that a number of errors had been made in the determination of that amount by the MoA. The amount of funds paid to manage drought issues that was identified by the audit was just under CZK 26 billion. The difference was thus more than CZK 3 billion.

## **7. Contradictions between the MoA and the MoE**

Cooperation between the MoA and the MoE in mitigating the impacts of drought and water scarcity has not always been optimal. This is evidenced, among other things, by the failure to adopt the anti-erosion decree, which is crucial for improving the management of agricultural land and strengthening its ability to retain water. Another example is the implementation of conflicting subsidy programmes. The budget of the MoA is used for technical improvements of the beds of small watercourses, without any requirement to preserve their nature-based state. The MoE uses its subsidy programme to remove inappropriate technical improvements and return watercourses to a nature-based state. There was no consensus between the MoA and the MoE on subsidies for the sewerage system, either. These subsidies were provided by both the MoA and the MoE, but only the MoA included aid for the sewerage system among the subsidy programmes financing the mitigation of the negative impacts of drought and water scarcity, unlike the MoE.

## **8. Increasing drought damage and financial compensation**

Drought damage has increased in recent years. According to the MoA, the estimated actual total damage caused by drought in agriculture and forestry was:

- CZK 3 billion in 2015,
- CZK 7.7 billion in 2017,
- CZK 24 billion in 2018.

The MoA paid almost CZK 2.4 billion to farmers in the period of 2016-2018 to compensate for the damage caused by the drought in 2015 and 2017; however, this is not an active fight against drought, but only a financial contribution to overcome an unfavourable period. The MoA spent CZK 2.9 billion on the implementation of investment subsidy programmes to mitigate the negative impacts of drought in the period of 2016-2018, which can be considered

as preventive measures in the fight against drought. However, increasing damage claims show that the preventive measures implemented to combat drought are not sufficiently effective.

**Note:** The legal regulations referred to in this Audit Report are applied in the version effective for the audited period.

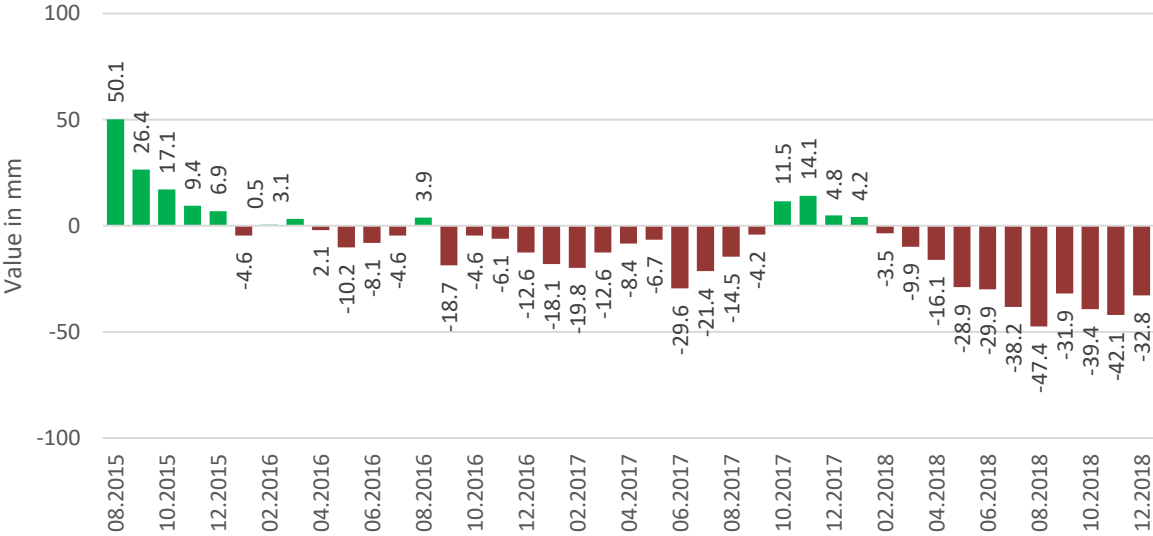
## II. Information on the Audited Area

### Drought and water scarcity

Drought is a random natural phenomenon caused mainly by a precipitation deficit, which subsequently leads to a significant decrease in water in different parts of the water cycle (in the atmosphere, in the soil, in watercourses, in underground structures) and then also in water sources. If, as a result of drought, demands for water consumption exceed available water resources and it is necessary to reduce water management and take other measures, a state of water scarcity occurs.

The following chart illustrates the increasing intensity of drought in the Czech Republic (see also Annex 3 to this Audit Report).

**Chart 1: Soil moisture deficit in the Czech Republic**



**Source:** Prepared by the SAO on the basis of data from the InterSucho Project.

**Note:** Soil moisture deficit represents the deviation of soil moisture (in mm) from the normal soil water content observed between 1961 and 2010.

### Drought – legislation and basic concept documents

The issue of drought was not regulated by law at the time the audit was completed (June 2019). The Water Act mentions drought only marginally, and an amendment to the Act with a chapter on drought has not yet been passed.

The document entitled *Preparation of the implementation of measures to mitigate the negative impacts of drought and water scarcity* was adopted by the Government of the Czech Republic by its Resolution No. 620 of 29 July 2015. The MoA and the MoE are the main implementers of the tasks set out in that Government document.

The basic concept document in the area of drought is the *Concept of Drought Protection for the Czech Republic*, approved by Government Resolution No. 528 of 24 July 2017. The document was prepared by the WATER-DROUGHT Working Group following Government Resolution No. 620 of 2015. The approved Concept contains overviews of subsidy programmes under the MoA and the MoE for financing measures to mitigate the negative impacts of drought.

### **Ministry of Agriculture**

The Ministry of Agriculture is the central state administration authority for agriculture, with the exception of the protection of the agricultural land fund, and for water management, with the exception of the protection of natural water accumulation, the protection of water resources and the protection of the quality of surface water and groundwater.<sup>2</sup> The MoA exercises the powers of the central water administration authority under the Water Act.

The MoA performs the tasks of the Managing Authority of the RDP and the OPF. The MoA also provides subsidies from national sources on the basis of the principles which, on the basis of the Agriculture Act<sup>3</sup>, determine the conditions for the provision of subsidies for individual calendar years. The MoA also grants subsidies from national sources under programme funding. The MoA provides compensation for damage according to the principles that determine the conditions for providing subsidies to mitigate drought damage. Other subsidies are provided by the MoA within the framework of forestry aid under the Forest Act.<sup>4</sup>

### **Ministry of the Environment**

The Ministry of the Environment is the central state administration authority for, among other things, the protection of natural water accumulation, the protection of water resources and the protection of surface water and groundwater quality.<sup>5</sup> The MoE exercises the powers of the central water administration authority in matters listed in Section 104(3) of the Water Act.

The MoE is the Managing Authority for the OPEn. Furthermore, the MoE provides national subsidies in the field of drought under the responsibility of the MoE, as well as funds from the State Environmental Fund (SEF) of the Czech Republic through the *National Programme Environment*.

---

<sup>2</sup> Section 15 of Act No. 2/1969 Coll., on the establishment of ministries and other bodies of central government of the Czech Republic.

<sup>3</sup> Act No. 252/1997 Coll., on agriculture.

<sup>4</sup> Act No. 289/1995 Coll., on forests and on amendments and supplements to some acts (the Forest Act).

<sup>5</sup> Section 19 of Act No. 2/1969 Coll., on the establishment of ministries and other bodies of central government of the Czech Republic.

### **III. Scope of the Audit**

The MoA and the MoE were the entities audited. However, the relevant subsidy programmes were not evaluated as a whole, but only in aspects related to drought and water scarcity. For each subsidy title, the SAO audited the link to the *Concept of Drought Protection for the Czech Republic* and assessed the financial significance and the contribution to mitigating the negative impacts of drought and water scarcity.

The audit covered all subsidy programmes reported by the MoA to combat drought, i.e. 26 subsidy programmes and aids, as well as compensation paid for drought damage, i.e. 27 subsidy programmes in total. The financial list also includes old RDP commitments, a total of 28 items (see Annex 1 to this Audit Report). Of these, 15 programmes were listed in Annex 14 to the Concept and were national subsidy programmes (e.g., water supply, sewerage, ponds, small water reservoirs, irrigation, etc.). Beyond Annex 14 to the Concept, 12 other programmes were involved. These programmes include agricultural aid under the RDP (agricultural, environmental and climatic measures, organic farming, less favoured areas), afforestation of agricultural land, forestry measures and land improvements, as well as the OPF, the aerial firefighting service and aid under the National Agency for Agricultural Research.

Within the MoE, all subsidy programmes listed in Annex 15 to the Concept were audited, i.e. subsidies provided from the OPEn, the *National Programme Environment* and programmes under the responsibility of the MoE, i.e. 10 programmes in total (see Annex 2 to this Audit Report). The scope of the subsidy programmes reported by the MoE was in line with the contents of Annex 15 to the Concept.

The total auditable volume of funds at the system level was almost CZK 28 billion, of which CZK 25.974 billion was at the MoA and CZK 1.810 billion at the MoE.

A sample of projects was also audited at the MoA and the MoE. The audited volume of funds at the project level was CZK 85,604,655 at the MoA. In addition, specific constituents of damage compensation amounting to CZK 87,315,911 were examined. The audited volume of funds at the project level was CZK 305,529,940 at the MoE.

### **IV. Detailed Facts Found in the Audit**

#### **1. Insufficient legislation on drought and water scarcity**

The legal regulation of drought and water scarcity is crucial for the ability of the state administration to address the situation in an efficient manner. The lack of definition of statutory rights and obligations of individual stakeholders complicates the implementation of measures to mitigate the impacts of drought and water scarcity.



### 1.1. Definition of drought and water scarcity

The issue of drought and water scarcity is mentioned only marginally in the Water Act. The issue of drought and water scarcity is not addressed in the Water Act in detail. Drought is referred to in several sections of the Water Act, but these are always general provisions that do not address specific obligations or measures.

The definition of drought, the definition of water scarcity and an entire newly drawn up chapter on drought entitled “*Drought and Water Scarcity Management*” are included in the draft amendment to the Water Act, which was still in the legislative process at the time of the audit completion.

**The definition of drought and water scarcity was only included in some concept and strategic documents approved by a Government Resolution. Neither the Water Act nor other legislation contained a definition of drought.**

### 1.2. Anti-erosion decree

The decree on the protection of agricultural land against erosion (the so-called anti-erosion decree) is to be an implementing regulation to the Act on the Protection of Agricultural Land<sup>6</sup>. The decree is to specify the rules for farming on erosion-prone land. Soil conservation and water retention in the landscape is essential to mitigate the negative effects of drought and water scarcity. Therefore, the protection of the soil stock against erosion was one of the tasks listed in the strategic documents related to drought. The decree should establish generally applicable principles of soil erosion protection, which should be followed by all those who farm the land in the future, regardless of whether they are subsidy beneficiaries or not.

**The anti-erosion decree had not been approved by the end of the audit.**

### 1.3. Competences

The competences of the central administrative authority in the field of water management are shared between several ministries under the Water Act. Section 108(1) of the Water Act provides: “*Unless otherwise provided by this Act, the Ministry of Agriculture shall exercise the powers of the central water administration authority*”.

- The MoE exercises the powers of the central water administration authority in matters referred to in Section 108(3) of the Water Act (clauses (a) to (w)), for example in matters of flood protection, as well as in matters of protection of the quantity and quality of surface water and groundwater.
- The MoA and the MoE exercise the competences of the central water administration authority in matters of drawing up water plans, creating and maintaining the information system, and fulfilling tasks arising from the relationship with the European Union in the field of water protection.
- The Ministry of Transport exercises the powers of the central water administration authority in matters of the use of surface waters for navigation.

---

<sup>6</sup> Act No. 334/1992 Coll., on the protection of agricultural land.

- The Ministry of Defence exercises the powers of the central water administration authority in matters where the competence of military area authorities is established.
- The Ministry of the Interior is the central state administration authority for internal affairs, in particular for crisis management, civil emergency planning, population protection and the integrated rescue system. The Water Act sets out in detail the role of the Ministry of the Interior during floods.

Other entities involved:

- The Ministry of Regional Development, which is the central state administration authority in the field of land-use planning that is also related to the issue of water management;
- The Ministry of Health, which is given powers in the Water Act, e.g., in the area of water quality;
- The Ministry of Finance, which sets the price regulation rules for the exact calculation of the price of surface water by a price decision (assessment);
- The Ministry of Industry and Trade, which is the central state administration authority for, among other things, the state industrial policy and energy. The strategic documents related to drought list several tasks in the implementation of which the Ministry of Industry and Trade is to participate;
- Other stakeholders include, e.g., municipalities with extended powers, regions, the Czech Environmental Inspectorate, the State Environmental Fund, the Povodí (River Basin) companies and many others.

In response to the significant drought spells of late 2013 and early 2014, an inter-ministerial WATER-DROUGHT commission (hereinafter the “WATER-DROUGHT Commission”) was established. The Ministry of Agriculture and the Ministry of the Environment concluded a Memorandum of Cooperation. The outputs of the WATER-DROUGHT Commission are available at: [www.suchovkrajine.cz](http://www.suchovkrajine.cz). A number of state and non-state actors are involved in addressing drought issues, with nearly forty in total represented on the WATER-DROUGHT Commission. The water and therefore drought situation is highly fragmented.

To achieve the objectives of mitigating the negative impacts of drought and water scarcity, the cooperation of all stakeholders is needed. Strategic decision-making to address drought and water scarcity is complex and often very slow given the number of actors involved. An example is the construction of dams; no new dam has been built in the Czech Republic in the last 25 years.

One of the outcomes of the activities of the WATER-DROUGHT Commission was the document entitled *Preparation of the implementation of measures to mitigate the negative impacts of drought and water scarcity*, which was approved by the Government of the Czech Republic by Resolution No. 620 of 29 July 2015. Another outcome was the *Concept of Drought Protection for the Czech Republic*. The Concept was adopted by Government Resolution No. 528 of 24 July 2017.

**Competences in the field of water management are divided among a number of entities, with the most important roles belonging to the Ministry of Agriculture and the Ministry of**

**the Environment. The inter-ministerial WATER-DROUGHT Commission plays an important role in addressing the drought problem.**

## **2. Formal fulfilment of the tasks set by the Government of the Czech Republic arising from Government Resolution No. 620 of 29 July 2015**

The ministries are obliged to fulfil the tasks set by Government Resolutions and to report on the progress of their fulfilment.

The document entitled *Preparation of the implementation of measures to mitigate the negative impacts of drought and water scarcity*, relating to Government Resolution No. 620 of 29 July 2015, was drawn up as an output of the inter-ministerial WATER-DROUGHT Commission. The document contains 49 tasks, the implementation of which was to be ensured independently by the MoE or the MoA, the MoE in cooperation with the MoA, or in cooperation with other ministries.

The SAO evaluated the progress of implementation of individual tasks from Government Resolution No. 620/2015 of 29 July on the basis of the document entitled *Information on the progress of implementation of measures to mitigate the negative impacts of drought and water scarcity*, which had been considered by the Government of the Czech Republic on 9 January 2017, including annexes and other additional information from the ministries.

### **2.1. Implementation of tasks by the MoA**

The MoA was to ensure the performance of a total of 45 tasks, of which in 35 cases in cooperation with another ministry. The SAO assessed 25 tasks as completed, eleven tasks as partially completed and four tasks as not completed. The SAO did not evaluate five tasks within the MoA at all, as the MoA had been only marginally involved in their implementation.

### **2.2. Implementation of tasks by the MoE**

The MoE was involved in the performance of a total of 37 tasks, of which in 35 cases in cooperation with another ministry. The SAO assessed 22 tasks as completed, three tasks as partially completed and four tasks as not completed. The SAO did not evaluate eight tasks within the MoE at all, as the MoE had been only marginally involved in their implementation.

**For both ministries, the subject-matter of a number of tasks was to prepare a proposal, conduct an analysis, assess the potential, etc. Putting the proposals into practice was no longer the focus of the tasks. Examples of tasks that were formally completed but nevertheless did not result in any real changes include the tasks that involved the preparation of a draft amendment to the Water Act concerning a rational setting of the price of raw water abstractions from groundwater and surface water sources<sup>7</sup>. Another example**

---

<sup>7</sup> This is the price of raw water for large customers (water companies, large enterprises, etc.), who use more than 6,000 m<sup>3</sup> per year. The price of raw water from underground sources is currently two to three times lower than the price of raw water from surface sources (the price of raw surface water varies from basin to basin). The price of raw groundwater is listed in the Annex to the Water Act and does not change, while the price of raw surface water increases regularly. A more rational adjustment of the balance between surface

of a task that was completed – as a proposal was drawn up – but subsequently not implemented is the task concerning surface water storage sites<sup>8</sup>. Furthermore, there was, for example, the task of the hard-to-insure risk fund, which the MoA has still not set up<sup>9</sup>.

### 3. Shortcomings of the concept

Concepts are agreed-upon procedures to achieve a target in a given area. Strategies are long-term plans of activities aimed at achieving a set target. The implementation of the concepts and strategies should result in improvements. Setting targets as SMART – specific, measurable, achievable, realistic, time-bound – contributes to achieving them. The absence of these elements negatively affects the effective management and evaluation of the measures taken.

There are many strategic and concept documents related to drought and water scarcity. Not all of them have the issue of drought and water scarcity as their main concern.

The document entitled *Preparation of the implementation of measures to mitigate the negative impacts of drought and water scarcity* was adopted by the Government of the Czech Republic by its Resolution No. 620 of 29 July 2015. The document instructs the Ministers of the Environment, Agriculture, Industry and Trade, Finance and Regional Development and the Head of the Government Office to implement the measures listed in the document, and the Ministers of Agriculture and the Environment to prepare and submit information on the implementation of the measures to the Government of the Czech Republic (by the end of 2016) and to develop a concept for drought protection (by 30 June 2017).

Government Resolution No. 528 of 24 July 2017 approved the *Concept of Drought Protection for the Czech Republic*. The development of the Concept was one of the tasks under Government Resolution No. 620 of 29 July 2015. The document defines three main strategic objectives. These objectives are to be pursued through five thematic pillars and 30 specific actions (see Diagram 1). The approved Concept contains overviews of subsidy programmes under the MoA and the MoE for financing measures to mitigate the negative impacts of drought. The Government of the Czech Republic, by the aforesaid resolution, instructed the Minister of Agriculture and the Minister of the Environment to respect and promote the Concept, to push for the implementation of measures to limit the consequences of drought

---

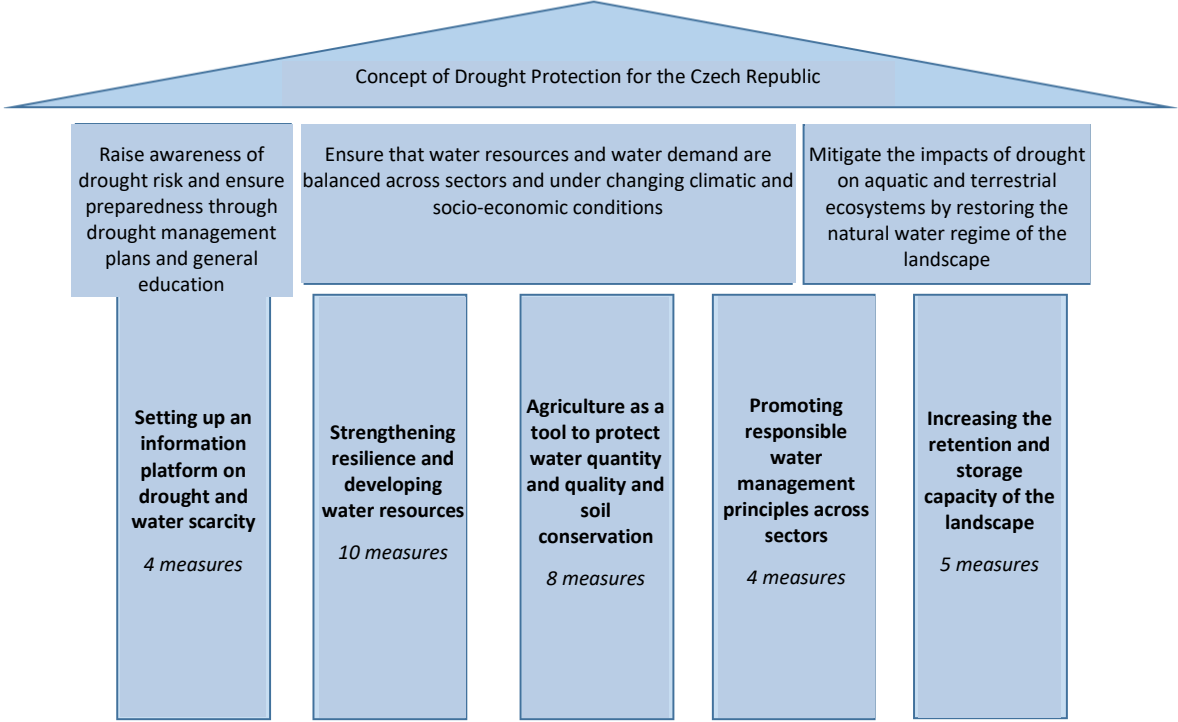
water and groundwater prices would contribute to greater protection of scarce groundwater resources. In accordance with the task set out in the document relating to Government Resolution No. 620 of 29 July 2015, a draft amendment to the Act was drawn up, but it has not been adopted and the imbalance between the price of raw surface water and the price of raw groundwater continues to grow.

<sup>8</sup> The Surface Water Storage Site Master Plan identifies sites where waterworks (dams) could be built in the future. Providing sufficient water to the population is one of the main reasons for the preparation and construction of waterworks. Although a revision of the Surface Water Storage Site Master Plan was prepared, after discussing the proposed revision the MoA and the MoE agreed not to make the change.

<sup>9</sup> The hard-to-insure risk fund should compensate farmers for damage caused by natural effects and drought (or possibly also frost and other hard-to-insure risk factors), and the state and farmers would contribute regularly to the fund. The fund would therefore reduce the burden on the state budget during extremely bad years when the state pays drought compensation. In accordance with the task set out in the document relating to Government Resolution No. 620 of 29 July 2015, a proposal for a fund for hard-to-insure risks was drawn up, but the proposal was never adopted.

and water scarcity, and to secure the necessary financial resources, preferably from European funds.

**Diagram 1: Strategic objectives and thematic pillars of the Concept of Drought Protection for the Czech Republic**



Source: prepared by the SAO on the basis of the *Concept of Drought Protection for the Czech Republic*.

In Annex 14 to the Concept, in the table *Overview of subsidy titles under the Ministry of Agriculture financing measures to mitigate the negative impacts of drought*, the MoA listed only national funds and the resources of potential subsidy beneficiaries. The MoA did not mention financial resources from European funds in the Concept. The MoA reports these funds in the documents for the Government of the Czech Republic beyond the scope of the Concept.

The Concept lists a total of 30 measures; however, there are no specific, measurable, realistic and time-bound targets for those measures. The text of the Concept itself does not even specify who is responsible for the implementation of the individual measures.

At least one measure of the Concept will not be implemented by 2022. It is the measure entitled “*change of agricultural policy in the area of energy crops*”. Other measures, such as “*new multi-purpose dams*”, require a significantly longer time horizon for their implementation.

**Concept measure “*change of agricultural policy in the area of support for energy crops*”**

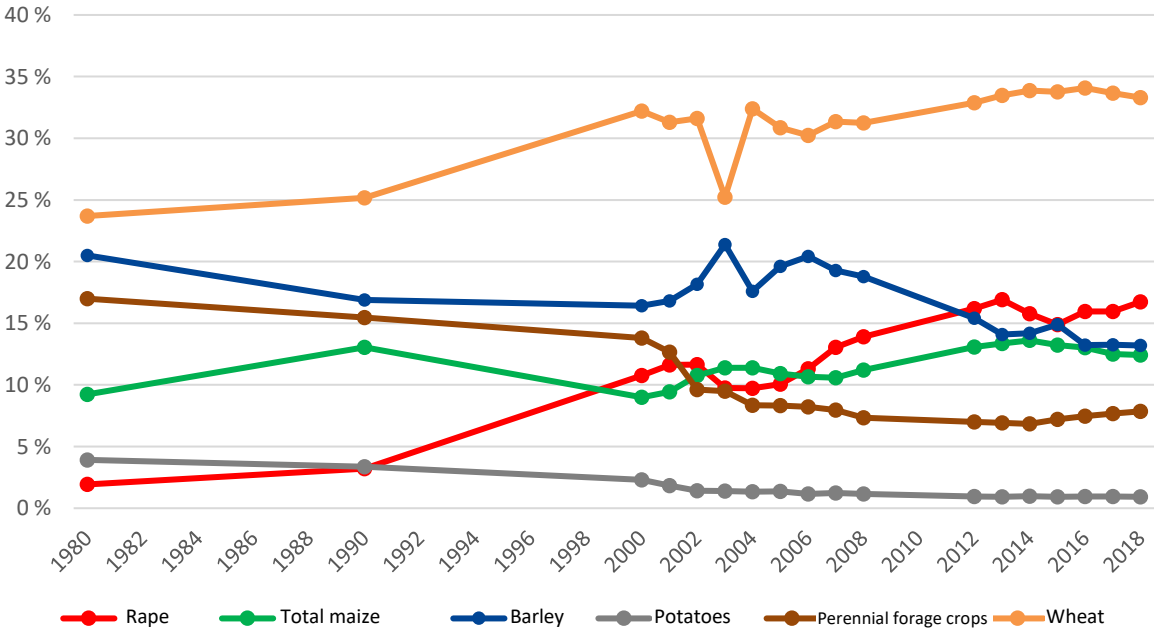
One of the measures under the Concept is “*change of agricultural policy in the area of support for energy crops*”.

The audit verified that the strategic documents focused on energy policy and biofuels continued to foresee the use of industrial crops for energy purposes. In contrast, the measure in the Concept states that there is a need to “... fundamentally rethink existing support for biofuel production and support for the cultivation of agricultural crops for energy use ... The aim of this measure is to reduce the burden of excessive erosion and chemical pollution on the soil and consequently on water resources in connection with the cultivation of agricultural crops for energy use”.

**The measure “change of agricultural policy in the area of support for energy crops” is unlikely to be achieved by 2022 in the current situation.**

Using data from the Czech Statistical Office, the SAO checked the development of the use of sown areas for certain industrial crops, namely rape and maize (the sum of the areas of maize for grain and maize for silage), and, for comparison, the development of the sown areas of wheat, barley, perennial forage crops and potatoes, see Chart 2.

**Chart 2: Development of the share of certain crops in the total sown area in the Czech Republic**



Source: prepared by the SAO on the basis of CZSO data.

Chart 2 shows that traditionally, wheat has been the most widely grown crop in the Czech Republic, with a share of about 24% of the total sown area in 1980; since 2004, the share of wheat has been in the range of 30-34%. Since about 1990, however, the share of rape in the total sown area has been increasing sharply, with a corresponding decline in some other formerly traditional crops such as barley and perennial forage. Before 1990, the share of rape was 3.21%. In 2018, the share was as high as 16.73%. Another widely grown energy crop is maize, the share of which has also increased in recent years, but not as sharply as that of rape, with maize accounting for 12.43% of the total sown area (grain and silage combined) in 2018. **The sum of the shares of these two energy crops (rape, maize) in 2018 was 29.17 % of the**

**total sown area, making energy crops a very abundant group of crops grown in the Czech Republic.**

#### **4. Lack of specific and measurable targets and indicators for drought**

The setting of specific targets and measurable indicators to assess the degree of achievement of each target is essential for a proper evaluation of the effectiveness of individual measures. Incorrect setting or even the absence of targets and indicators makes it impossible to monitor and evaluate whether the funds spent are having the desired effect.

**Almost none of the subsidy programmes implemented by the MoA and the MoE as at 31 December 2018, which are reported by the ministries as being implemented to mitigate drought and water scarcity, have combating drought as the main objective and purpose. This is reflected in the targets and indicators set, which are used to evaluate the set objectives of the programmes, but not to evaluate their drought benefits. For the drought area, the reported indicators have no predictive value. An exception is a few subsidy programmes where the indicators are focused on water retention in the landscape, but their positive impact on the issue of drought is not entirely clear.**

##### **4.1. Subsidy programmes co-financed by the EU**

The MoA reported a total of eight subsidy titles co-financed from EU funds in the framework of mitigating the negative impacts of drought, seven of which are under the RDP 2014-2020 and one under the OPF 2014-2020. The most financially significant were aids spent on agricultural, environmental and climatic measures (CZK 8.7 billion), payments for mountain areas and other areas with natural or other special constraints (CZK 7.1 billion), and organic farming (CZK 3.5 billion). These so-called agricultural aids were reported by the MoA beyond the Concept; out of the total volume of CZK 26 billion, it was CZK 21.6 billion. These aids were not primarily intended to mitigate the effects of drought and water scarcity; their effect, particularly on agricultural drought, was indirect.

The MoE reported a total of four specific objectives of the Operational Programme *Environment 2014-2020* in the framework of the fight against drought. A total of ten activities were eligible for drought aid. The most financially significant activities 1.2.1 and 1.2.2 were used to aid the construction and modernisation of water treatment plants and the improvement of the quality of drinking water sources and the construction of water supply systems (CZK 0.8 billion).

Objectives:

**Neither the MoA nor the MoE set the issue of addressing the negative consequences of drought and water scarcity as the main objective of their individual subsidy programmes. Reducing the negative effects of drought and water scarcity is thus only a possible side effect.**

The subsidy programmes co-financed from European sources (RDP, OPF and OPE) are designed to address objectives other than drought. While the MoE, on the recommendation of the evaluator, incorporated the Concept's proposals into the OPE in the framework of the

update of the programming document, neither the RDP nor the OPF were purposely changed by the MoA in favour of mitigating the negative consequences of drought.

Indicators:

The indicators monitored by the MoA and the MoE are not primarily focused on the effectiveness of drought measures, but are set in relation to the achievement of the objectives set out in the individual programming documents. **Thus, the MoA and the MoE did not set specific indicators focusing on drought and water scarcity.**

Evaluation of the achievement of objectives:

Neither the MoA nor the MoE monitored or evaluated the qualitative benefits of the programmes included in the Concept for mitigating the negative consequences of drought and water scarcity.

**Thus, for the funds spent, the MoA and the MoE generally did not monitor and further evaluate whether the aided projects actually had a positive effect on mitigating the negative impacts of drought and water scarcity. The MoA and the MoE did not set such quantifiable and measurable targets on the basis of which it would have been possible to objectively assess the level of impact of the implemented projects on the area of drought and water scarcity.**

#### **4.2. National subsidies**

The MoA reported a total of 19 subsidy programmes financed from national sources to mitigate the negative impacts of drought, of which five had not been implemented as at 31 December 2018 and there was zero use of the related funds. Of the 14 implemented subsidy programmes, the most financially significant within the framework of programme funding were *Aid for measures on small watercourses and small reservoirs* (CZK 1.1 billion) and *Aid for the construction and technical improvement of water supply and sewerage infrastructure II* (CZK 0.6 billion). In addition to the programme funding, the state budget also spent a significant part of the funds to mitigate the damage caused by drought to agricultural crops, almost CZK 2.37 billion.

The MoE reported a total of six nationally funded subsidy programmes to combat drought. The most financially significant of these was the *Landscape Care Programme* (CZK 0.13 billion).

Objectives:

For national subsidies, the MoA and the MoE mostly set only general objectives consisting of fulfilling obligations arising from strategic documents and subsidy programme documentation. **For this reason, the MoA and the MoE could not monitor and evaluate the effectiveness of the state budget funds spent in relation to drought and water scarcity.**

Indicators:

Indicators were set in relation to programme/sub-programme objectives, but in most cases these were not set in relation to mitigating the negative impacts of drought and water scarcity. **The ministries did not set any specific indicators in relation to drought and water scarcity.** The established indicators provided only quantitative data on the implemented measures and



did not provide qualitative and contextual information to measure and evaluate the effects on drought and water scarcity. The audit also found that some of the indicators had not been set in a realistic way, as the performance values in some cases exceeded the target values by hundreds to thousands of percent.

Evaluation of the achievement of objectives:

**In most cases, the MoA and the MoE did not evaluate the individual subsidy programmes in terms of their contribution to addressing drought and water scarcity.** The evaluation of the subsidy programmes took the form of mere summary statistical information on the number of applications received, the amount of funds disbursed, etc.

## **5. New programmes not implemented**

The subsidy programmes aided need to respond to the changing climate by adapting existing programmes and implementing new ones. This is the only way to help mitigate the impacts of drought and water scarcity.

### **5.1. Ministry of Agriculture**

**The audit found that the MoA continued to implement existing programmes which had a long tradition at the MoA (e.g., support for the construction of water supply and sewerage systems, ponds, small watercourses and small water reservoirs), but whose main objective was not to combat drought. No new programmes aimed at combating drought had been launched as at 31 December 2018.**

In Annex 14 to the Concept, the MoA listed an overview of subsidy programmes financing measures to mitigate the negative impacts of drought. There are 15 national subsidy programmes, five of which had not been launched by the MoA as at 31 December 2018. There are two programmes for dams, namely the preparation and implementation of dams and sediment removal, a programme to aid the reconstruction, repair and modernisation of major drainage facilities, and a programme to aid the interconnection of water management systems. The programmes listed in the Concept and not launched also include *a programme to develop tools to assess the technical, water management and economic efficiency of drought and water scarcity protection measures*, which should enable the selection of optimal and efficient drought and water scarcity reduction measures, as opposed to the existing piecemeal approaches, and thus enable the most effective measures to be targeted. The delay in the implementation of the programme may have a negative impact on the effectiveness of the implementation of drought measures and thus on the efficiency of the expenditure of state budget funds.

Implementation is not even underway for the subsidy programmes for dams, where it is planned to spend over half a billion Czech crowns from the state budget on the preparation of the Senomaty, Šanov and Kryry Dams near Rakovník. In addition, the MoA is dealing with the construction of the Vlachovice Reservoir in the Zlín Region. Dams have been built in Bohemia and Moravia in the past, so this is not a new project. No new dam has been built in the last 25 years. There are currently more than 150 reservoirs in the Czech Republic. Sediment removal is required at 104 dams.

## 5.2. Ministry of the Environment

A new approach of the MoE to dealing with drought and water scarcity is rainwater management. **Within the framework of the national subsidy programme, the so-called “Small” Rainwater Management Programme, CZK 42 million was spent in the period of 2016-2018. For this and other programmes, the MoE did not set baseline or target indicator values.**

Within the framework of existing aid from the OPE, projects for rainwater management, the so-called “Large” Rainwater Management Programme, can also be aided. **For these projects, the MoE was not able to quantify the amount of spending because the reporting system did not allow it (at most it was approximately CZK 10 million).**

**Marginal spending also took place in the national subsidy programmes of the MoE, where, for example, only CZK 294 thousand was spent on environmental education, awareness-raising and consultancy.**

## 6. Billion-worth reporting errors

Reporting is intended to present a realistic picture of the use of public funds and is the basis for sound management and decision-making. Inaccurate information in reporting leads to erroneous conclusions and solutions.

### 6.1. Incorrectly reported amount of funds

The MoA reported the total amount of funding provided in subsidy programmes and aid from the Ministry of Agriculture in 2016-2017 (in several cases including 2018, up to August) to reduce the effects of drought and water scarcity in the total amount of CZK 29,036.7 million, of which CZK 21,599.5 million was EU-funded aid.

**The audit found that the correct amount was CZK 25,973.66 million. The difference between the reported and actual expenditure was CZK 3,063.04 million.**

**In the “*Information on the progress of implementation of programmes to reduce the consequences of drought and water scarcity in the Czech Republic under the responsibility of the Ministry of Agriculture*” (hereinafter the “Information”) submitted to the Government of the Czech Republic (considered by the Government of the Czech Republic on 7 January 2019 and noted by Government Resolution No. 7 of 7 January 2019), the MoA provided incorrect data in the reported amounts of funds.**

The differences were mainly caused by the following:

- For the subsidy programme 129 280 – *Aid for water retention in the landscape – ponds and reservoirs*, the MoA reported the amount of CZK 450 million in the Information although

CZK 31 million had been paid out by the end of 2017. (2018 was not included in the reported funds, according to the Information.)

- For the subsidy programme 129 300 – *Aid for the construction and technical improvement of water supply and sewerage infrastructure II*, the MoA reported the amount of CZK 803.68 million in the Information although CZK 589.268 million had been paid out (as of 15 August 2018).
- In the case of mitigation of drought damage to agricultural crops, the MoA reported in the Information an amount of CZK 4,120 million although the MoA paid CZK 2,367 million for damage incurred in 2015 and 2017. The allocated but unspent 2016 funding of CZK 1,750 million was also incorrectly included.
- In the case of land improvements under the RDP, the MoA reported the amount of CZK 727 million in the Information although drought-related projects had a subsidy of CZK 31 million.
- Another difference was found in the case of forestry aid under the RDP, where the MoA reported CZK 110.7 million in the Information, but the correct figure should have been CZK 74 million.
- The MoA reported in the Information the amount of CZK 139.11 million instead of the actually paid CZK 79.378 million in the text part of the Information for aids from the National Agency for Agricultural Research, and included only the amount of CZK 12 million in the total amount paid (in the summary financial table 17 in the Information).

## **6.2. Funds reported beyond the framework of the Concept**

The MoA reported approximately CZK 3 billion for subsidy programmes under the Concept. In the *Information on the progress of implementation of programmes to reduce the consequences of drought and water scarcity in the Czech Republic under the responsibility of the Ministry of Agriculture*, the MoA reported additional programmes beyond Annex 14 to the Concept. Another CZK 21 billion were agricultural aids under the RDP (e.g., payments for organic farming and less fertile areas), which did not contribute to mitigating the negative impacts of drought and water scarcity. The MoA did not monitor the actual effects and real impacts of these subsidies on the area of drought. A further CZK 2.4 billion was spent on compensation for damage caused to farmers by drought.

The audit showed that the subsidy programmes listed in the Concept (Annex 14 to the Concept) were, in the opinion of the MoA, subsidy programmes specifically targeting the problem of drought and water scarcity. Programmes presented beyond the Concept are programmes that have different objectives and priorities but also contribute to or are related to the drought problem. It is very difficult to evaluate the effects of these programmes on drought, mainly because their objectives are different and the setting of indicators to measure effects other than on drought corresponds to those objectives.

## **7. Contradictions between the MoA and the MoE**

Drought is an extensive issue affecting many actors. Addressing this issue requires the cooperation of the main stakeholders, namely the MoA and the MoE. Without their cooperation, it is impossible to achieve the set objectives.

Cooperation between the MoA and the MoE in the area of drought was not optimal. This is evidenced, among other things, by the disagreement on the forthcoming draft anti-erosion decree, which is crucial for improving the management of agricultural land and strengthening its ability to retain water. Another example is the implementation of conflicting subsidy programmes. The funds of the MoA are used for technical improvements of the beds of small watercourses, without any requirement to preserve their nature-based state. On the other hand, the MoE uses its subsidy programme to remove inappropriate technical improvements and return watercourses to a nature-based state. There was no consensus between the MoA and the MoE on subsidies for water supply and sewerage systems, either. These subsidies were provided by both the MoA and the MoE. Aid for the sewerage system was included by the MoA in the area of combating drought, but not by the MoE.

### **7.1. Failure to adopt the anti-erosion decree**

The MoE performs the role of the central state administration authority for the protection of the agricultural land fund according to Act No. 334/1992 Coll., on the protection of agricultural land.

The task of preparing and putting into practice an anti-erosion decree as a comprehensive tool for qualitative soil protection is set out in the strategic documents on drought and water scarcity. The task is managed by the MoE and co-managed by the MoA. The relevant audit was set for 2017.

**The MoE identified a speedy issuance of the anti-erosion decree to be crucial for improving the management of agricultural land and strengthening its ability to retain water.**

In June 2017, the MoE submitted a draft anti-erosion decree under an inter-ministerial comment procedure. The basis for the draft was the use of the so-called erosion calculator. After the inter-ministerial comment procedure, the draft was suspended. In October 2018, the MoA submitted its own draft anti-erosion decree based on the rules of conditionality and the monitoring of erosion events. The draft of the MoA was assessed by the MoE as unacceptable.

**The anti-erosion decree had not been approved by the end of the audit.**

### **7.2. Conflicting subsidy programmes**

**The subsidy programme of the MoA is used for technical improvements of small watercourses. The subsidy programme of the MoE aids improvements that are in line with the requirement to preserve a nature-based state, and inappropriate technical improvements are being removed.**

*According to the Concept, in the management of watercourses, "... priority should be given to the objectives of protecting water bodies in order to achieve their good ecological condition over the consistent restoration of technical improvements in watercourse beds if they no longer serve their purpose and there is no overriding public interest. Improvements in this area*

*can be achieved through the following measures. Sections of watercourses with already inadequate technical modifications, which require improvement of their ecological condition, should be divided into those that will require solutions in the form of complex revitalisation and those sections where it is sufficient to support spontaneous renaturation by complementary measures. For these reasons, the orientation of watercourse management towards measures to improve the ecological condition of watercourses should be encouraged."*

Ecologically oriented management of watercourses should be aimed at minimising activities that damage the ecological condition of watercourses and at maximising the ability of spontaneous renaturation as a tool to restore their natural characteristics and functions.

The MoA supports the programme *Aid for measures on small watercourses and small reservoirs*. One of the parameters of the programme is *"the construction, reconstruction/repair of fortification of watercourse beds"*, with a target value of 530,000 m<sup>2</sup>.

The OPE addresses the revitalisation or renaturation of watercourses for the programming period of 2014-2020 under specific objectives 1.3 and 4.3. According to the target value of the indicator *"length of the addressed kilometres of watercourses"*, the MoE planned to aid the revitalisation of 236 kilometres of rivers. According to the information on the implementation of the indicators as at 11 March 2019, only 0.23 kilometres of watercourses had been revitalised. According to the target value of the indicator *"length of revitalised watercourses"*, the MoE planned to aid the revitalisation of 202 kilometres of rivers. According to the information on the implementation of the indicators as at 11 March 2019, 7.9 kilometres of watercourses had been revitalised.

**The MoA plans to provide funding for 530,000 m<sup>2</sup> of technically improved watercourse beds under the subsidy programme. The MoE, on the other hand, supports revitalisation where technical (artificial) modifications of watercourses are abolished, as artificially modified watercourse beds accelerate water runoff from the landscape.**

### **7.3. Inclusion of the sewerage system among projects contributing to mitigating the negative effects of drought and water scarcity**

The MoA administers the national subsidy programme entitled *Aid for the construction and technical improvement of water supply and sewerage infrastructure II*. This was listed in Annex 14 to the Concept as a source of funding to mitigate the negative effects of drought and water scarcity.

The MoE, through the SEF, administers the OPE, namely specific objective 1.1 *"to reduce the amount of pollution discharged into surface water and groundwater from municipal sources and the input of pollutants into surface water and groundwater"*. However, in Annex 15 to the Concept, the MoE does not mention these resources as financial means to mitigate the negative consequences of drought and water scarcity.

According to the MoE, *"... the aided activities under specific objective 1.1 are primarily aimed at reducing the amount of pollution discharged into surface water and groundwater from municipal sources. These measures do not have a demonstrable effect on mitigating the*

*negative impacts of drought and, therefore, were not included in the Concept of Drought Protection for the Czech Republic”.*

The audit found that the MoA and the MoE were spending funds on the construction of sewers, among other things. While the MoA reports these funds as financial resources for mitigating the negative consequences of drought and water scarcity, the MoE does not show the resources spent in this way in the Concept. There is no consensus between the MoA and the MoE on the inclusion of funds spent on the construction and technical improvement of sewers.

## 8. Increasing drought damage and financial compensation

Drought compensation is not an active tool to combat drought. Active tools are investment subsidy programmes to prevent the negative effects of drought and water scarcity. Rising compensation claims point to the ineffectiveness of preventive measures.

After the occurrence of an extraordinary event, the Government of the Czech Republic decides on the launch of a programme to compensate for the damage incurred, including the allocation of the relevant funds. The Government of the Czech Republic decided to compensate for drought damage in 2015, 2017 and 2018. Drought compensation is paid from the *Framework Programme for Risk and Crisis Management in Agriculture*. These are national subsidies that are fully covered by the state budget. The total budget of the Framework Programme is approximately CZK 7 billion, while the estimated annual budget (according to the “*Information on the progress of implementation of programmes to reduce the consequences of drought and water scarcity in the Czech Republic under the responsibility of the Ministry of Agriculture*”) is CZK 1.75 billion. The audit verified compensation for drought damage in 2015 and 2017.

**Table 1: Overview of compensation paid by crop group and nursery type (as at 16 April 2019)**

Type of compensation	Total paid (in CZK million)
<b>Compensation for drought damage in 2015</b>	
Agricultural crops – cash crops, fruit and ornamental nurseries	119.86
Agricultural crops – fodder crops (maize and PG)	1,045.86
Forest nurseries	28.15
<b>Compensation for drought damage in 2017</b>	
Agricultural crops – cash crops	1,017.76
Agricultural crops – fodder crops (maize and PG)	155.15
<b>TOTAL COMPENSATION</b>	<b>2,366.78</b>

Source: prepared by the SAO audit team on the basis of a communication from the MoA dated 16 April 2019.

The MoA paid almost CZK 2.4 billion to farmers in the period of 2016-2018 to compensate for the damage caused by the drought in 2015 and 2017; however, this is not an active fight against drought, but only a financial contribution to overcome an unfavourable period. The MoA spent CZK 2.9 billion on the implementation of investment subsidy programmes to mitigate the negative impacts of drought in the period of 2016-2018, which can be

considered as preventive measures in the fight against drought. This comparison clearly shows that the funds paid out for the national investment subsidy programmes of the MoA and for compensation in 2016-2018 were of a similar amount. Increasing damage claims thus show that the preventive measures implemented to combat drought are not sufficiently effective.

#### **List of Terms and Abbreviations**

Concept	<i>Concept of Drought Protection for the Czech Republic</i>
Sites	sites for surface water storage
MoA	Ministry of Agriculture
MoE	Ministry of the Environment
OPF	Operational Programme <i>Fisheries 2014-2020</i>
OPEn	Operational Programme <i>Environment 2014-2020</i>
RDP	<i>Rural Development Programme 2014-2020</i>
SEF	State Environmental Fund
PG	permanent grassland

**Total amount of funds provided in subsidy titles and aids from the Ministry of Agriculture in 2016-2017  
(in several cases including 2018, up to August) to mitigate the negative impacts of drought and water scarcity**

Subsidy titles	Estimated allocation listed in Annex 14 to the Concept (in CZK million)	Values reported by the MoA in the Information		Funds paid – values identified by the SAO audit (in CZK million)
		Reported by the MoA in the Information, in the text and tables (in CZK million)	Summary in Table 17 of the Information (in CZK million)	
<b>Subsidy titles listed in Annex 14 to the Concept</b>				
129 280 – Aid for water retention in the landscape – ponds and reservoirs	1,000	450.50	2,938.10	31.00
Execution of the Skalička waterworks in the Bečva river basin	100	350.00		350.00
Preparation and execution of dams in regions affected by drought and lack of water resources	400	Under preparation		0.00
129 290 – Aid for measures on small watercourses and small reservoirs	1,600	1,122.00		1,122.00
Aid for the planting of ameliorative and stabilising tree species	1,500	14.40		14.40
129 310 – Aid for the competitiveness of the agri-food complex – II-stage irrigation	1,100	61.00		61.00
Removal of sediments from dams, construction of dams	1,500	Under preparation		0.00
Programme to aid the reconstruction, repair and modernisation of major drainage facilities	200	Not launched		0.00
Programme to aid the interconnection of water management systems to secure water resources	500	Under preparation		0.00
129 300 – Aid for the construction and technical improvement of water supply and sewerage infrastructure II	4,800	803.68		589.27
I.I – Aid for the establishment of drip irrigation in orchards, hop fields, vineyards and nurseries	100	80.92		76.02
Programme to develop tools to assess the technical, water management and economic efficiency of drought and water scarcity protection measures	400	Under preparation		0.00
Compensation under the Forest Act – measures of land reclamation and torrent control in forests	250	56.10		56.10
<b>Subsidy aids from the MoA chapter (outside programme funding)</b>				
Promotion of ecological and nature-friendly forest management technologies*	600	68.62	4,499.10	68.60
Restoration of forests affected by pollutants*	150	7.61		7.90
Rehabilitation, protection and maintenance of growth up to 40 years of age – ameliorative and stabilising tree species	Not specified	267.10		266.40
Provision of aerial firefighting services	Not specified	23.94		17.73
Mitigating drought damage to agricultural crops	Not specified	4,120.00		2,366.78
Aid under the National Agency for Agricultural Research	Not specified	139.11		79.38
<b>Aid from national resources</b>	<b>CZK 14.2 billion in subsidies</b>	<b>7,564.98</b>	<b>7,437.20</b>	<b>5,106.58</b>
<b>EU-funded aid</b>				
Agricultural, environmental and climatic measures	Not specified	8,731.19	20,732.50	8,731.19
Organic farming	Not specified	3,502.20		3,502.20
Payments for mountain areas and other areas with natural or other specific constraints (ANC)	Not specified	7,133.34		7,133.34
Afforestation of agricultural land	Not specified	5.86		5.86
Old commitments under the RDP 2007-2013	Not specified	1,359.89		1,359.89
Implementing preventive measures in forests	Not specified	25.00	110.70	25.00
Restoration of forest growth after calamities	Not specified	49.00		49.00
Landscaping	Not specified	727.00	727.00	31.30
Operational Programme Fisheries	Not specified	29.30	29.30	29.30
<b>EU-funded aid</b>	<b>Not specified</b>	<b>21,562.78</b>	<b>21,599.50</b>	<b>20,867.08</b>
<b>TOTAL</b>		<b>29,127.76</b>	<b>29,036.70</b>	<b>25,973.66</b>

Source: prepared by the SAO on the basis of the Concept, the Information and information from the MoA.

\* Subsidy titles listed in Annex 14 to the Concept.



**Total amount of funds provided in subsidy titles of the Ministry of the Environment in 2015-2018  
to mitigate the negative impacts of drought and water scarcity**

Subsidy titles listed in Annex 15 to the Concept		2014-2020			
		Maximum amount of aid specified in the Concept	Estimated allocation listed in Annex 15 to the Concept (in CZK million)	Funds paid – values identified by the SAO audit (in CZK million)	
OP Environment 2014-2020	PRIORITY AXIS 1 – IMPROVING WATER QUALITY AND REDUCING FLOOD RISK				
	SPECIFIC OBJECTIVE 1.2 – Ensure the supply of drinking water of adequate quality and quantity	Construction and modernisation of water treatment plants and improvement of the quality of drinking water sources, including the construction and modernisation of systems for the protection of drinking water sources in their immediate vicinity, serving public needs (Activity 1.2.1)	63.75%	3,200	779.28
		Construction and completion of drinking water supply and distribution networks, including related public facilities (Activity 1.2.2)	63.75%		
	SPECIFIC OBJECTIVE 1.3 – Ensure flood protection of built-up areas	Improving or increasing the retention potential of watercourse beds and adjacent floodplains, improving natural spillways (Activity 1.3.1)	85%	5,300	41.12
		Management and reuse of rainwater in built-up areas instead of its accelerated disposal through sewers (Activity 1.3.2)	85%		
	PRIORITY AXIS 4 – PROTECTION AND CARE OF NATURE AND LANDSCAPE				
	SPECIFIC OBJECTIVE 4.3 – Improve natural landscape functions	Improving migration barriers for aquatic and terrestrial animals and measures to reduce animal mortality associated with the development of technical infrastructure (Activity 4.3.1)	75%	4,200	512.22
		Creation, regeneration or enhancement of the functionality of landscape elements and structures (Activity 4.3.2)	80 to 100%		
		Revitalisation and support of spontaneous renaturation of watercourses and floodplains, restoration of eco-stabilising functions of water and water-related ecosystems (Activity 4.3.3)	100%		
		Improvement of the species, age and spatial structure of forests (except state-owned forests) managed under the Forest Management Plan except for Specially Protected Areas and Natura 2000 sites (Activity 4.3.4)	75%		
Implementation of nature-based measures resulting from comprehensive studies aimed at slowing down surface water runoff, erosion protection and adaptation to climate change (Activity 4.3.5)		75%			
SPECIFIC OBJECTIVE 4.4 – Improve the quality of the environment in settlements	Revitalisation of functional areas and elements of settlement greenery (Activity 4.4.1)	60%	1,900	91.76	
NATIONAL PROGRAMMES	National Programme Environment – programme of the State Environmental Fund of the Czech Republic	“Rainwater Management Programme” – rainwater management in households (rainwater catchment for garden watering, rainwater storage for toilet flushing and garden watering, use of grey or treated wastewater for watering, toilet flushing, disconnection of rainwater from the sewerage system)	50%	100*	42.14
		“Exploration, strengthening and building of drinking water sources” – exploration, strengthening and building of drinking water sources (exploratory boreholes addressing drinking water sources in municipalities, including their connection to water supply lines)	60-80%	300	116.14
		“Support for settlement greenery” – aid for the restoration and enhancement of natural areas, including accompanying water features, in towns, villages and their surroundings (regularly announced calls)	80%	40*	33.33
		Calls under the sub-area “Environmental education and awareness-raising” (regularly announced calls)	Varies according to the specific call	Varies according to the specific call	1.18
	MoE – programmes under the responsibility of the MoE	“Landscape Care Programme” – restoration, creation and care of landscape elements (e.g., woods, meadows, pools, wetlands, elements of the territorial system of ecological stability of the landscape) for small measures up to CZK 250 thousand	100%	200	133.57
	“Support for the restoration of the natural functions of the landscape” – ISPROFIN No 115 160 – measures of adaptation to climate change for forest, non-forest and water ecosystems (e.g., replanting of native trees, anti-erosion measures, restoration of small water reservoirs) for small measures up to CZK 250 thousand (in the case of water ecosystems up to CZK 1 million)	100%	50	59.55	
<b>TOTAL</b>				<b>1,810.29</b>	

Source: prepared by the SAO on the basis of the Concept and information from the MoE.

\* This is the allocation for the first call. The allocation will be increased.

### Data analysis for the Audit Report

The SAO analysed data on drought and water scarcity. Data for the analysis was provided by the Intersucho Project – [www.intersucho.cz/cz/](http://www.intersucho.cz/cz/).

The **Intersucho Project is now in its seventh year of monitoring the state of drought and its impacts in the Czech Republic**, mainly thanks to the collaboration of numerous scientists and experts who, at the time of the project's inception, built on more than a decade of ongoing research in drought monitoring and climatology in the Czech Republic, Europe and the U.S. The project cooperates with and is supported by a number of institutions, agencies and commissions.

It is an interdisciplinary project involving meteorologists, atmospheric physicists, climatologists, agro-climatologists, dendrochronologists, ecophysicologists, forestry experts and GIS specialists.

The main operators of the Intersucho Portal are three institutions, where the core research work is carried out and the operation of the entire website is ensured. It is a cooperation between the Global Change Research Institute of the Czech Academy of Sciences (CzechGlobe), Mendel University in Brno and the State Land Office.

The data processed concerns the period from 2015 to 2019. The data is collected by a network of expert respondents who share their observations from their locations in real time.

The data analysis is available at: <https://www.nku.cz/scripts/detail.php?id=10704>.