Abstract

The Catchment of Esteghlal dam of Minab Because of saltwater rivers and also Very high air temperature in the city of Minab And Hormozgan province And On the other hand because of the city drinking water supply Minab, Bandar Abbas, Qeshm and kamir has special importance. According to the importance of global climate change in this Research, To review and assess the effects of climate change in five synoptic stations in the province have been investigated By General Circulation Models (Fifth Assessment Report) Appropriate with area, under 4 scenario RCP (2.6, 4.5, 6.0, 8.5),and at end, the survey of water resources Allocation of Esteghlal dam of Minab by using WEAP software has been done.The Results of downscaling models shows, Weakness neural network (Multi-Layer Perceptron) in downscaling precipitation data. For this purpose, the method Change Factor for downscaling precipitation data is used. The Results of increasing temperature are generally under the scenario rcp2.6 between 0.6 until 1.1 degrees and under the scenario RCP8.5 between 0.9 until 2.05 until the year 2100 AD compared to the observation period (2005-1986). Temperature increase under scenario 4.5 and 6.0 will be between two above scenario too. The highest temperature rise is related to the station of Bandar Jask and the lowest temperature increase is related to Bandar Lenge. In general, all models predict an increase in the amount of annual precipitation but in some months of the year will also see reduced rainfall. WEAP model was used to get the next Debi of Water and The results of the upcoming runoff generally reflects an increase of 4.5% runoff under the scenario 2.6 (the amount Reducing of runoff in March and April for all scenarios) until the year 2100. According to The results of modeling of reservoir the highest increase of tank volume is under the scenario 2.6 and also the lowest volume is under the scenario 4.5 until the year 2100. From the other side, the esteghlal Dam has ability to support the water requirements of the region until 2055, According to the definition of compatibility scenario and considering the plan of water desalination construction and also Closuring of unauthorized agricultural wells can provide the water requirements in the region for years to come.

Keywords: Climate Change, Allocation of water resources, SOM, GCM, WEAP

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