

THE RATE OF THE AGRICULTURAL WATER SUPPLY IN THE LIGHT OF GENERAL COMMENT NO. 15*

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Article 15/F. (4) of Act LVII of 1995 on Water Management (hereinafter Water Management Act) stipulates those factors based on which the rate of the agricultural water supply fee must be determined. In doing so, the following obligations have to be respected: a) to provide coverage for the continuous and efficient operation and long-term maintenance of agricultural water supply; b) to contribute to the safe supply of agricultural water services; c) to encourage the provision of agricultural water services at a minimum cost and d) to comply with the principle of cost recovery under this Act. Interestingly, a number of key elements of these provisions can be also detected in General Comment No. 15 on the right to water (hereinafter General Comment No. 15) as both addresses water supply service though for a different function, notably agricultural and human use. Armed with this information, first, General Comment No. 15 will be discussed followed by the detailed examination of Article 15/F. (4) of the Water Management Act in the light of General Comment No. 15. Finally, some conclusions will be drawn.

1. General Comment No. 15 on the Right to Water

In 2002, the United Nations Economic and Social Council adopted General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), that contributed to clarifying the scope of the right to water and provided a guideline for states based on Articles 11 and 12 of the International Covenant on Economic, Social and Cultural Rights. Article 11 declares „*the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions*”, while Article 12 ensures the „*right of everyone to the enjoyment of the highest attainable standard of physical and mental health*”. Recital 2 of General Comment No 15 stipulates that the „*human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses*”. This acknowledgement is crucial as without drinking water humans cannot survive for more than a week, whereas without food we may survive for a month (Verschuuren 2006, 427). Therefore, this approach reflects the human rights approach which puts the people’s needs first in comparison with other uses and is especially used to challenge the economic and social injustice affecting the most vulnerable groups (Klawitter & Qazzaz 2007, 284).

In relation to the provisions of the General Comment No. 15, part II concerning the *Normative content of the right to water* and part III regarding *State parties’ obligations* must be highlighted. Embarking upon part II, Recital 10 lays down that „*The right to*

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water contains both freedoms and entitlements. The freedoms include the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies. By contrast, the entitlements include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water”.

As stated by Recital 11 and 12, the elements of the right to water must be adequate for human dignity, life, and health, in accordance with Articles 11, paragraph 1, and 12. While the adequacy of water required for the right to water may vary according to different conditions, the following factors apply in all circumstances: water availability, quality, and accessibility (including physical and economic accessibility, non-discrimination, as well as information accessibility).

Moving onto the State parties’ obligations, first, Recitals 18 and 19 contain the general legal obligations, such as *„States parties have a constant and continuing duty under the Covenant to move as expeditiously and effectively as possible towards the full realization of the right to water. Realization of the right should be feasible and practicable, since all States parties exercise control over a broad range of resources, including water, technology, financial resources and international assistance, as with all other rights in the Covenant.”* or *„There is a strong presumption that retrogressive measures taken in relation to the right to water are prohibited under the Covenant”*. Second, under Recitals 21 and 23, specific legal obligations are listed. Starting with the obligation to respect, it *„requires that States parties refrain from interfering directly or indirectly with the enjoyment of the right to water”*. It is followed by the obligation to protect that *„requires State parties to prevent third parties from interfering in any way with the enjoyment of the right to water”*. Finally, Recital 25 mentions the obligation to fulfil which *„can be disaggregated into the obligations to facilitate, promote and provide”*.

2. The Agricultural Water Supply Fee

Annex I to the Water Management Act stipulates agricultural water supply as the *„irrigation of agricultural and forestry land, water supply for ponds and other agricultural water use, and for other purposes related to the agricultural water supply system”*. It is noteworthy that even though several water uses are mentioned in this paragraph, in practice, the dominance of the irrigation of agricultural land can be observed. The phrase ‘agricultural water supply’ forms part of Article 15/F. (1) of Act LVII of 1995 on Water Management, which declares that *„The user of the agricultural water supply service shall pay an agricultural water supply fee to the service provider. The State may assume the water service fee for water use for irrigation, rice production and fish farming as defined in the Government Decree”*.

In addition, 15/F. § (3) of the Water Management Act sets out an agricultural water supply fee as a two-factor fee consisting of, on the one hand, the basic fee for the availability and the amount of water used, for water supply season and *pro rata temporis*.

3. The Rate of the Agricultural Water Supply

Article 15/F. (4) of the Water Management Act determines four requirements that must be taken into consideration when determining the rate of the agricultural water supply. This part wishes to analyse all these requirements as well as the potential link to General Comment No. 15.

(a) to provide coverage for the continuous and efficient operation and long-term maintenance of agricultural water supply

This provision determines three requirements regarding the agricultural water supply. First, the operation is required to be continuous. Under General Comment No. 15, the term continuous is understood as „*the regularity of the water supply is sufficient for personal and domestic uses*”. If we consider the irrigation of the agricultural land as an example, based on Article 6(5) of Regulation KHVM 2/1997. (II. 18.), we can see that the water supply season runs from 1 March to 31 October; nonetheless, the operator and the water user may agree on a different time if the directorate agrees. Given that irrigation is a seasonal activity, whereas the drinking water supply has to be ensured throughout the year, we can conclude that the term continuous does not mean the same thing for these two activities. However, similarly to the definition of General Comment No. 15, concerning agricultural water supply, the term continuous must also involve uninterrupted water supply during the water supply season. Additionally, it is worth noting that on the one hand, it is not uncommon that agricultural lands are covered with either snow or inland inundation in the spring, including March and early April, that makes agricultural activities impossible or excessively difficult to carry out during this period, therefore there is no need for irrigation. These phenomena affect primarily the Great Plain. At the same time, interestingly, an extended period of water stress was issued until 30 November 2018 that exceeded the water supply season by a whole month. So, in harmony with this phenomenon and the authorization of the Water Management Act, ‘continuous’ may imply that water supply service can be provided even after the agricultural water supply season thanks to the agreement between the operator and the water user. In other words, in practice, the period in which agricultural water supply service is ensured can be either shorter or longer than the agricultural water supply season. Not to mention, the number of factors determine whether or to what extent receiving agricultural water supply service can be justified at all, including but not limited to the temperature, the water need of the soil and the crop, and the precipitation. Nonetheless, low interest in receiving this service cannot have an impact on ensuring continuous water supply, but even the opposite might happen and the water service provider has to be able to satisfy (at least temporarily) higher water needs than usual without compromising on the requirement of continuous water supply.

Second, the requirement of efficient operation is imposed on the operator. Water efficiency means „*wasting less water and increasing productivity per volume*”. It is both „*an economic and environmental opportunity that serves sectors and functions that use water, helps economic growth and, at the same time, safeguards the environment*”. The requirement of efficiency must be linked to the problem of water leakage from supply

systems that is still ‘substantial’ in certain parts of Europe due to the construction and maintenance of water-related infrastructure (EEA 2018, 75). As regards efficiency under Recital 28 of General Comment No. 15, it is referred to in relation to sufficient and safe water and addressed as a recommendation towards state parties, namely:

“States parties should adopt comprehensive and integrated strategies and programmes to ensure that there is sufficient and safe water for present and future generations. Such strategies and programmes may include: (a) reducing depletion of water resources through unsustainable extraction, diversion and damming; [...] (f) increasing the efficient use of water by end-users.”

As can be seen, this provision highlights the significance and responsibility of the end-users as well. It is evident that efficient operation and efficient water use by the water user must go hand in hand. An efficient operation system is worth nothing if the users do not treat water as a valuable resource with limited renewable capacity, and instead, water is used in a wasteful or inefficient way. Conversely, the efforts made by environmentally conscious and responsible water users are unable to compensate for the failures derived from the inefficient operation.

(b) to contribute to the safe supply of agricultural water services

A safe supply of agricultural water services may cover both sufficient water quantity and quality. These aspects can be illustrated, among others, with the water needs of crop production. When it comes to the quantitative aspect of irrigation, a safe supply may imply water in sufficient quantity throughout the water supply season. The irrigation water requirement of crops is determined by several factors, such as the crop water requirement, as well as by the water naturally available to the crops including *inter alia* effective precipitation and soil moisture. Accordingly, the irrigation water requirement of crops can be calculated with knowledge of climatic conditions and the physiological processes at the plant level (FAO). Importantly, crops differ widely in terms of their water intensity and drought tolerance capacity. Turning our attention to General Comment No. 15, it opts for referring to the World Health Organization’s guidelines to define the minimum water quantity in order to fulfil the right to water. In addition, Recital 12 (a) of General Comment leaves scope for a derogation for those individuals and groups who *„require additional water due to health, climate, and work conditions”*.

As currently calculated by the World Health Organization, *„Based on estimates of requirements of lactating women who engage in moderate physical activity in above-average temperatures, a minimum of 7.5 litres per capita per day will meet the requirements of most people under most conditions. [...] A higher quantity of about 20 litres per capita per day should be assured to take care of basic hygiene needs and basic food hygiene”* (WHO).

As regards water quality for irrigation, it has to be stressed that although irrigation does not claim a level of water quality as high as, among others, drinking water, but it does not mean that all qualities of water would be acceptable for this type of water use. Water for irrigation is required to have a dissolved salt content of less than 100-500 mg/l and the percentage of sodium should be less than 35-45%. These values depend on the soil to be irrigated and the method of cultivation (Pregun & Juhász). Moving onto Recital 12 (b) of General Comment No 15., the requirements concerning water quality

are summarized in the following way: „*The water required for each personal or domestic use must be safe, therefore free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person’s health. Furthermore, water should be of an acceptable colour, odour and taste for each personal or domestic use*”.

In addition, Recital 28 of General Comment No 15. confirms the obligation „*to ensure that there is sufficient and safe water for present and future generations*”. This approach can be strongly linked to sustainable development.

(c) to encourage the provision of agricultural water services at a minimum cost and d) to comply with the principle of cost recovery under this Act

It is practical to discuss the two cost-related provisions together. Embarking upon the provision of agricultural water service at a minimum cost, some aspects of irrigation have to be referred to. First, irrigation plays and will play a special role in agriculture in Hungary since the damage caused by persistent drought affects degraded soils in their physical and biological state, as well as soils with a low nutrient level much more severely. Conversely, the good physical and biological condition of soils improves the drought tolerance of the field (VAHAVA 2005, 29). Second, it cannot be overemphasised that „*irrigated agriculture is, on average, at least twice as productive per unit of land*” (FAO). As a result, productivity can be linked to food security and farmers’ income.

However, according to the revised National River Basin Management Plan adopted in 2015, merely 1-2 per cent of agricultural land is irrigated depending on the weather conditions, whereas the proportion of irrigable land is 3.3 per cent (OVGT 2015, 268). Based on the Research Institute of Agricultural Economics, in 2016, more than three-quarters of the areas, namely 128 823 ha, where authorisation for irrigation was granted, were located on the Great Plain (AKI 2017, 4). Interestingly, a big discrepancy can be detected between the areas where authorisation for irrigation was granted and where irrigation actually took place, as merely 53.35 per cent of those areas where authorisation for irrigation was granted were actually irrigated (AKI 2017, 6).

These phenomena, notably the low proportion of irrigated land as well as the high proportion of areas where authorisation for irrigation was granted but was actually not irrigated might be explained by the high installation and maintenance cost of the irrigation systems as well as the price of water for irrigation. These concerns are reflected in Kovách’s research on Hungarian land users, which identified the heterogeneity of farmers in terms of their economic power and farm size as well as the increasing concentration of agricultural lands (Kováč 2016). As a result, on the one hand, the provision of agricultural water services at a minimum cost can encourage irrigation even for those who have lower incomes. At the same time, it raises questions such as whether it can be justified to favour farmers with high income who could pay higher costs as well or whether the requirement of minimum cost can be compatible with the efficient operation.

In sharp contrast to the supply of agricultural water, the use of which, although beneficial, is still voluntary, costs regarding drinking water are way more sensitive. This question is addressed in Recital 12(c)(ii) of General Comment No. 15 in relation to

availability as economic accessibility, namely „*Water, and water facilities and services, must be affordable for all. The direct and indirect costs and charges associated with securing water must be affordable, and must not compromise or threaten the realization of other Covenant rights*”.

Moving onto the obligation to comply with the principle of cost recovery under this Act, Article 15(7) of the Act on Water Management states that „*Pricing policy must take into account the principle of recovering the costs of water services, depending on the purpose of the demand for water (distinguishing at least household, industrial, agricultural uses), taking into account the costs of protecting the environment and water resources, the polluter pays principle. When setting prices, account shall be taken of the social, environmental and economic impact of the return*”.

Inspired by the previous paragraph on the cost of the agricultural water supply system as well as the economic affordability of water under the General Comment, one major difference between agricultural water use and water for human use must be reaffirmed. This difference follows from the fact that humans cannot exist without water and they need water in sufficient quantity and quality to survive and satisfy their basic needs. However, receiving agricultural water supply is voluntary though beneficial for farmers. In addition, even though increasing food supply and food security by irrigation is justifiable goals, it cannot be ignored that not all crop productions support these goals.

Conclusions

Article 15/F. (4) of the Water Management Act concerning the rate of the agricultural water supply fee as well as General Comment No. 15 on the right to water share a number of similarities, whereas differences are attributable to the different functions of drinking water and water for irrigation. Similarities can be observed in relation to the operation of the water supply service, including the requirements of ‘continuous and efficient operation’ and the ‘safe supply’ of water service. Nonetheless, in relation to the costs, it has to be mentioned that receiving agricultural water supply is voluntary as the majority of agricultural lands are rainfed in Hungary, whereas drinking water is received primarily through the water supply system that should be affordable to everybody.

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