

A critical analysis of municipal water supply in Turkey from the perspective of the UN-2030 Agenda for sustainable development

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Abstract

According to the definition of water security as proposed by UN-Water, a population is water secure only when it has a capacity to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability. This definition suggests that billions of people are not water secure because of the local, regional and global challenges. Increasing population, climate change and pollution are among the primary stresses that threaten the water security. Recognizing the fact that a significant majority of world population faces these challenges and they are lacking the capacity to achieve and sustain water security, *UN-Water* supports the inclusion of water security on the agenda of the UN Security Council and in the post-2015 development agenda as part of the Sustainable Development Goals. In 2015, UN member countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals, with 169 targets. With these Goals that universally apply to all, countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind. Goal number 6 (SDG 6) is directly related to water and defined as “Ensure access to water and sanitation for all”. SDG 6 has six targets (plus two) that will assist achieving the goal. The fifth target (SDG 6.5) is phrased as “by 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate”.

This paper discusses the current and the potential future challenges that Turkey will face in her efforts to achieve this target in the defined timeframe. The current water resources potential is evaluated on 81 province basis, from the standpoint of ensuring access to clean water for all. It was recognized that a significant number of municipalities has changed their water source from groundwater to surface water during in the last decade. Pollution, cost of energy and significant decline of groundwater level are among the main reason for this change. Recalling that surface waters are more vulnerable to climate changes as well as pollution and to modifications in land use, groundwater resources should be regarded as “strategic” in the sense of achieving water security and SDG’s. Following a detailed discussion of the current approach applied in water management in Turkey and the problems inherent to the methodology a series of recommendations are proposed to meet and tackle some of the challenges.

Keywords: *UN-2030 Agenda, Sustainable Development Goals, SDG 6.5, Turkey, clean water*