

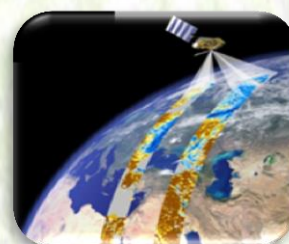
# ETHIOPIA METEOROLOGICAL INSTITUTE

## Agrometeorological Bulletin

### SEASONAL AGROMETEOROLOGICAL BULLETIN

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## TABLE OF CONIENTS

<b>FOREWARD .....</b>	<b>2</b>
<b>SUMMARY .....</b>	<b>7</b>
<b>1. WEATHER ASSESSMENT .....</b>	<b>13</b>
<b>1.1.Rainfall amount (21 – 31) January 2025.....</b>	<b>13</b>
<b>1.2.Rainfall Anomaly (21 – 31) January 2025 .....</b>	<b>14</b>
<b>1.3.Moisture status (21 – 31) January 2025 .....</b>	<b>15</b>
<b>1.4.Rainfall amount on the month of January 2025 .....</b>	<b>16</b>
<b>1.5.Rainfall Anomaly on the month of January 2025.....</b>	<b>17</b>
<b>1.6.Moisture status on the month of January 2025.....</b>	<b>18</b>
<b>1.7.Rainfall Amount on Bega season 2024/25 .....</b>	<b>19</b>
<b>1.8.Rainfall Anomaly on Bega Season 2024/25.....</b>	<b>20</b>
<b>2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE.....</b>	<b>21</b>
<b>2.1.VEGETATION CONDITION AND IMPACT ON AGRICULTURE DURING BEGA, 2024/25 .....</b>	<b>21</b>
<b>2.2.EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING BELG, 2025 SEASON.....</b>	<b>22</b>
<b>3. DEFNITION OF TERMS .....</b>	<b>24</b>

## FOREWARD

This Agro met Bulletin is prepared and disseminated by the Ethiopia Meteorology Institute (EMI). The aim is to provide those sectors of the community involved in Agriculture and related disciplines with the current weather situation in relation to known agricultural practices.

The information contained in the bulletin, if judiciously utilized, are believed to assist planners, decision makers and the farmers at large, through an appropriate media, in minimizing risks, increase efficiency, maximize yield. On the other hand, it is vital tool in monitoring crop/ weather conditions during the growing seasons, to be able to make more realistic assessment of the annual crop production before harvest.

The Agency disseminates ten daily, monthly and seasonal weather reports in which all the necessary current information's relevant to agriculture are compiled.

We are of the opinion that careful and continuous use of this bulletin can benefit to raise ones agro climate consciousness for improving agriculture-oriented practices. Meanwhile, your comments and constructive suggestions are highly appreciated to make the objective of this bulletin a success.

Director General

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## አህፅሮት እ.ኤ.አ በጋ 2024/25

በኢትዮጵያ ሚኒስቴር ሚኒስቴር ኢንስቲትዩት የወቅቶች አከፋፈል መሰረት የበጋ ወቅት ከጥቅምት እስከ ጥር ያለውን ጊዜ የሚያጠቃልል ሲሆን፤ በመደበኛ ሁኔታ ፀሐይ ምጥቅጥ፣ ደረቅ እና ነፋሻማ የአየር ፀባይ በአብዛኛዎቹ የሀገሪቱ አካባቢዎች ላይ የሚያመዝንበት እና አልፎ አልፎ ወቅቱን ያልጠበቀ ዝናብ የሚታይበት ጊዜ ነው። እንዲሁም በሰሜን ምስራቅ፣ በምስራቅ፣ በመካከለኛው እና በደቡብ ደጋማ አካባቢዎች ላይ ከፍተኛ ቅዝቃዜና የውርጭ ክስተት የሚስተዋልበት ወቅት ሲሆን በሌላ በኩል ይህ ወቅት ለደቡብ እና ደቡብ ምሥራቅ ቆላማ የሀገሪቱ አካባቢዎች ሁለተኛና አጭሩ የዝናብ ወቅታቸው ጭምር ነው። ከዚህ ምቹ የአየር ፀባይ ጋር ተያይዞ በአብዛኛው የመኸር አብቃይ በሆኑ አካባቢዎች የተለያዩ ሰብሎች እድገታቸውን የሚጨርሱበት ከመሆኑ ጋር ተያይዞ የሰብል ስብሰባና ድህረ ሰብል ስብሰባ ተግባራት በስፋት የሚካሄድበት ጊዜ ሲሆን በደቡብና በደቡብ ምሥራቅ የአርብቶ አደሩና ከፊል አርብቶ አደር አካባቢዎች ለግጦሽና ለመጠጥ ውሃ እንዲሁም መጠነኛ የሆነ እርሻ እንቅስቃሴ የሚካሄድበት ጊዜ ነው።

እ.ኤ.አ በኦክቶበር ወር 2024 የነበረው የእርጥበት ሁኔታ በጋ ሁለተኛ የዝናብ ወቅታቸው በሆኑት በደቡብና በደቡብ ምስራቅ የሀገራችን አካባቢዎች በተለይም በቦረናና ጉጂ ዞኖች ለሚካሄደው መጠነኛ የሰብል ልማት የማሳ ዝግጅት ለማድረግና ዘር ለመዝራት ምቹ ሁኔታ የፈጠረ ሲሆን፤ በደቡብ ምዕራብና በምዕራብ አጋማሽ በሚገኙ የሀገራችን አካባቢዎች ተጨማሪ እርጥበት ለሚያስፈልጋቸውና ፍሬ በመሙላት ላይ ለሚገኙ የመኸር ጊዜ ሰብሎች የውሃ ፍላጎታቸውን ከማሟላት አንጻር ከፍተኛ ጠቀሜታ ነበረው። በተጨማሪም በዚህ ወቅት የተገኘው እርጥበት በተለይም ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ከማሻሻል አንጻር ከፍተኛ ጠቀሜታ ነበረው። በሌላ በኩል በሰሜን፣ በሰሜን ምዕራብ፣ በሰሜን ምስራቅ፣ በምስራቅና በመካከለኛው የሀገሪቱ ክፍሎች ላይ የነበረው እርጥበት ዘግይተው ተዘርተው እድገታቸውን ላልጨረሱና ከመስከረም ወር መጀመሪያ ጀምሮ በአፈር ውስጥ በሚገኝ እርጥበት ለተዘሩ እንደ ሽንብራና ጓያ ላሉ የጥራጥሬ ሰብሎች፣ ለቋሚ ተክሎች፣ ለጓሮ አትክልቶችና ለፍራፍሬዎች እንዲሁም በአረንጓዴ አሻራ ለተተከሉ ተክሎች የውሃ ፍላጎታቸውን ከማሟላት አንጻር አዎንታዊ ጎን ነበረው። በአንጻሩ ግን በተለይም በሰሜን፣ በሰሜን ምዕራብ፣ በሰሜን ምስራቅና በምስራቅ እንዲሁም በአንዳንድ የመካከለኛው የሀገራችን

አካባቢዎች የነበረው ወቅቱን ያልጠበቀ ዝናብ በመኸር ሰብል ስብሰባና ድህረ ሰብል ስብሰባ ላይ በመጠኑም ቢሆን አሉታዊ ተጽዕኖ ነበረው፡፡

እ.ኤ.አ በኖቨምበር ወር 2024 በአብዛኛዎቹ የሀገሪቱ ክፍሎች ላይ የበጋው ደረቅ የእርጥበት ሁኔታ ተስተውሏል፡፡ ይህም ሁኔታ ሰብል በደረሰባቸው አካባቢዎች ለሰብል ስብሰባና ድህረ ሰብል ስብሰባ አመቺ ሁኔታን የፈጠረ ነበር፡፡ በሌላም በኩል በምራብ፣ በሰሜን ምራብ እና በደቡብ ምራብ በአንዳንድ ቦታዎች ላይ የነበረው እርጥበት ሙሉ ለሙሉ እድገታቸውን ላልጨረሱ ሰብሎች፣ ለቋሚ ተክሎች፣ ለፍርፍሬ ተክሎችና ለጓሮ አትክልቶች የውሃ ፍላጎት መሟላት እንዲሁም በመኸር ወቅት መጨረሻ ላይ በአፈር ውስጥ በተከማቸው እርጥበት በመታገዝ ለሚዘሩ እንደ ጓያ እና ሽንብራ ለመሳሰሉ የጥራጥሬ ሰብሎች ጠቀሜታ የነበረው ቢሆንም በተለይም በዚህ ወቅት በመደበኛ ሁኔታ ደረቃማ የአየር ሁኔታ የሚስተዋልባቸው የመካከለኛው፣ የምስራቅ እና የሰሜን ምስራቅ የሀገሪቱ አካባቢዎች ላይ አልፎ አልፎ የነበረው ወቅቱን ያልጠበቀ ዝናብ በተለይም በደረሱ እና በመሰብሰብ ላይ በሚገኙ ሰብሎች ላይ በመጠኑም ቢሆን አሉታዊ ተጽዕኖ ነበረው፡፡ በአንጻሩም በጋ ሁለተኛ የዝናብ ወቅታቸው በሆኑት የደቡብ፣ የደቡብ ምዕራብ እና የደቡብ ምስራቅ የሀገሪቱ ክፍሎች ላይ የነበረው እርጥበት በተለይም በደጋማው አካባቢ በቦረናና ጉጂ ዞኖች ለተዘሩ ሰብሎች ምቹ ሁኔታ የፈጠረ ሲሆን በአርብቶ አደሩና ከፊል አርብቶ አደሮች አካባቢ ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት መሻሻልና የዝናብ ውሃን ለመሰብሰብና ለማከማችት ገንቢ ሚና ነበረው ።

እ.ኤ.አ በዲሴምበር ወር 2024 የበጋው ደረቃማ፣ ፀሃያማና ነፋሻማ የአየር ሁኔታ በተለይም በመጀመሪያውና ሁለተኛው አስር ቀናት በአብዛኛው የሀገሪቱ ስፍራዎች ላይ ተስተውሏል፡፡ ይህም በውሩ ውስጥ የተስተዋለው ደረቅ የእርጥበት ሁኔታ የደረሱ ሰብሎች እንዲደርቁ፣ በጊዜ እንዲሰበሰቡና የድህረ ሰብል ስብሰባ ተግባራትን ለማከናወን ምቹ ሁኔታ ነበረው፡፡ በሌላ መልኩ በአንዳንድ የሰሜን፣ መካከለኛው፣ ደቡብና ምስራቅ የሀገሪቱ ደጋማ ስፍራዎች ላይ ከቀኑ ዝቅተኛ የሙቀት መጠን የተነሳ የለሊትና የማለዳው ቅዝቃዜ ከ5 ዲግሪ ሴልሽየስ በታችና በተወሰኑ ቦታዎች ከ0 ዲግሪ ሴልሽየስ በታች ሆኖ ተመዝግቧል፡፡ ይህም የተስተዋለው ቅዝቃዜ በእንሰሳት ጤናና፣ በመስኖ በመታገዝ በሚለሙ የፍራፍሬ ተክሎችና በጓሮ አትክልቶች ላይ በጥቂት ቦታዎች ላይ በተወሰነ መጠን አሉታዊ ጎን ነበረው፡፡ ይሁንና በተለይም በዲሴምበር የመጨረሻዎቹ አስራ አንድ ቀናት አልፎ አልፎ በሰሜን ምስራቅ፣ በመካከለኛው፣ በደቡብና ምስራቅ የሀገሪቱ ደጋማ ስፍራዎች ላይ ከሞላጎደል ቀጥሎ ተስተዋለው፡፡ ይህም ሁኔታ ሙሉ ለሙሉ እድገታቸውን ላልጨረሱ አንዳንድ ሰብሎች፣ ለቋሚ ተክሎች፣ ለአትክልቶችና እንዲሁም ከሰብል ስብሰባ በኋላ

ለሚዘፋ እንደ ጓዶ እና ሽንብራ ለመሳሰሉ የጥራጥሬ ሰብሎችም ሆነ ለእንስሳት የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦት ላይ የተገኘው እርጥበት ጠቀሜታ ነበረው።

እ.ኤ.አ በጃንዋሪ ወር 2024 በተለይም በመጀመሪያውና ሁለተኛው አስር ቀናት ደረቃማው የእርጥበት ሁኔታ በአብዛኛው የሀገሪቱ ክፍሎች ላይ አመዝኖ እንደነበረ የተተነተኑ የግብርና ሚኒስቴሮች መረጃዎች ያመለክታሉ። በአመዛኙ ደረቃማ ከነበረው ሁኔታ ጋር ተያይዞ የሌሊትና የማለዳዉ ቅዝቃዜ በተለይም በአንዳንድ የሰሜን ምስራቅ፣ የመካከለኛው፣ የደቡብና የምስራቅ የሀገሪቱ ደጋማ ስፍራዎች ላይ አንጻራዊ ጥንካራ እንደነበረና የቀኑ ዝቅተኛ ሙቀት ከአምስት ዲግሪ ሴልሺየስ በታች ሆኖ የተመዘገበ እንደነበር መረጃዎች አመለክተዋል። ይህም ሁኔታ በአንዳንድ ቅዝቃዜን መቋቋም በማይችሉ በመስኖ በሚለሙ የደጋ ሰብሎች፣ በቋሚ ተክሎችም ሆነ በጓሮ አትክልቶች ላይ አሉታዊ ተጽዕኖ ሊያስከትል የሚችል የቅዝቃዜ ሁኔታ ተስተውሏል። ሆኖም በአመዛኙ ደረቃማ የነበረው የአየር ሁኔታ የድህረ ሰብል ስብሰባ ተግባራትን በተሟላ መልኩ ለማጠናቀቅ በጎ ጎን ነበረው። በሌላ በኩል በተለይም በመጨረሻዎቹ አሥራ አንድ ቀናት በደቡብ ምዕራብና በተወሰኑ የደቡብ የሀገሪቱ ኪስ ቦታዎች ላይ የነበረው መጠነኛ እርጥበት ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት በተወሰነ መልኩ አዎንታዊ አስተዋፆ የነበረው ሲሆን በተጨማሪም የበልግ ወቅትን ቀድመው ለሚጀምሩ አካባቢዎች ማሳን አስቀድሞ ለማዘጋጀት ጠቀሜታ ነበረው።

በአጠቃላይ ባሳለፍነው 2024/25 የበጋ ወራት የነበረው የእርጥበት ሁኔታ ሲገመገም በጋ ሁለተኛ የዝናብ ወቅታቸው በሆኑት የደቡብ ኦሮሚያና የደቡብ ሶማሌ በተጨማሪም የመካከለኛው ኦሮሚያ፣ በአንዳንድ የሰሜን ምዕራብ፣ የምዕራብና የደቡብ ምዕራብ የሀገሪቱ ክፍሎች ላይ ከቀላል እስከ ከባድ መጠን የሚደርስ የእርጥበት ይዘት እንደነበራቸው የተተነተኑ የግብርና ሚኒስቴሮች መረጃዎች ያመለክታሉ። ይህም ተጠናክሮ የታየው እርጥበታማ ሁኔታ እድገታቸውን ላልጨረሱና በተለያዩ የእድገት ደረጃ ላይ ለሚገኙ የመኸር ሰብሎችም ሆነ ለቋሚ ተክሎች እድገት የሚያስፈልጋቸውን እርጥበት ከሟሟላት አንጻር አዎንታዊ ሚና ነበረው። በተጨማሪም በጋ ሁለተኛ የዝናብ ወቅታቸው ለሆኑት የአርብቶ አደርና የከፊል አርብቶ አደር አካባቢዎች የተለያዩ የግብርና እንቅስቃሴዎችን እንዲያከናውኑ አዎንታዊ ሚና የነበረው ሲሆን በተለይም በቦረናና ጉጂ ዞኖች ለሚካሄደው መጠነኛ የሰብል ልማት እንቅስቃሴ ምቹ ሁኔታን የፈጠረ ሲሆን፤ በተጨማሪም በዚህ ወቅት የተገኘው እርጥበት በተለይም ለአርብቶ አደርና ከፊል አርብቶ አደር አካባቢዎች የግጦሽ ሳርና የመጠጥ ውሃ አቅርቦትን ከማሻሻል አንጻር ከፍተኛ ጠቀሜታ ነበረው። እነዚሁም ውሃ አጠር ለሆኑ አካባቢዎች ውሃን ለመሰብሰብና ለማከማቸት መልካም

አጋጣሚን የፈጠረ ነበር። በሌላ በኩል በሰሜን፣ በሰሜን ምዕራብ፣ በሰሜን ምስራቅ፣ በምስራቅና በመካከለኛው የሀገሪቱ ክፍሎች ላይ የነበረው እርጥበት ዘግይተው ተዘርተው እድገታቸውን ላልጨረሱና ከመስከረም ወር መጀመሪያ ጀምሮ በአፈር ውስጥ በሚገኝ እርጥበት ለተዘሩ እንደ ሽንብራና ጓያ ላሉ የጥራጥሬ ሰብሎች፣ ለቋሚ ተክሎች፣ ለጓሮ አትክልቶችና ለፍራፍሬዎች እንዲሁም በአረንጓዴ አሻራ ለተተከሉ የዛፍ ችግኞች የውሃ ፍላጎታቸውን ከማሟላት አንጻር አዎንታዊ ጎን ነበረው። በአንጻሩ ግን በተለይም በሰሜን፣ በሰሜን ምዕራብ፣ በሰሜን ምስራቅና በምስራቅ እንዲሁም በአንዳንድ የመካከለኛው የሀገራችን አካባቢዎች የነበረው ወቅቱን ያልጠበቀ ዝናብ በመኸር ሰብል ስብሰባና ድህረ ሰብል ስብሰባ ላይ በመጠኑም ቢሆን አሉታዊ ተጽዕኖ የነበረው ሲሆን በተጨማሪም በተለይም በጃንዋሪ ወር በደቡብ ምዕራብና በተወሰኑ የደቡብ የሀገሪቱ ኪስ ቦታዎች ላይ የነበረው መጠነኛ እርጥበት የበልግ እርሻ እንቅስቃሴን ቀድመው ለሚጀምሩ አካባቢዎች ማሳን አስቀድሞ ለማዘጋጀት በመጠኑም ቢሆን ጠቀሜታ የነበረው። በአንፃሩም በበጋ ወቅት በአንዳንድ የሀገሪቱ ስፍራዎች የነበረው ከፍተኛና ተከታታይነት የነበረው እርጥበት የበረዶና ጎርፍ ክስተት የመሬት መንሸራተት በማስከተሉ በሰብል ማሳዎች፣ በሰው ህይወትና በንብረት ላይ ጉዳት ያደረሰ ነበር።

## **SUMMARY**

### **Bega 2024/25**

During the month of October 2024 under review, according to the analyzed agro meteorological information, particularly in the third dekad of the month better moisture prevail over southern and south-eastern parts of the country. The observed enhanced moisture had positive implication for planting and required the daily water needs of Bega season crops particularly Borena and Guji highlands and also the observed improved moisture might be positive implication for pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the southern and south-eastern pastoral and agro pastoral community where Bega is the second rain season. On the other hand the observed better rainfall over southern and south-eastern parts of the country had a good opportunity to collect rain water harvesting. Moreover the observed rainfall over western half of the country had been favour the existing Meher crops, which were under different phenological phases and lately planted and currently found at various growing stages which requiring additional moisture for their further development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture. On the other hand, the observed unseasonal rainfall in the northern, north-western, north-eastern, eastern and central parts of the country might have a negative impact for harvest and post-harvest activities of crops and areas that had received heavy and continuous rainfall might experience landslides over some parts of the country. In particular, field report indicates that there has been death and property damage due to landslide over Wolita zone Kawa koish Woreda.

During the month of November 2024, according to the analyzed agro meteorological information dry, sunny and windy weather conditions prevailed over most parts of Kiremt rain-benefiting areas of the country. This condition was favourable for harvest and post-harvest activities of fully matured Meher season crops in regions where the harvest season is underway. On the other hand, the observed enhanced moisture over western, north-western and south-western parts of the country had been favor the existing Meher crops, which were under This situation was believed to be more favorable various crops which are found from vegetative to grain filling stages toward attaining their water need for further growth and development, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops which planted at the end of the season with



residual moisture. However the receiving unseasonal moisture over central, eastern and north-eastern parts might have slightly negative impact for areas which are currently conducting harvest and post-harvest activities of matured crops. Similarly, since Bega is the second rainy season for the southern and south-eastern parts of the country, the received moisture during the month could play very crucial role to satisfy the water need of Bega season crops over the southern high lands. Moreover, the condition had positive impact for improving the availability of pasture and drinking water and significantly important to regenerate natural and artificial ponds over both the pastoral and agro pastoral areas as well as the enhanced moisture had a good opportunity to collect rain water harvesting over both the pastoral and agro pastoral community. On the other hand, the cloud coverage had been decreasing the occurrences of frost over the high land parts of the country.

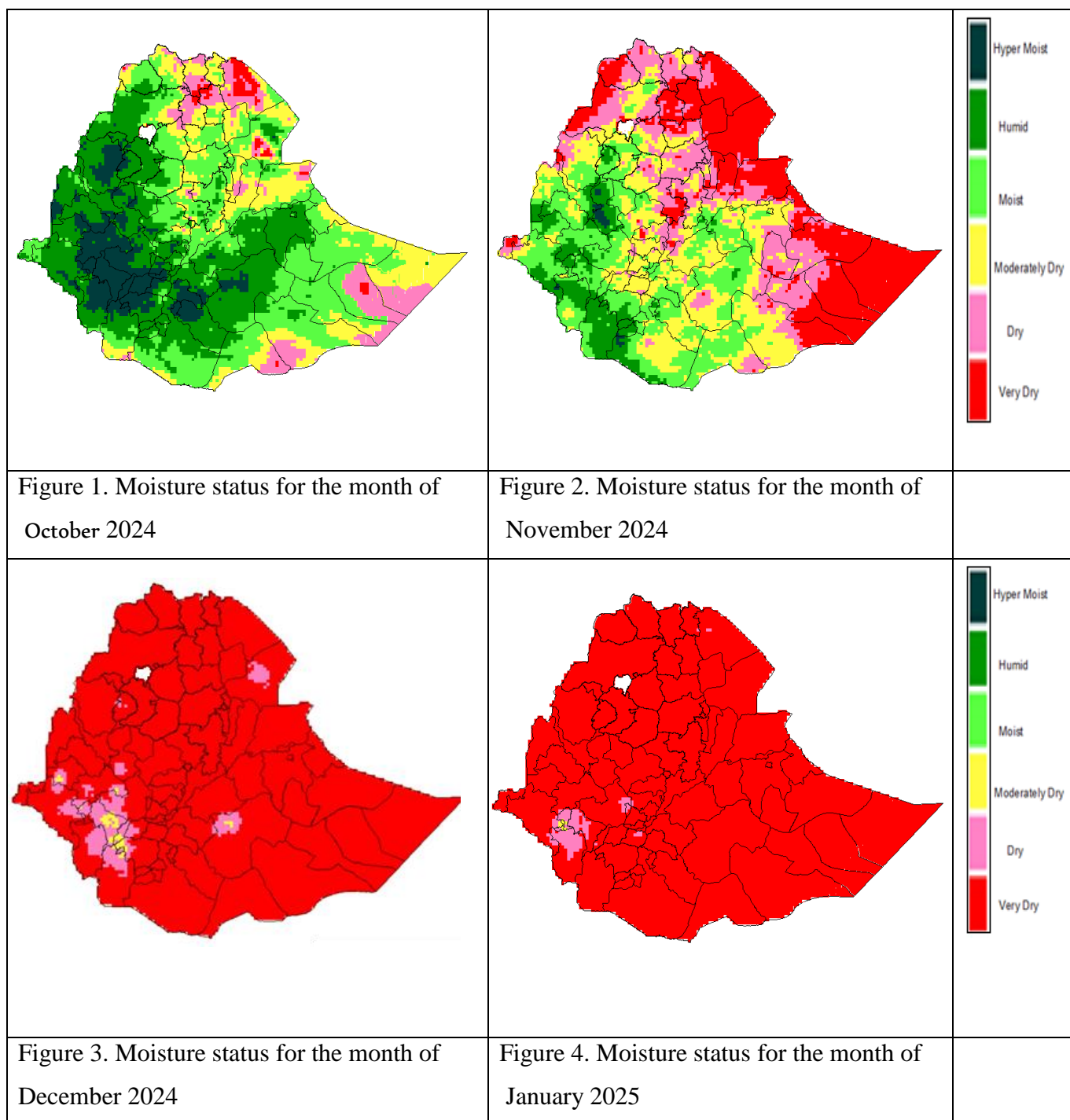
During the month of December 2024, Bega season dry, sunny and windy climate condition prevailed across the country and this situation was more pronounced during the first and second dekad of the month. Given the current state of agricultural activities, the dry condition was favourable for the timely dry out of matured crops and to conduct harvest and post-harvest activities. On the other hand, in line with the dry condition some of the northern, central, south and eastern parts of the country recorded minimum temperatures below 5<sup>0</sup>C while some few places remained below zero degree Celsius. This cold and chill condition might have some negative impact on livestock health, irrigated Bega season crops and over various horticulture plants. However during the last dekad of December light to moderate moisture was recorded over few places of north-eastern, central, southern and eastern parts of the country. This condition favours toward the water satisfaction of not fully matured crops, perennial plants, for various horticulture crops and some of legumes which often planted after harvest of Meher crops. In addition, it might have positive impact on ensuring the availability of pasture and drinking water over pastoral and agro pastoral areas.

During the month of January 2024, according to the analyzed agro meteorological information during the month of January the Bega season dry moisture condition prevailed across most parts of the country. This condition was favorable for the ongoing post-harvest activities for Meher season crops. On the other hand, in the last dekads of the month the station report indicated that during the month certain places of southern and south- western parts of the country received light to moderate rainfall. The situation might be positive implication for the water availability of perennial plants and to sustain the growth of fodder and pasture and the availability of drinking water in the pastoral and agro pastoral area. In addition, the experienced

wet condition improving the soil moisture content and thus may favor the upcoming Belg season early time land preparation.

Generally during the past Bega 2024/25 season the analyzed agro meteorological indicators shows that a good performance of moisture index, Standardized Precipitation Index, vegetation cover and Rangeland index particularly during the month of October and November over most part of the country. In line with this Bega benefiting areas (Hageya/Deyr) rain over southern Oromia, southern Somali pastoral and agro-pastoral regions, Central Oromia some parts of north-eastern, western and south-western parts of the country experienced slight to heavy moisture condition. The observed moisture was favorable for the performances of Meher crops that are late sown and not yet fully matured, perennial plants, fruits and vegetables as well as it would have significant contribution for the production of pulse crops which planted at the end of the season with residual moisture. Moreover, the receiving moisture over southern and south-eastern parts of the country including southern Somali, Sidama, south-western region, southern Oromia (Borena, Gugi) could play very crucial role to perform the water need of various Meher and Bega crops and improving the availability of pasture and drinking water. In addition the enhanced moisture had a good opportunity to collect rain water harvesting over both the pastoral and agro pastoral community. On the other hand, the received heavy and continuous rainfall had resulted in landslides, Hailstorm and flood damage.in some parts of the country also unseasonal moisture over northern, north-western, north-eastern, eastern and central parts of the country negatively affected harvest and post-harvest activities of Meher crops. However, the experienced wet condition in the month of January improving the soil moisture content and thus may favor the upcoming Belg season early time land preparation.

# Bega 2024/25 Moisture Status Map



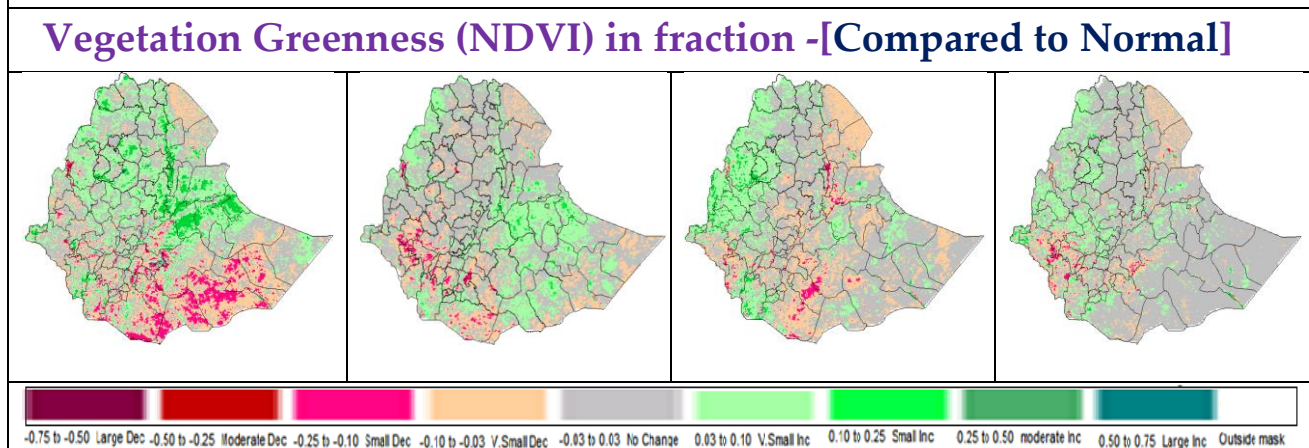
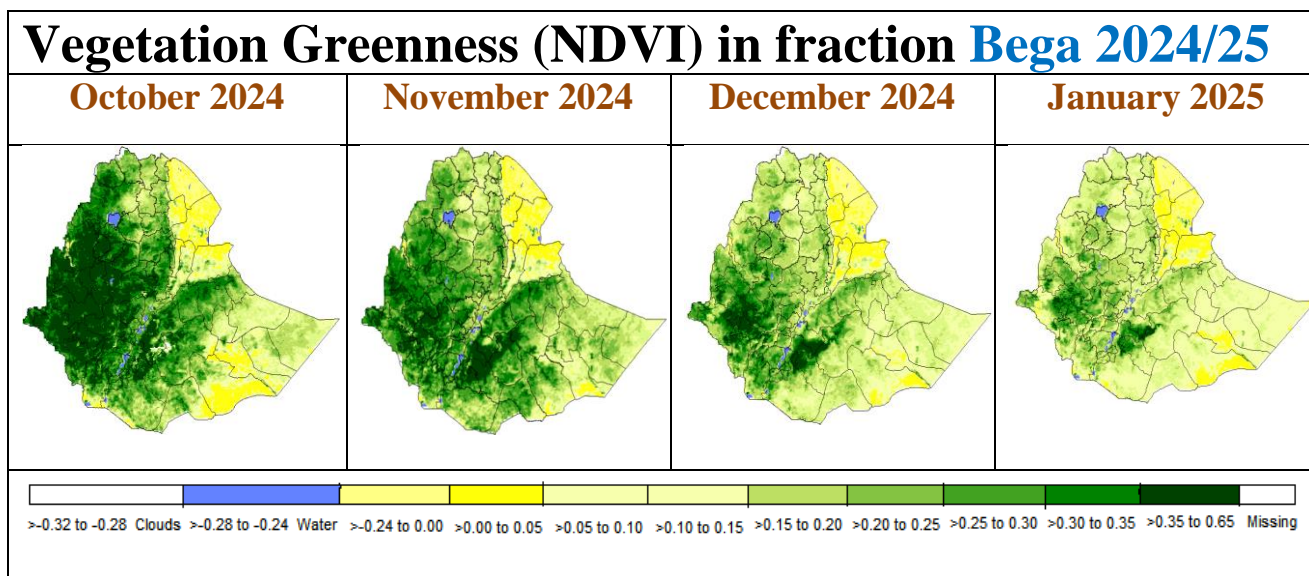


Fig. 5. Vegetation Greenness (NDVI) in fraction and Compared to Normal Kiremt (October 2024 – January 2025)

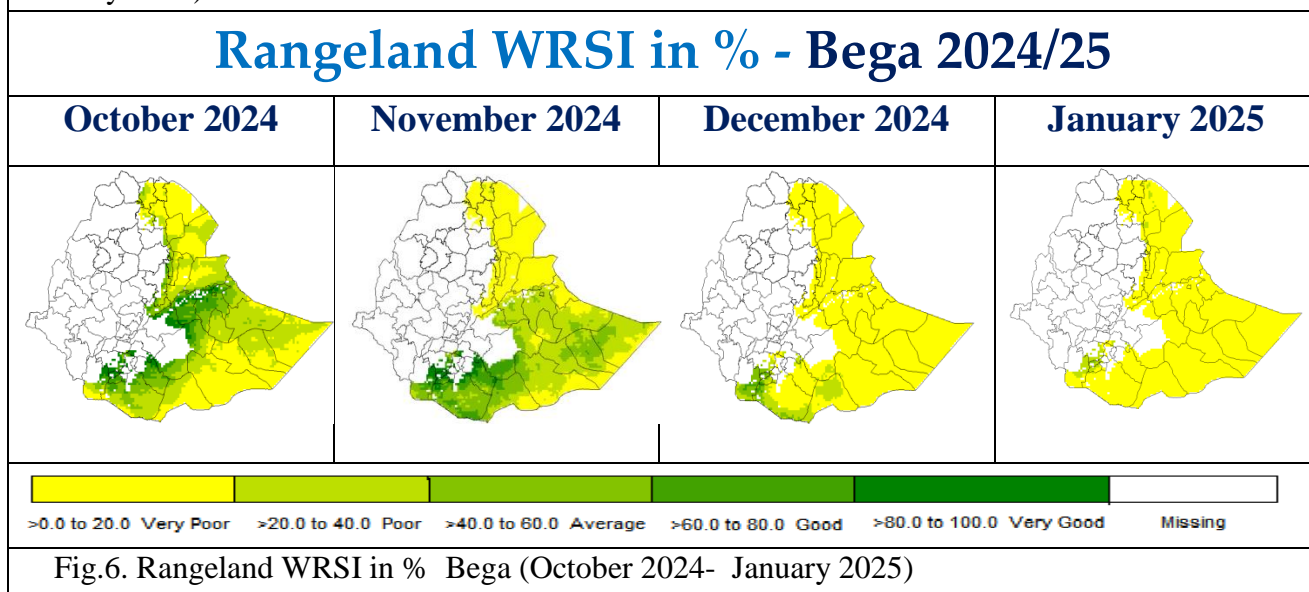


Fig.6. Rangeland WRSI in % Bega (October 2024- January 2025)

## Standardized Precipitation Index (SPI)



## For Bega 2024/25

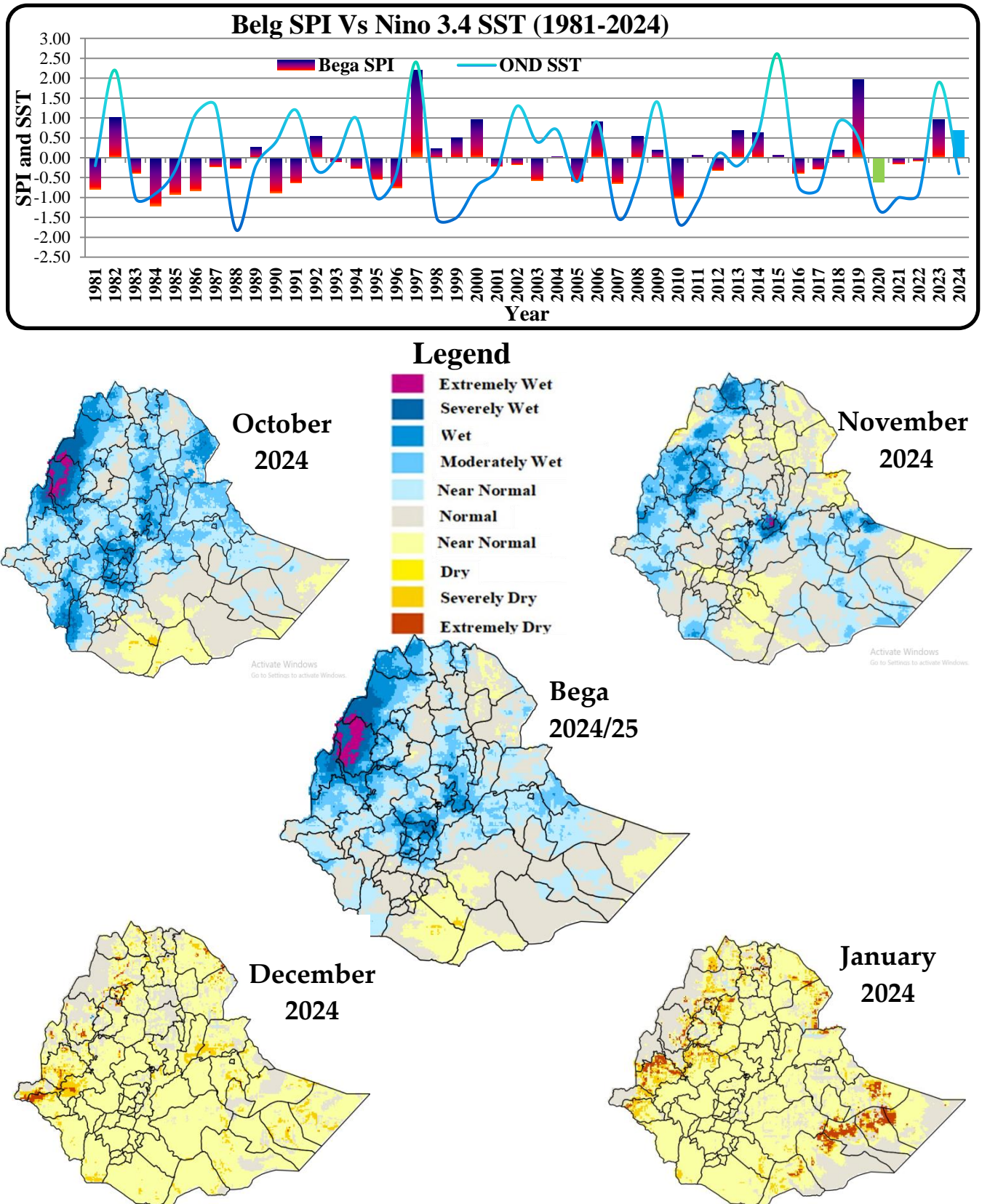


Fig.7. Standardized Precipitation Index (SPI) Bega (October 2024- January 2025)

# 1. WEATHER ASSESSMENT

## 1.1. Rainfall amount (21 – 31) January 2025

During the Third dekad of January 2025, some pocket areas of the Tepi, South Omo, Amaro zone and Sidama region were received 5-25 mm of rainfall. On the other hand, most parts of the country were dominantly dry or less than 5 mm of rainfall conditions.

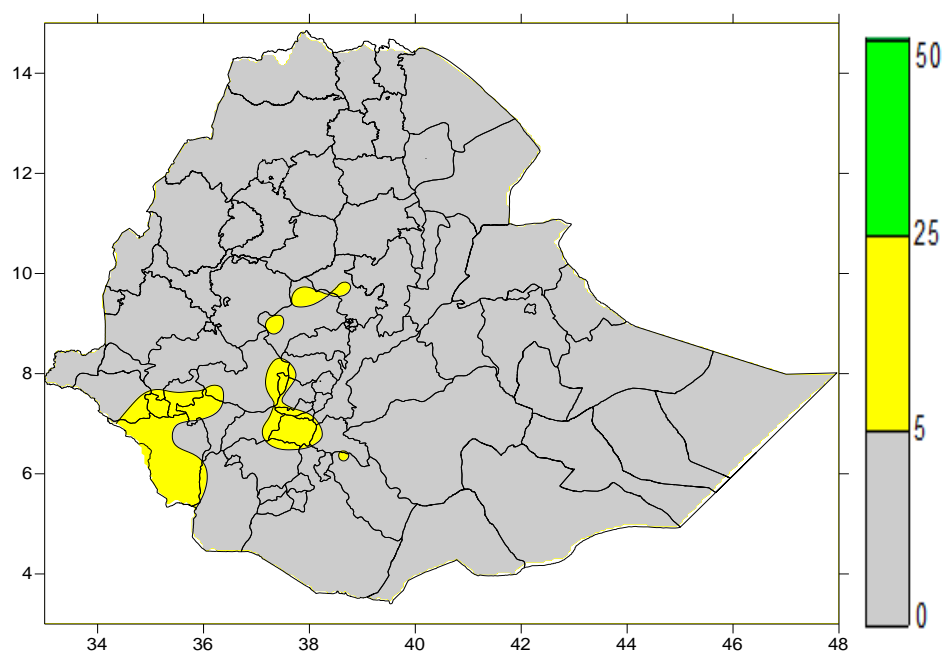


Fig 7. Rainfall distribution in mm (21 – 31) January 2025

## 1.2. Rainfall Anomaly (21 – 31) January 2025

During the Third dekad of January 2025, some pocket areas of south and south western as well as some Central parts of the country were exhibited Normal to Above Normal Rainfall condition. On the other hand, most parts of the country were experienced below Normal too Much below Normal rainfall condition.

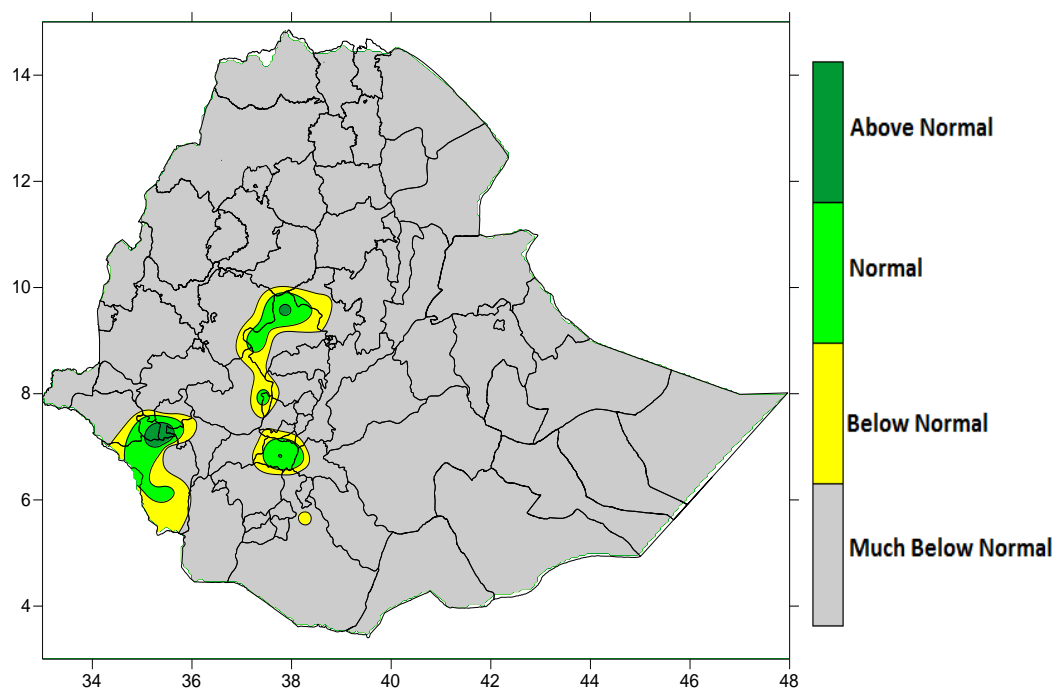


Fig. 8. Percent of normal rainfall distribution (21 – 31) January 2025

### Explanatory notes for the Legend

- < 50-Much below normal
- 50-75%-Below normal
- 75-125%- Normal
- > 125% - Above normal

### 1.3. Moisture status (21 – 31) January 2025

During the third dekad of January 2025, some areas of south western parts of the country experienced Moist to Hyper moist moisture. The rest parts of the countries exhibited Moderately Dry to Very Dry.

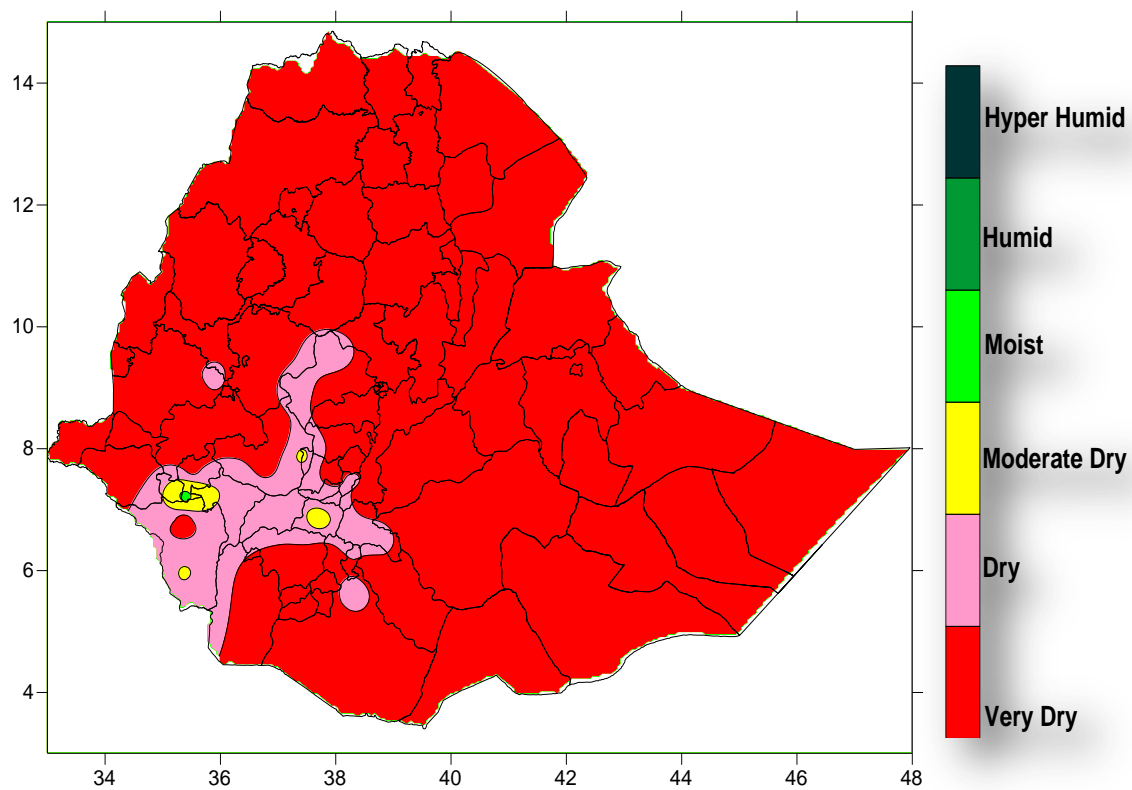


Fig.9. Moisture Status (21 – 31) January 2025



#### 1.4. Rainfall amount on the month of January 2025

During the Month of January 2025, some parts of southern parts of the country were received 5-25 mm of rainfall. On the other hand, most parts of the country were dominantly dry or less than 5 mm of rainfall conditions.

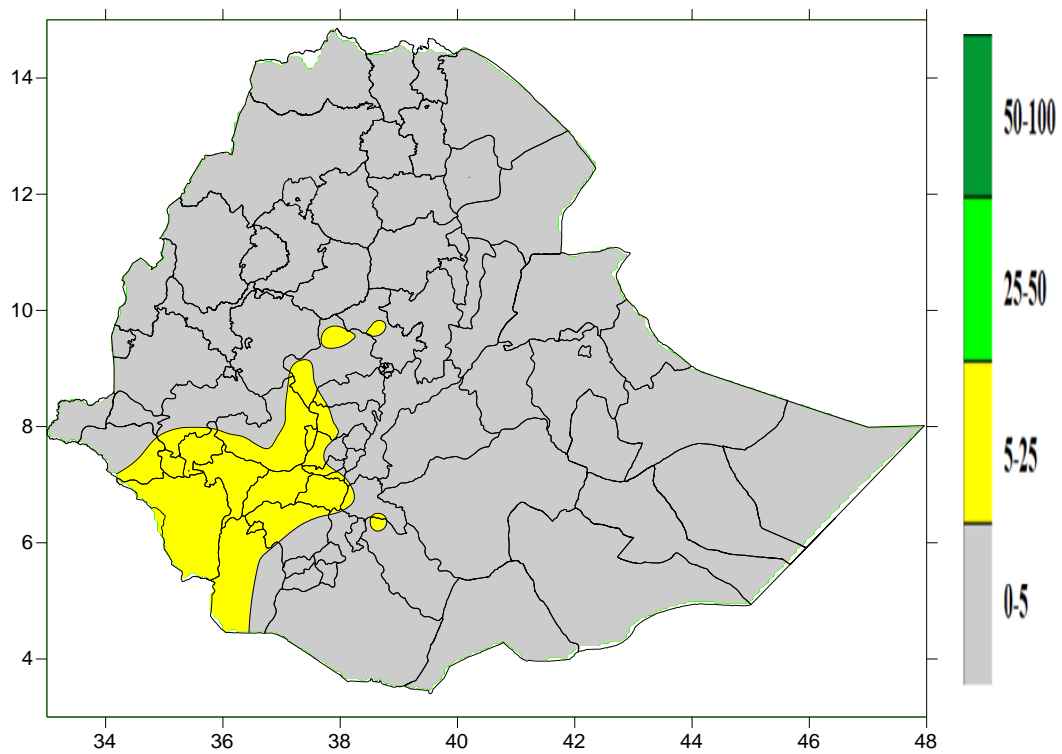


Fig. 10. Rainfall amount in mm for the month of January 2025

### 1.5. Rainfall Anomaly on the month of January 2025

During the month of January 2025, some pocket areas of south and south western as well as some central parts of the country were exhibited Normal to Above Normal Rainfall condition. On the other hand, most parts of the country were experienced below Normal too Much below Normal rainfall condition.

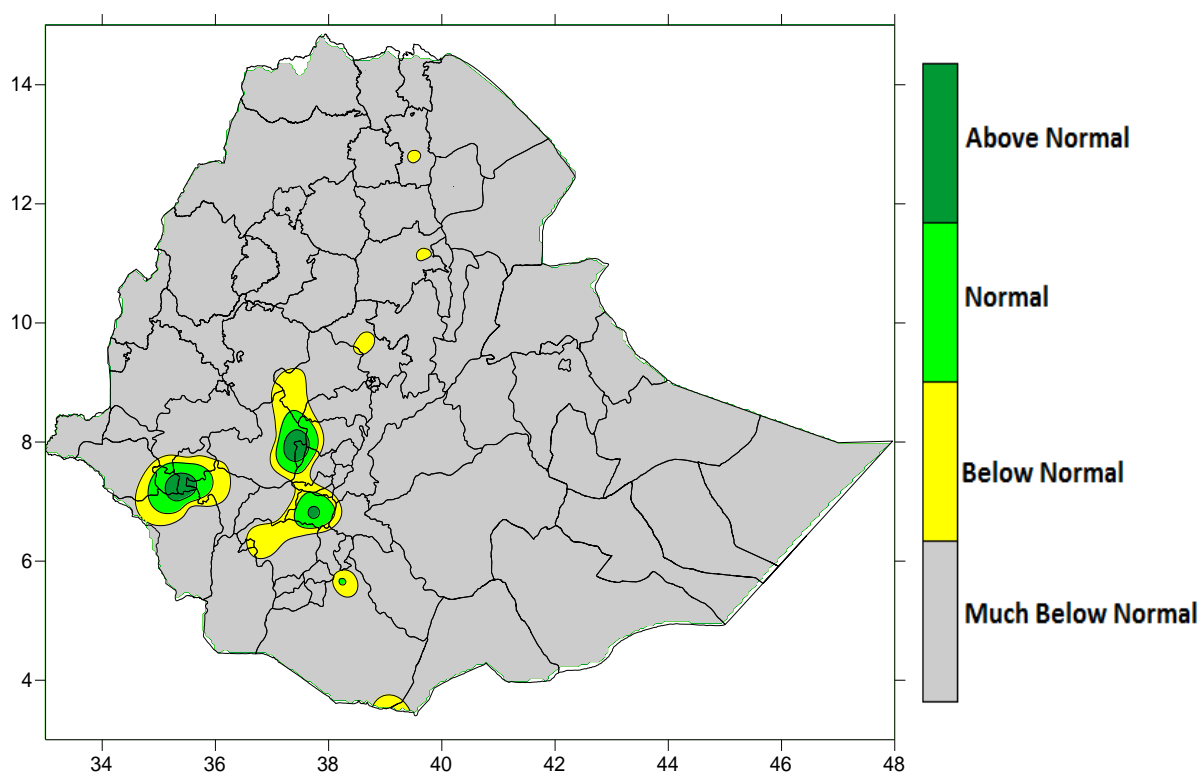


Fig. 11. Percent of Normal Rainfall for the month of January 2025

#### Explanatory notes for the Legend

- < 50- Much below normal
- 50-75%- Below normal
- 75-125%- Normal
- > 125% - Above normal

### 1.6. Moisture status on the month of January 2025

During the month of January 2023 Pocket Area of west western part of the country exhibited moist condition. The rest parts of the countries experienced moderately dry too very dry.

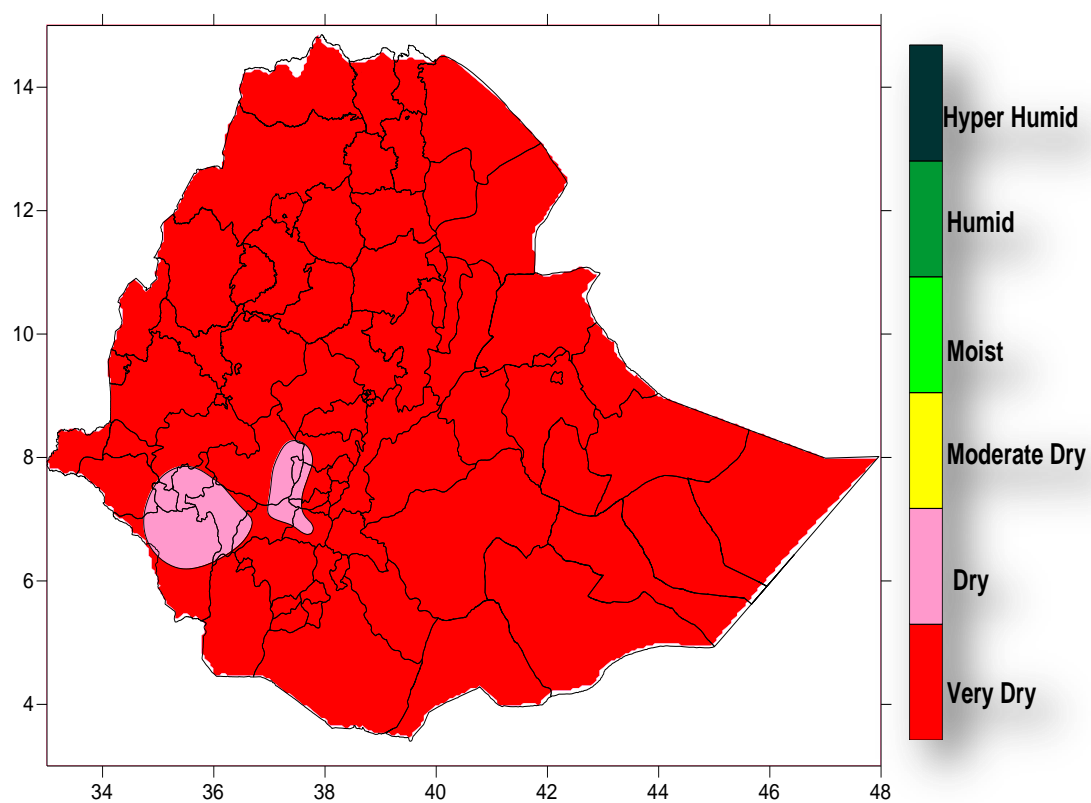


Fig. 12. Moisture status for the month of January 2025

### 1.7. Rainfall Amount on Bega season 2024/25

During the 2024/25 Bega Season, most Bega rain benefiting areas of Southern, South Western, Western and some Central parts the country was received from 200-300mm of rainfall. In addition to that most parts of the country were received 100-200 mm of rainfall. On the other hand, most parts of the country were dominantly received 25-100 mm of rainfall.

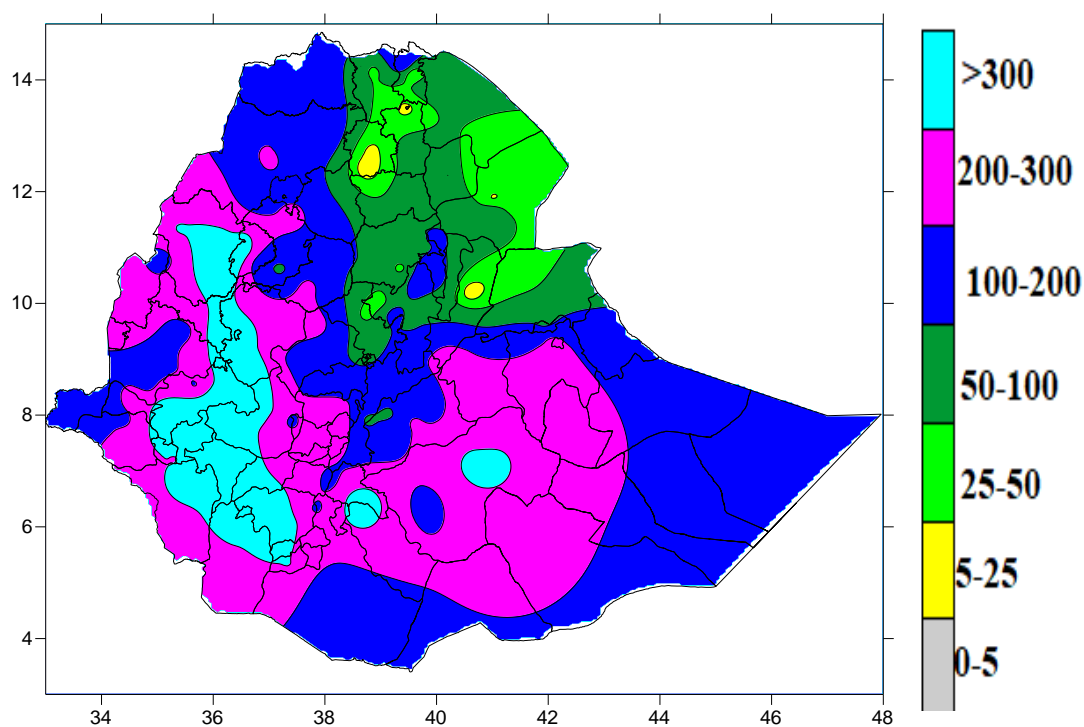


Fig.13. Rainfall amount in mm for Bega 2024/25



### 1.8. Rainfall Anomaly on Bega Season 2024/25

During the Bega 2024/25 season, most parts of the country were exhibited Normal to Above Normal Rainfall condition. On the other hand, pocket areas of country were experienced below Normal too Much below Normal rainfall condition.

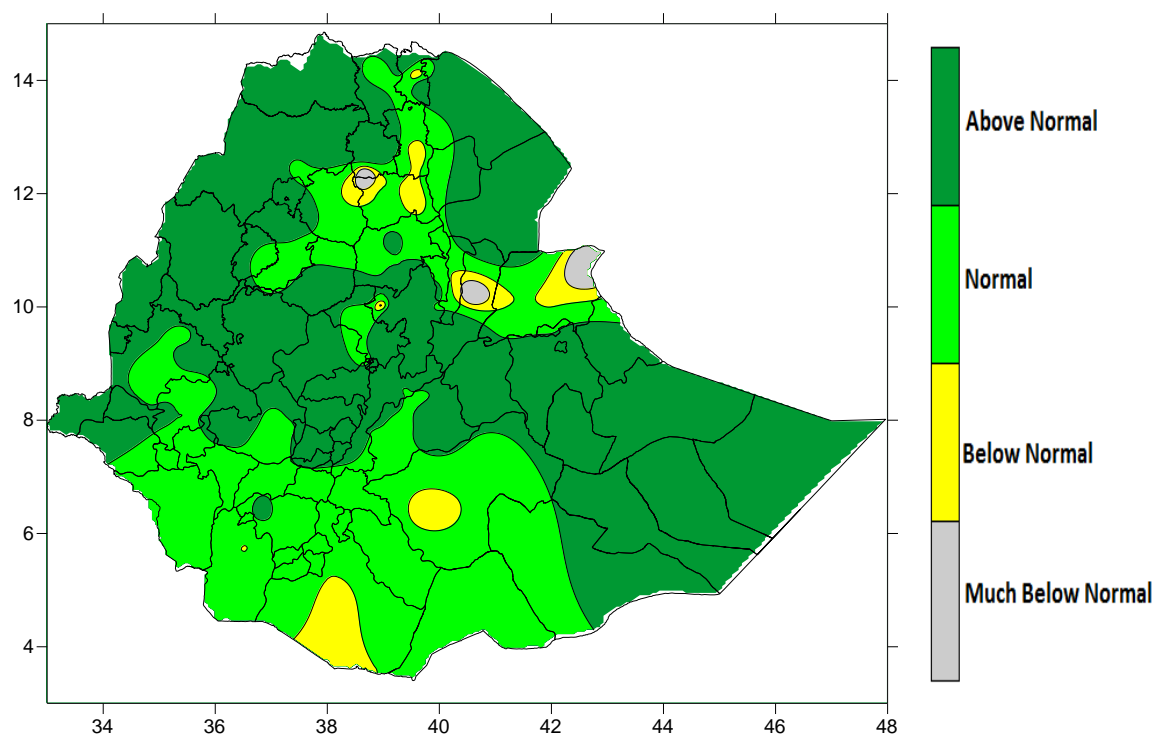


Fig.14. Percent of Normal Rainfall for Bega 2024/25

#### Explanatory notes for the Legend

- < 50-Much below normal
- 50-75%-Below normal
- 75-125%- Normal
- > 125% - Above normal

## **2. AGROMETEOROLOGICAL CONDITIONS AND IMPACT ON AGRICULTURE**

### **2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE DURING BEGA, 2024/25**

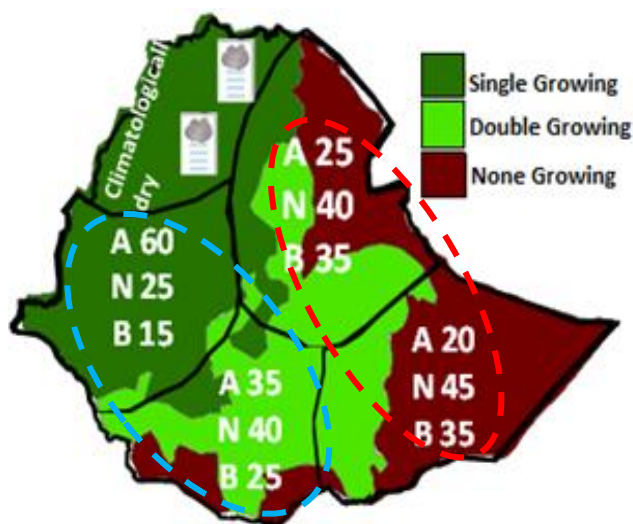
Generally during the past Bega 2024/25 season due to the influence of Kiremt system the moisture condition existed over North and North Eastern regions of the country .in particular during the month of October and November the moisture condition was enhanced over most part of the country. The observed moisture was favorable for the performances of Meher crops that are late sown and not yet fully matured, and perennial plants to satisfy the water requirement. Moreover, the southern and south-eastern Bega rain benefiting areas including south-western, central, eastern and western parts of the country the NDVI Fig.5 (the green plant coverage) and RLWRSI Fig.6 increased in most of Bega rainfall benefiting areas. Particularly due to the expanded green plant coverage and Rangeland indicated over southern and south-eastern pastoral and agro pastoral community might play crucial role toward improving the availability of pasture and drinking water and to regenerate natural and artificial ponds.

## 2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING BELG, 2025 SEASON

Belg season normally central parts of northern high lands, eastern highlands, part of central, south western and southern Ethiopia are known as Belg growing areas. The contribution of Belg rainfall is ranging from 5-30% over the north, north eastern and eastern highlands whereas 30-60% over south and south western parts of the country from annual total crop production of the areas.

The analyzed moisture Status, Standardized Precipitation Index (SPI), total crops water requirement (WRSI) and Rangeland WRSI in most of analogue years expected to favor Belg agricultural activities over much of Belg producing areas. However moderate to poor performance shows over north-eastern and south eastern Belg rain benefiting areas. Thus, farmers and the concerned body need to give attention for those areas and utilize rain water harvesting, moisture conservation and adoption of suitable crops needing less water requirement. Moreover the observed better NDVI and Range land WRSI after the month of February over all selected analogue years expected to favor Belg agricultural activities, planting of long cycle crops and availability of pasture and drinking water.

### TERCILE PROBABILITY FOR BELG (FMAM) 2025









### IMPLICATION OF THE SEASON:-







- ☁ The *Neutral-IOD* and *ENSO-Neutral* episode projected in the coming Belg 2025 season.
- ☁ *Above normal* expected across the *South-western and Western*
- ☁ *Normal to above normal* expected over much of *Southern Oromia, Sidama and Southern Ethiopia*
- ☁ *Normal to below normal* expected over *North-eastern, eastern and central*.
- ☁ *Slightly early onset* over *southwestern* and *delayed* over *Belg rainfall benefiting areas*.
- ☁ *Late cessation* will be expected over Belg 2025 benefiting areas,
- ☁ *Above-normal* to slightly near-normal temp

In general, in view of the prevailing and projected climate scenarios, Belg 2025 season is anticipated to dominate **normal to below normal rainfall over Belg rainfall benefiting areas of the south and southeastern Ethiopia**.
















### **The Possible Positive Impact of Belg 2025**

-  Favour to enhance the soil moisture and early land preparation;
-  Enhanced moisture over southern and south western favour daily crop water needs;
-  Favourable for planting of long cycle crops;
-  Favourable for availability of pasture and drinking water;
-  Favourable for water harvesting for supplementary irrigation;
-  The dry condition will be favourable for harvest of bega season. irrigated crops

### **The Possible Negative Impact of Belg 2025**

-  Reduce crop production and productivity and availability of pasture;
-  Reduced animal reproduction and productivity;
-  Above average and warmer temperature will contribute to heat stress and trigger forest fires over wild fire prone area
-  Increased conflict over pasture and water;
-  Reduced pasture and water availability leading to increased livestock mobility and mortality;
-  Reduced feed/food security and nutrition.
-  Displacement due to floods;
-  Outbreak of water borne diseases ;
-  Possibility of water logging, soil erosion and landslide affecting crops.

### **Key Response Measures/Policy Brief to Cope up the Negative Impact**

-  Performing soil and water conservation practices ;
-  Promote water harvesting and use of supplementary irrigation ;
-  Select optimum time for agricultural input application ;
-  *Store* animal feeds for use during the dry period ;
-  Proper integration of pest and disease management ;
-  Close follow-up of forest fields for wild fire protection ;
-  Strengthen coordination of anticipatory action by multi-disciplinary/sectorial agencies ;
-  Early warning and Early Action in drought/flood prone areas ;
-  Supply of early maturing and drought resistant crop and feed;
-  Promote resource mobilization efforts to support anticipatory actions ;
-  Community sensitization in area of **BN** and **AN** especially women and vulnerable groups;
-  Proper integration of pest and disease management;
-  Enhance the awareness of the farmers the upcoming climate condition;
-  Close follow-up of forest fields for wild fire protection;
-  Closely Follow-up climate update by EMI.



### **3. DEFINITION OF TERMS**

**ABOVE NORMAL RAINFALL:** - Rainfall in excess of 125% of the long term mean

**BELOW NORMAL RAINFALL:** - Rainfall below 75 % of the long term mean.

**NORMAL RAINFALL:** - Rainfall amount between 75 % and 125 % of the long term mean.

**BEGA:** - It is characterized with sunny and dry weather situation with occasional falls. It extends from October to January. On the other hand, it is a small rainy season for the southern and south eastern lowlands under normal condition. During the season, morning and night times are colder and daytime is warmer.

**BELG:** - Small Rainy season that extends from February to May and covers southern, central, eastern and north-eastern parts of the country.

**CROP WATER REQUIREMENTS:** - the amount of water needed to meet the water loss through evapotranspiration of a disease free crop, growing under non-restricting soil conditions including soil water and fertility.

**DEKAD:** - First or second ten days or the remaining days of a month.

**EXTREME TEMPERATURE:-** The highest or the lowest temperature among the recorded maximum or minimum temperatures respectively.

**ITCZ:-** Inter-tropical convergence zone (narrow zone where trade winds of the two hemispheres meet.

**KIREMT:** - Main rainy season that extends from June to September for most parts of the country with the exception of the south-eastern lowlands of the country.

**RAINY DAY:** - A day with 1 or more mm of rainfall amount

Page 25