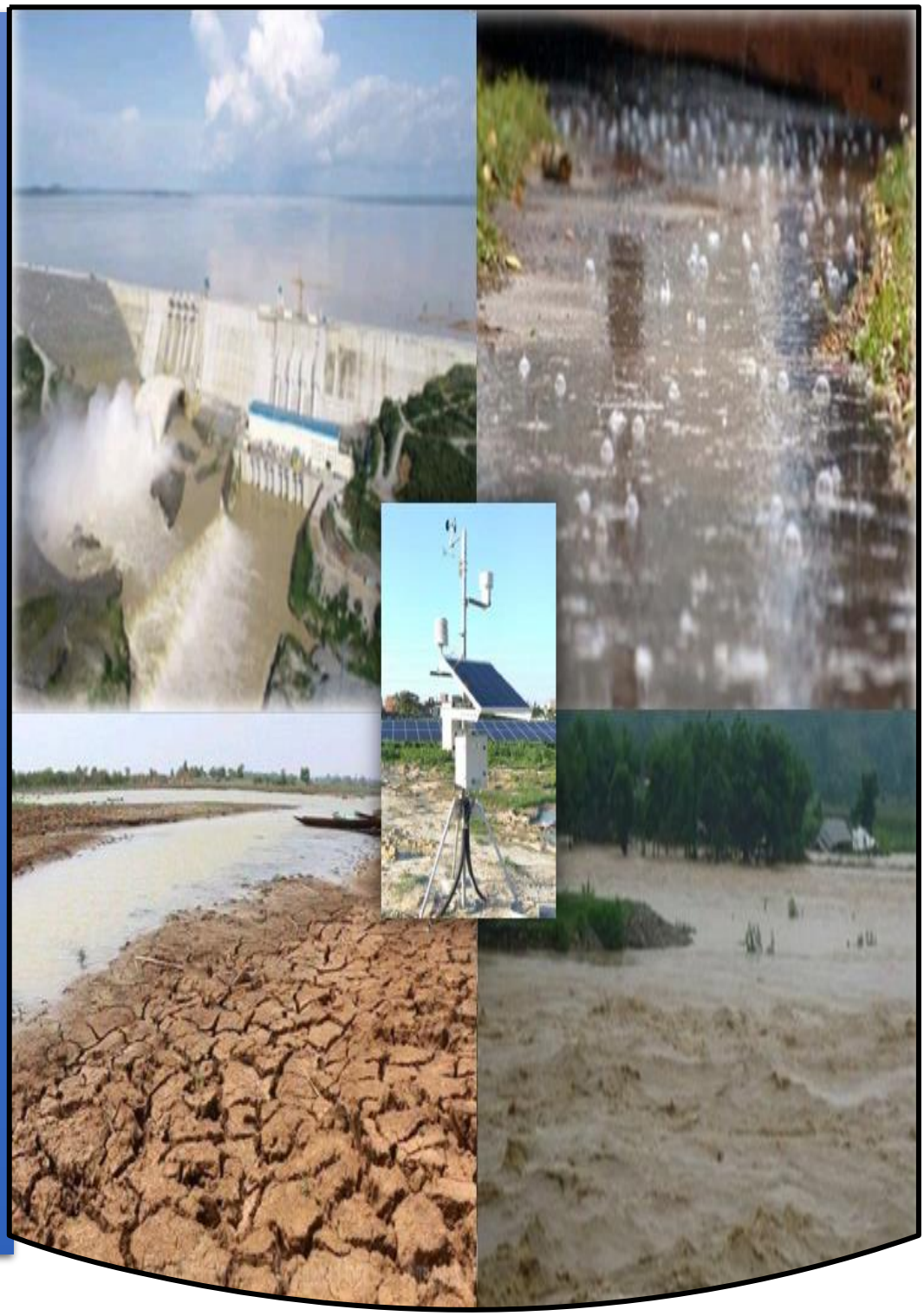
Hydro-meteorological and Flood Monitoring Bulletin: January 1st Assessment & 2nd Dekad Impact Outlook, 2025



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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 January 01-10, 2026-month climate condition and its impacts over the river catchment across the country and highlights the January 11-20, 2026 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 month climate on each and every water basins and the associated climate risks observed during the month under review. In addition to the previous month impact assessment, the bulletin also provided the expected climate condition for the coming months 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.

1.1 Hydro-Meteorological Impact Assessment (January 01-10, 2026)

During the first ten days of January 2026, most parts of the Mereb-Gash, Abay, Tekeze, Rift Valley, Ogaden, Wabi-Shebelle, Afar-Danakil, and Aysha catchments were under arid conditions. However, the Upper Baro-Akobo and the Middle Omo-Gibe catchments experienced relatively better surface water flow conditions. As a result, the prevailing arid weather conditions within the catchments led to a reduction in surface water flows, a day-to-day decrease in water levels in various water reservoirs, and negative impacts on ecological systems.

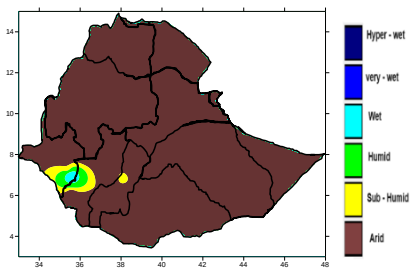
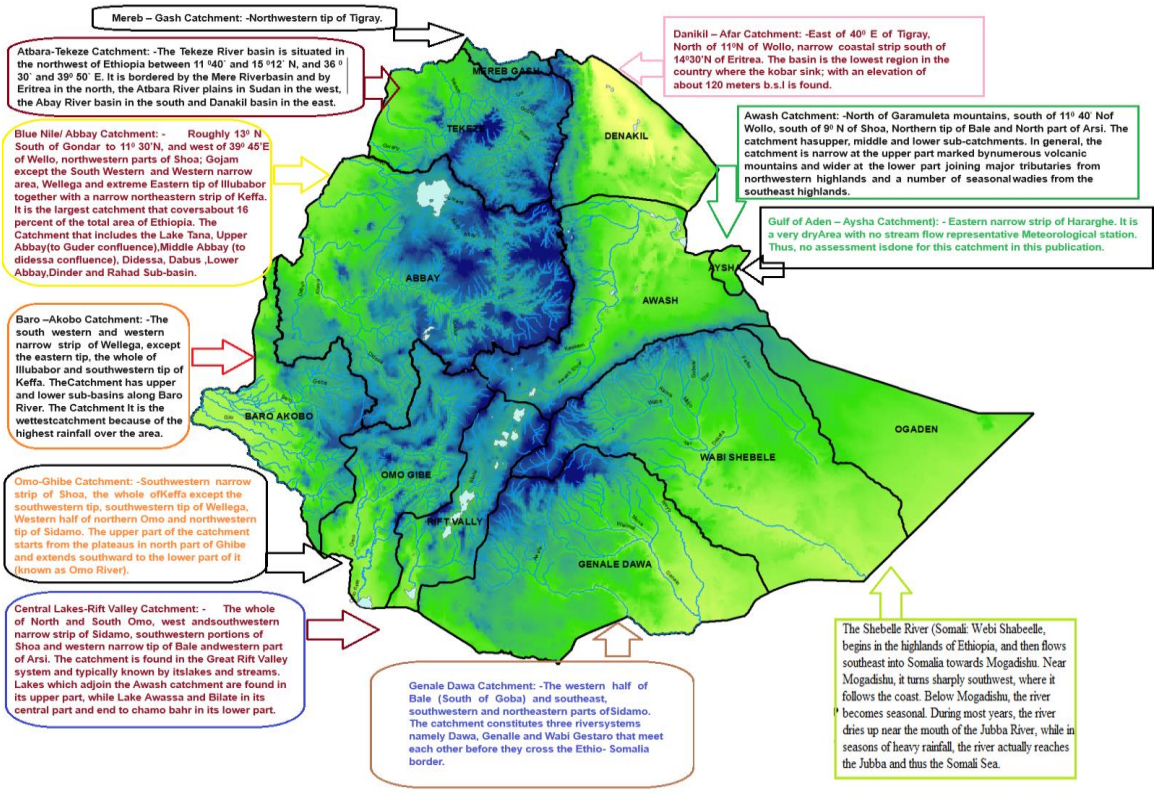
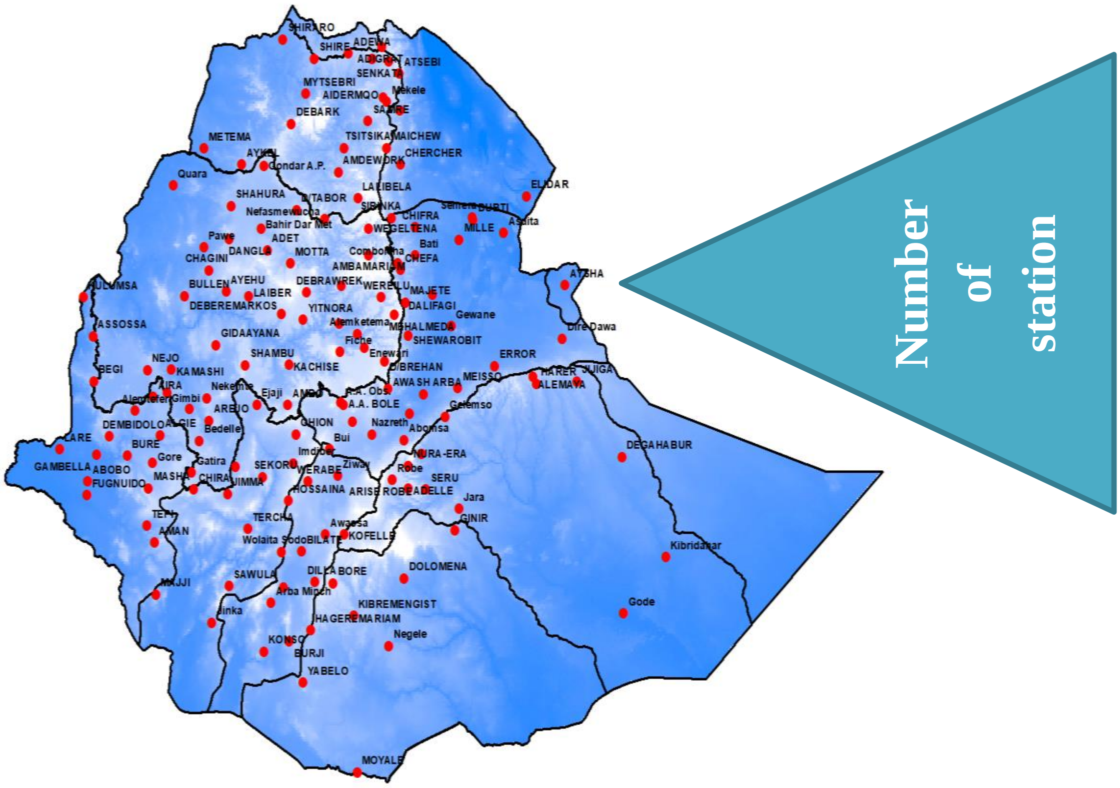


Figure 1 Dekad Hydro-Meteorological Assessments from January 01-10, 2026

1.2 Hydro-Meteorological Impact Outlook (January 11-20, 2026)

During the upcoming first dekad of January the prevailing weather conditions are expected to remain predominantly arid across most river basins, which may have notable impacts on the water sector. In line with this, moderate surface moisture flow conditions are anticipated in the Upper Baro-Akobo, parts of the Middle Omo-Gibe, and the Rift Valley, where there is no significant risk of flooding or sediment hazards and where moderate water availability for irrigation, hydropower generation, and domestic use is expected; however, increased evapotranspiration and declining surface water levels may lead to localized shortages of safe drinking water, particularly in lowland areas. In contrast, much of the Abay, Awash, Wabi-Shebelle, Upper Genale-Dawa, Afar-Danakil, Tekeze, Mereb-Gash, Ogaden, and Aysha basins are expected to experience conditions ranging from moderately arid to arid, with no flood or sediment risk but with declining river flows and reduced water availability, potentially affecting drinking water supplies and other water-related services. Accordingly, it is essential that relevant sectoral institutions implement the recommended hydro-meteorological advisories, protect available water resources from pollution and wastage, promote water conservation practices such as rainwater harvesting, and ensure the efficient and sustainable use of water resources to minimize adverse impacts.


Mereb – Gash Catchment: -Northwestern tip of Tigray.
Atbara-Tekeze Catchment: -The Tekeze River basin is situated in the northwest of Ethiopia between 11 º40' and 15 º12' N, and 36 º 30' and 39º 50' E. It is bordered by the Mere Riverbasin and by Eritrea in the north, the Atbara River plains in Sudan in the west, the Abay River basin in the south and Danakil basin in the east.
Blue Nile/ Abbay Catchment: - Roughly 13º N South of Gondar to 11º 30'N, and west of 39º 45'E of Wello, northwestern parts of Shoa; Gojam except the South Western and Western narrow area, Wellega and extreme Eastern tip of Illubabor together with a narrow northeastern strip of Keffa. It is the largest catchment that coversabout 16 percent of the total area of Ethiopia. The Catchment that includes the Lake Tana, Upper Abbay(to Guder confluence),Middle Abbay (to didessa confluence), Didessa, Dabus ,Lower Abbay,Dinder and Rahad Sub-basin.
Baro –Akobo Catchment: -The south western and western narrow strip of Wellega, except the eastern tip, the whole of Illubabor and southwestern tip of Keffa. TheCatchment has upper and lower sub-basins along Baro River. The Catchment It is the wettestcatchment because of the highest rainfall over the area.
Omo-Ghibe Catchment: -Southwestern narrow strip of Shoa, the whole ofKeffa except the southwestern tip, southwestern tip of Wellega, Western half of northern Omo and northwestern tip of Sidamo. The upper part of the catchment starts from the plateaus in north part of Ghibe and extends southward to the lower part of it (known as Omo River).
Central Lakes-Rift Valley Catchment: - The whole of North and South Omo, west andsouthwestern narrow strip of Sidamo, southwestern portions of Shoa and western narrow tip of Bale andwestern part of Arsi. The catchment is found in the Great Rift Valley system and typically known by itslakes and streams. Lakes which adjoin the Awash catchment are found in its upper part, while Lake Awassa and Bilate in its central part and end to chamo bahr in its lower part.
Danikil – Afar Catchment: -East of 40º E of Tigray, North of 11ºN of Wollo, narrow coastal strip south of 14º30'N of Eritrea. The basin is the lowest region in the country where the kobar sink; with an elevation of about 120 meters b.s.l is found.
Awash Catchment: -North of Garamuleta mountains, south of 11º 40' Nof Wollo, south of 9º N of Shoa, Northern tip of Bale and North part of Arsi. The catchment hasupper, middle and lower sub-catchments. In general, the catchment is narrow at the upper part marked bynumerous volcanic mountains and wider at the lower part joining major tributaries from northwestern highlands and a number of seasonal wadies from the southeast highlands.
Gulf of Aden – Aysha Catchment): - Eastern narrow strip of Hararghe. It is a very dryArea with no stream flow representative Meteorological station. Thus, no assessment isdone for this catchment in this publication.
Genale Dawa Catchment: -The western half of Bale (South of Goba) and southeast, southwestern and northeastern parts ofSidamo. The catchment constitutes three riversystems namely Dawa, Genalle and Wabi Gestaro that meet each other before they cross the Ethio- Somalia border.
The Shebelle River (Somali: Webi Shabeelle, begins in the highlands of Ethiopia, and then flows southeast into Somalia towards Mogadishu. Near Mogadishu, it turns sharply southwest, where it follows the coast. Below Mogadishu, the river becomes seasonal. During most years, the river dries up near the mouth of the Jubba River, while in seasons of heavy rainfall, the river actually reaches the Jubba and thus the Somali Sea.
MEREB GASH
TEKEZE
DENAKIL
ABBAY
AWASH
AYSH
BARO AKOBO
OMO GIBE
RIFT VALLY
GENALE DAWA
WABI SHEBELE
OGADEN


SHIRARO
SHIRE
ADEWA
ADIGRAT
ATSEBI
SENKATA
MYTSEBRI
AIDERMOO
Mekele
DEBARK
SAMRE
METEMA
TSITSIKA
MAICHEW
AYKEL
Gondar A.P.
AMDEWORK
CHERCHER
Quara
LALIBELA
ELIDAR
SHAHURA
D/TABOR
SIRINKA
CHIFRA
DUBTI
Bahir Dar Met
WEGELTENA
MILLE
Asaita
Pawe
ADET
Bati
DANGLA
MOTTA
Combolcha
CHEFA
CHAGINI
AMBAMARIAM
BULLEN
AYEHU
DEBRAWREK
WERELU
MAJETE
ATSHA
LAIBER
DEBEREMARKOS
YITNORA
DALIFAGI
ASSOSSA
Gewane
MEHALMEDA
Fiche
SHEWAROBIT
Dire Dawa
GIDAAYANA
SHAMBU
Enewari
ERROR
NEJO
BEGI
KACHISE
DBREHAN
KAMASHI
MEISSO
HARER
JIJIGA
AIRA
AWASH ARBA
ALEMAYA
Gimbi
Nekemte
Ejaji
AMBO
A.A. Obs
Gelemso
ARJO
A.A. BOLE
DEMBIDOLO
ALGIE
Bedelle
GHION
Nazreth
Abomsa
DEGAHABUR
LARE
BURE
Bui
Gore
Imdibir
MIRA-ERA
GAMBELLA
ABOBO
Gatira
SEKORU
Ziway
Robe
FUGNUIDO
MASHA
CHIRA
JIMMA
WERABE
SERU
HOSSAINA
ARISE ROBE
ADELLE
Jara
TEPI
TERCHA
GINIR
AMAN
Awassa
KOFELLE
Wolaita Sodo
BILATE
Kibridahar
DOLOMENA
DILLA
BORE
SAWULA
MAJJI
Arba Minch
KIBREMENGIST
Gode
Jinka
HAGEREMARIAM
Negele
KONSO
BURJI
YABELO
MOYALE
Number of station