

Dekedal Hydro Meteorology



Forward

This Dekedal Hydro Meteorological Bulletin is prepared and disseminated by the Ethiopia Meteorological institute (EMI). The ultimate objective of producing and disseminating this bulletin is to inform all level decision makers with the updated and relevant hydro meteorological information. This Dekedal Bulletin reviews the march 1, 2025-month climate condition and its impacts over the river catchment across the country and highlights the March, 2, 2025 climate outlook along with the likely impact over the water dams and the rivers basins. The information contained in this bulletin is believed to assist the water professionals for planning the capacity expansion of reservoirs, water supply, ecosystem restoration as well as rehabilitation of existing systems including dams, irrigation, canals, pumps, wetlands and the likes. In addition to the aforementioned benefit the bulletin also reveals the aridity levels of each basin, extremes heavy rainfall events and areas where significant amount of moistures loss through evapotranspiration. In the impact outlook section of the bulletin it provides the likelihood of the climate in the coming month and its potential impact over various aspect of the river basins including the hydraulic structures such as culverts, bridges, reservoir spillways, road embankments and dikes. It also indicates the measures need to be taken as the early actions so as to reduce the possible negative impact of the upcoming month climate condition. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objectives of this bulletin a success.



1. *Introduction*

The provision of hydro meteorological services can contribute a significant role toward water resource management and socio-economic development. Both surface water and groundwater management are essentially linked to climate variability. Therefore, the provided climate information and knowledge in this monthly hydro meteorological bulletin have a critical importance for efficient, equitable and sustainable development and management of the national water resources and for coping with any climate related risks. The information illustrates the impact of previous 10 day weather on each and every water basins and the associated climate risks observed during the day under review. In addition to the previous 10 day impact assessment, the bulletin also provided the expected climate condition for the coming ten day and its impact on the water resource. The design of water-use and flood-control facilities, mainly dams and reservoirs, is frequently based on these analyses. Estimating the likelihood of precipitation, the distribution of precipitation and the rate of evaporation in location and time, the heavy rainfall and the subsequent runoff, extreme temperature and wind are among issues that hydro meteorologists are concerned with.

Hydro Meteorological Impact Assessment march 1-10, 2025

During March 1st day ten few southern basins experienced sub humid to wet moisture, such as most of Omo Gibe, Central rift valley, upper BaroAkobo, middle and lower Genale Dawa, upper eastern and middle pocket Abay, upper and lower pocket sub basin awash, lower bottom Wabi shebele and Ogaden. therefore In line to this, positive impact on surface water, the rest catchment were dry condition, most of Tekeze, Afar Danakil, Abay, Mereb gash, wabi shebele, upper Genale Dawa and middle and lower Baro Akobo, hence negative impact on water resources, specially day max temperature lose water by evaporation.



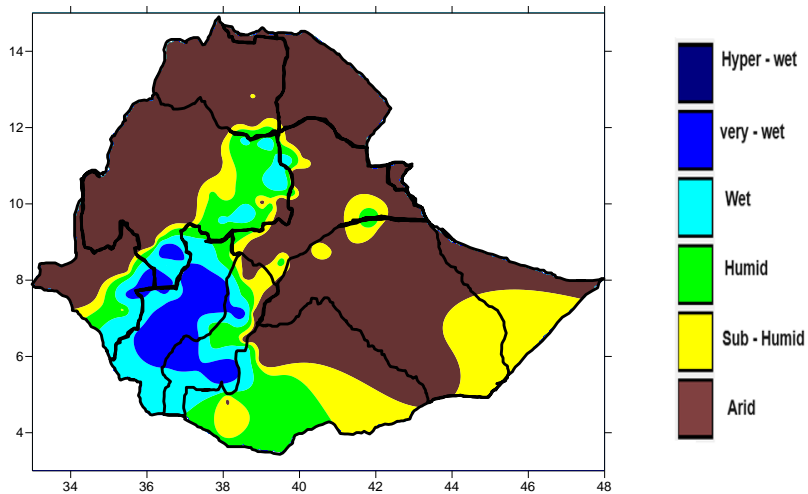
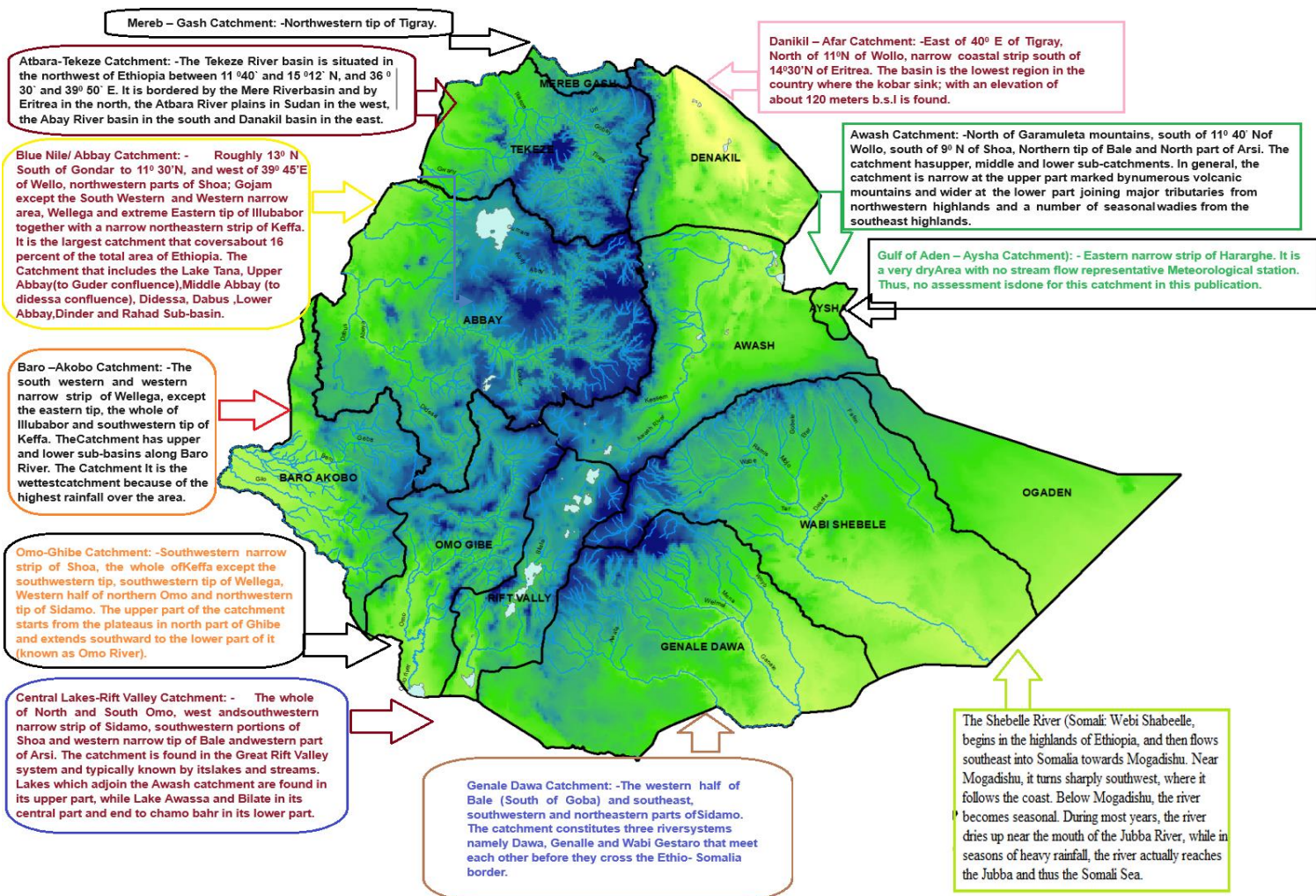


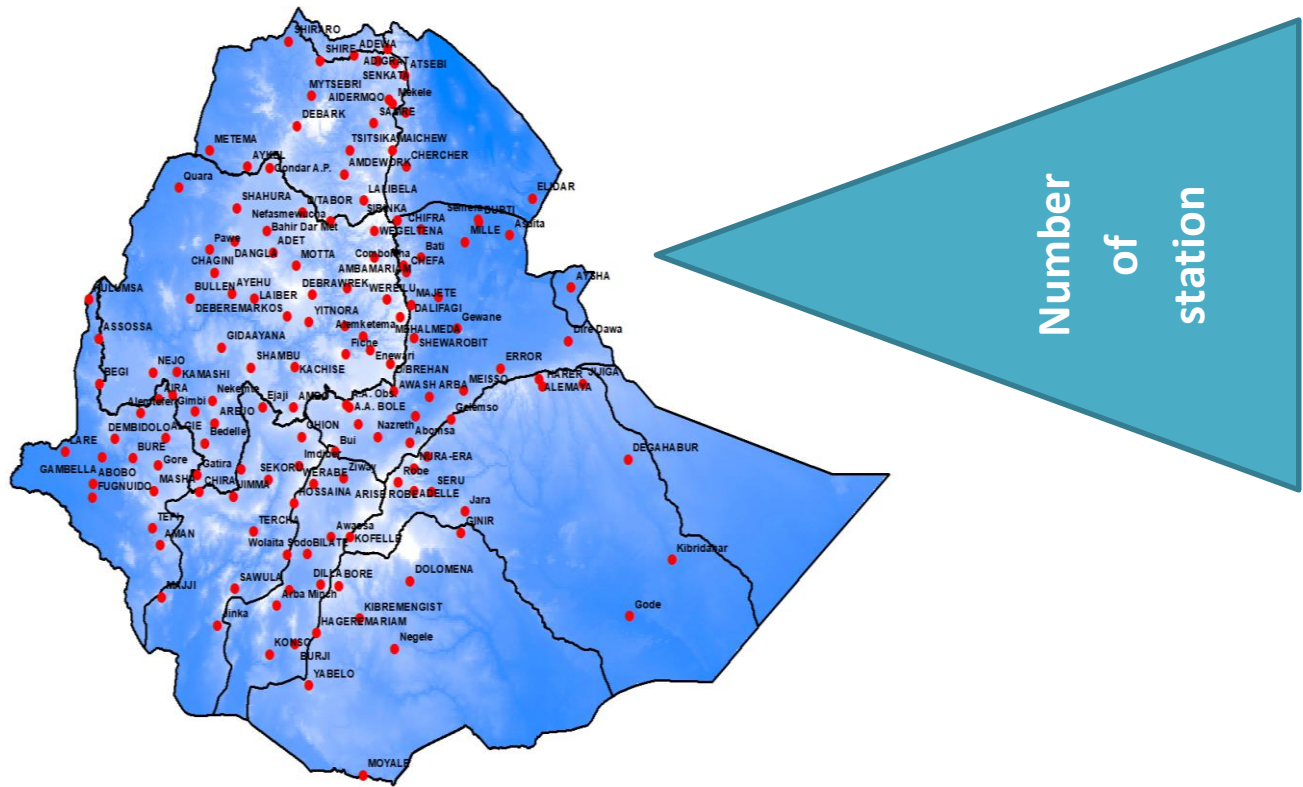
Figure 1 Dekedal Hydro Meteorological Assessments from march1-10, 2025

1.2 Hydro Meteorological Impact Outlook for march 11-20, 2025

The next ten days of March 2st dekade southern, central, and south western basins will be sub humid to wet weather condition. Therefore upper and middle Omo gibe, central rift valley, Genale Dawa, upper Baro Akobo, Awash, Easter upper Abay, in line with this we advise by using different method collect the rain water for water sustainability. Whereas most of basins will be dry condition such as most of Tekeze Afar Danakil, wabi shebele, Ogaden, Aysha, and Mereb Gash .this condition will have negative impact on water resource.







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