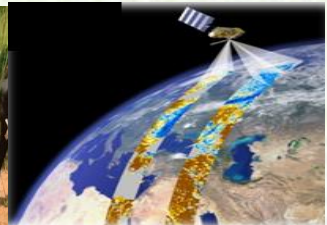


# NATIONAL METEOROLOGY AGENCY

## Agrometeorological Bulletin

### MONTHLY AGROMETEOROLOGICAL BULLETIN

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## **FORE WARD**

This Agro met Bulletin is prepared and disseminated by the National Meteorological Agency (NMA). 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.

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# አህፅሮት

## እ.ኤ.አ ኤፕሪል 2022

በመደበኛ ሁኔታ የአፕሪል ወር ከመጀመሪያው አሥር ቀናት ጀምሮ የእርጥበት ሁኔታው በበልግ አብቃይ አካባቢዎች የሚሻሻልበትና ለበልግ ሰብሎች፣ ለቋሚ ተክሎች እንዲሁም የረጅም ጊዜ ሰብሎችን ለመዝራት የሚቻልበት ወቅት ሲሆን እንዲሁም የሚገኘው እርጥበት ለአርብቶ አደሩ አካባቢ ከፍተኛ ጠቀሜታ የሚሰጥበት ወቅት ነው። በተጨማሪም በአንዳንድ አካባቢዎች ጎርፍ የሚከሰትበትና እንዲሁም ለዘር በተዘጋጁና በሰብል በተሸፈኑ ማሳዎች ላይ ጉዳት ሊያስከትል የሚችልበት ወቅት ነው።

ባለፉት የአፕሪል 2022 የመጀመሪያ አሥር ቀናት ወደ ሀገራችን እየገባ የነበረው ዕርጥበት አዘል አየር በአብዛኛዎቹ የበልግ አብቃይ እና ተጠቃሚ አካባቢዎች ላይ የተሻለ ገጽታ ነበረው። ከዚህ ጋር በተያያዘም ባለፉት አስር ቀናት አብዛኛዎቹ የበልግ ተጠቃሚ ላይ በተለይም በደቡብ፣ በደቡብ ምዕራብ እና በምዕራብ ባሉት የሀገሪቱ አካባቢዎች ካለፈው ጊዜ አንጻራዊ በሆነ መሻሻል በማሳየታቸው ከመካከለኛ እስከ ከባድ መጠን ያለው ዝናብ በተለያዩ ቀናት ተመዝግቧል። በመሆኑም የተገኘው እርጥበት የተሻለ ከመሆኑ ጋር ተያይዞ የበልግ እርሻ ስራ እንቅስቃሴ እያካሄዱ ላሉ አካባቢዎች ለሰብሎ የውሃ ፍላጎት መሟላት፣ ለረጅም ጊዜ ሰብሎች የማሳ ዝግጅትና የዘር ጊዜ እርሻ እንቅስቃሴ፣ ለቋሚ ተክሎች የውሃ ፍላጎት መሟላት እንዲሁም ከላይ በተጠቀሱት አካባቢዎች ለሚገኙ አርብቶ አደሮችና ከፊል አርብቶ አደሮች ለመጠጥ ውሀና ለግጦሽ ሳር አቅርቦት ጠቀሜታ ነበረው። ከዚህ በተፀራሪ በተቀሩት የሀገሪቱ ክፍሎች የነበረው አነስተኛ ዝናብ ከፀሐያማና ሞቃታማ የአየር ሁኔታ ጋር ተዳምሮ በወቅቱ አጠቃላይ የግብርና ሥራ እንቅስቃሴ እና የሰብሎች ወሃ ፍላጎት መሟላት ላይ አሉታዊ ተፅዕኖ እንደአሳደረ ነው።

ባሳለፍነው የኤፕሪል ሁለተኛው አስር ቀናት የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች እንደሚያመለክቱት በአብዛኛዎቹ የበልግ ሰብል አብቃይና የበልግ ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ላይ ከባለፉት አስር ቀናት በተሻለ መልኩ የተስፋፋ የእርጥበት ሁኔታ ነበራቸው። በአጠቃላይ ባለፉት አስር ቀናት በደቡብ፣ ምዕራብ፣ መካከለኛውና ምስራቅ ኦሮሚያ፣ በደቡብ ምዕራብ ኢትዮጵያ፣ በደቡብ ብሄር

ብሄረሰቦችና ህዝቦች ክልል፣ በሲዳማ፣ በጋምቤላ፣ በደቡብና ሰሜን ሱማሌ አካባቢዎች ላይ ከቀላል እስከ ከባድ መጠን ያለው ዝናብ ተመዝግቧል። ከዚህ ጋር ተያይዞ በተለይም በደቡባዊ የሀገሪቱ አጋማሽ አልፎ አልፎ ባሉት ቀናት ከነበረው ጠንካራ የደመና ክምችት ከባድ መጠን ያለው ዝናብ ተመዝግቧል። ይህም ሁኔታ በልግ አብቃይ አካባቢዎች ተስተውሎ የነበረውን የእርጥበት እጥረት ያሻሻለ ከመሆኑም በላይ አስቀድመው ለተዘሩ የበልግ ስብሎች እና ቋሚ ተክሎች የውኃ ፍላጎታቸውን ከማሟላት አኳያ አዎንታዊ ሚና ነበረው። በተለይም ከኤፕሪል ጀምሮ ለሚዘሩ የረጅም ጊዜ ስብሎች ማሳን ለማዘጋጀትም ሆነ ዘር ለመዝራት ጠቀሜታው የጎላ ነበር። በአንዳንድ አካባቢዎች ላይ የተመዘገበው ከባድ ዝናብ በተወሰኑ ቦታዎች ለጎርፍ መከሰት አስተዋፅኦ ነበረው። ከባድ ዝናብ ከተመዘገበባቸው ጣቢያዎች መካከል አንዳንዶቹን ለመጥቀስ ያህል በነገሌ 37.3ና 77.0፣ በአርጅ 36.4፣ በበደሌ 30.3፣ በቡሬ 30.7፣ በሞያሌ 97.7፣ በአጃጃጂ 40.6፣ በሊሙ ገነት 65.5፣ በድሬዳዋ 37.8፣ በቴፒ 40.7ና 52.0፣ በሳዉላ 39.5፣ በአማን 34.6፣ በጂንካ 67.8 እና በማሻ 30.6 በሚሜ ይገኙበታል። የተመዘገበው ከባድ ዝናብ በተወሰኑ ቦታዎች ለጎርፍ መከሰት አስተዋፅኦ ቢኖረውም በአዎንታዊ መልኩ ውኃን ለመሰብሰብና ለማጠራቀም ምቹ ሁኔታን የፈጠረ ነበር። እንዲሁም በቆላማ አካባቢዎች ለሚኖሩት አርብቶ አደርና ከፊል አርብቶ አደሩ አካባቢዎች ለግጦሽ ሳርና ለመጠጥ ውሃ አቅርቦት መሟላት በጎ ጎን ነበረው።

ባሳለፍነው የኤፕሪል ሶስተኛው አስር ቀናት የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች እንደሚያመለክቱት በአብዛኛዎቹ የበልግ ስብል አብቃይና የበልግ ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ላይ በአንፃራዊ መልኩ ከባለፉት አስር ቀናት የተሻለ የእርጥበት ሁኔታ ነበራቸው። ከዚህ ጋር ተያይዞ በአንዳንድ አካባቢዎችም ከባድ ዝናብ እንደነበራቸው ከተለያዩ የሀገሪቱ ክፍሎች የተሰበሰቡ መረጃዎች አመልክተዋል። ይህም ሁኔታ በአንዳንድ አካባቢዎች ተስተውሎ የነበረውን የእርጥበት እጥረት ያረገበ ከመሆኑም በላይ አስቀድመው ለተዘሩ የበልግ ስብሎች እና ቋሚ ተክሎች የውኃ ፍላጎታቸውን ከማሟላት አፃር አዎንታዊ ሚና ነበረው። በተለይም ከኤፕሪል ጀምሮ ለሚዘሩ የረጅም ጊዜ ስብሎች ማሳን ለማዘጋጀትም ሆነ ዘር ለመዝራት ጠቀሜታው የጎላ ነበር። በተጨማሪም ለመጠጥ ውኃና ለግጦሽ ሳር አቅርቦት በጎ ጎን ነበራቸው። በአንዳንድ አካባቢዎች ላይ የተመዘገበው ከባድ ዝናብ ለጎርፍ መከሰት ምቹ ሁኔታ የነበረው ሲሆን፣ ነገር ግን በአብዛኛው በአዎንታዊ መልኩ ውኃን ለመሰብሰብና ለማጠራቀም ጥሩ ሁኔታ የፈጠረ ነበር። ከባድ መጠን ያለው ዝናብ ከመዘገቡ ሥፍራዎች መካከል ለመጥቀስ ያህል በአቦምሳ 36.2፣ በአልጌ 41.0 እና

36.0፣ በአምባማርያም 83.6፣ በባህር ዳር 36.9፣ በበደሌ 33.8፣ በቡኢ 63.4፣ በጨፋ 38.0፣ በጨራ 43.3፣ በሀገረማርያም 60.7፣ በሆሳኢና 40.2፣ በጂማ 37.6 እና 37.0፣ በጂንካ 44.6፣ በሳውላ 59.5፣ በሰንቃላ 38.9፣ በሶዶ 59.1፣ በቴፒ 31.5፣ በማሻ 42.0፣ በጉንዶ መስቀል 30.5 እንዲሁም በአምድብር 47.0 በሚ.ሜ. ይገኙበታል። በሌላ መልኩ በዚህ ወቅት እርጥበታማ ሁኔታ በሚጠበቅባቸው የደቡብና የደቡብ ምስራቅ የሀገሪቱ አካባቢዎች ጥሩ የእርጥበት ሁኔታ ስር ነበሩ። በነዚህ አካባቢዎች ላይ በተከታታይ እየተስተዋለ ያለው ደረቃማ የእርጥበት ሁኔታ የነበረውን የእርጥበት እጥረት ከማሻሻል ጋር ተያይዞ በአርብቶ አደርና ከፊል አረብቶ አደር አካባቢዎች ለግጦሽ ሳርና የመጠጥ ውኃ አቅርቦት ላይ አዎንታዊ ጎን ነበረው።

ባለፈው የአፕሪል ወር ለወቅቱ ዝናብ መኖር አመቺ ሁኔታን የሚፈጥሩ የአየር ሁኔታ ክስተቶች በበልግ አብቃይ እና ተጠቃሚ በሆኑ የሀገሪቱ አካባቢዎች ላይ ተጠናክረው ተስተውለዋል። ይህም በአብዛኛው የበልግ አብቃይ እና ተጠቃሚ የሀገሪቱን ክፍሎችን ያዳረሰ የእርጥበት ሁኔታ ነበረው። ይህም ሁኔታ ቀደም ብለው ተዘርተው በተለያዩ የእድገት ደረጃ ላይ ለሚገኙ የበልግ ሰብሎች ቀጣይ እድገታቸው ላይ የጎላ ጠቀሜታ የነበረው ሲሆን፣ እንዲሁም ለረጅም ጊዜ ሰብሎች የማሳ ዝግጅትና ለዘር እርሻ እንቅስቃሴ፣ ለቋሚ ሰብሎች የውሀ ፍላጎት መሟላት በተጨማሪም ለአርብቶ አደሮችና ከፊል አርብቶ አደሮች አመቺ ሁኔታን የፈጠረ ነበር። በተለይም በደቡብና በጥቂት ሰሜን ምስራቅ የሀገሪቱ አካባቢዎች ላይ በአንዳንድ ስፍራዎች የነበረው ከባድ መጠን ያለው ዝናብ ለአዝዕርቱ የውሃ ፍላጎት መሟላት፣ ለግጦሽ ሳርና ለመጠጥ ውሀ አቅርቦት አመቺ ሁኔታን ቢፈጥርም፣ በአንዳንድ ከላይ በተጠቀሱ አካባቢዎች የነበረው ከባድ ዝናብና ቅጽበታዊ ጎርፍ በተለያዩ የእድገት ደረጃዎች ላይ ባሉ ሰብሎች እንዲሁም በሰው እና በንብረት ላይ አሉታዊ ተፅዕኖ ነበረው። በሌላ በኩል ባለፈው የሚያዚያ ወር በማዳካስካር አካባቢ በተከታታይ በተፈጠረው ዝቅተኛ የአየር ግፊት ምክንያት በዚህ ወቅት በዋናነት ዝናብ በሚጠበቅባቸው የቦረናና ጉጂ እንዲሁም የደቡብ ምስራቅ የሀገሪቱ ክፍሎች ላይ አልፎ አልፎ ከነበራቸው አነስተኛ መጠን ያለው እርጥበት በስተቀር በአብዛኛው የእርጥበት እጥረት የነበራቸው ሲሆን፣ ይህም ሁኔታ በእነዚህ አካባቢዎች ለአርብቶ አደሮችና ከፊል አርብቶ አደሮች በተወሰነ መልኩ አሉታዊ ተጽእኖ ነበረው ።

ባሳለፍነው የኤፕሪል ሶስተኛው አስር ቀናት የተተነተኑ የግብርና ሚቲዎሮሎጂ መረጃዎች እንደሚያመለክቱት በአብዛኛዎቹ የበልግ ሰብል አብቃይና የበልግ ዝናብ ተጠቃሚ በሆኑት የሀገሪቱ አካባቢዎች ላይ በአንጻራዊ መልኩ ከባለፉት አስር ቀናት የተሻለ የእርጥበት ሁኔታ ነበራቸው። ከዚህ ጋር ተያይዞ በአንዳንድ አካባቢዎችም ካባድ ዝናብ እንደነበራቸው ከተለያዩ የሀገሪቱ ክፍሎች የተሰበሰቡ መረጃዎች አመልክተዋል። ይህም ሁኔታ በአንዳንድ አካባቢዎች ተስተውሎ የነበረውን የእርጥበት እጥረት ያረገበ ከመሆኑም በላይ አስቀድመው ለተዘሩ የበልግ ስብሎች እና ቋሚ ተክሎች የውኃ ፍላጎታቸውን ከማሟላት አፃር አዎንታዊ ሚና ነበረው። በተለይም ከኤፕሪል ጀምሮ ለሚዘሩ የረጅም ጊዜ ስብሎች ማሳን ለማዘጋጀትም ሆነ ዘር ለመዝራት ጠቀሜታው የጎላ ነበር። በተጨማሪም ለመጠጥ ውኃና ለግጦሽ ሳር አቅርቦት በጎ ጎን ነበራቸው። በአንዳንድ አካባቢዎች ላይ የተመዘገበው ከባድ ዝናብ ለጎርፍ መከሰት ምቹ ሁኔታ የነበረው ሲሆን፤ ነገር ግን በአብዛኛው በአዎንታዊ መልኩ ውኃን ለመሰብሰብና ለማጠራቀም ጥሩ ሁኔታ የፈጠረ ነበር። ከባድ መጠን ያለው ዝናብ ከመዘገቡ ሥፍራዎች መካከል ለመጥቀስ ያህል በአቦምሳ 36.2፣ በአልጌ 41.0 እና 36.0፣ በአምባማርያም 83.6፣ በባህር ዳር 36.9፣ በበደሌ 33.8፣ በቡኢ 63.4፣ በጨፋ 38.0፣ በጨራ 43.3፣ በሀገረማርያም 60.7፣ በሆላእና 40.2፣ በጂማ 37.6 እና 37.0፣ በጂንካ 44.6፣ በሳውላ 59.5፣ በሰንቃጣ 38.9፣ በሶዶ 59.1፣ በቴፒ 31.5፣ በማሻ 42.0፣ በጉንዶ መስቀል 30.5 እንዲሁም በእምድብር 47.0 በሚ.ሜ. ይገኙበታል። በሌላ መልኩ በዚህ ወቅት እርጥበታማ ሁኔታ በሚጠበቅባቸው የደቡብና የደቡብ ምስራቅ የሀገሪቱ አካባቢዎች ጥሩ የእርጥበት ሁኔታ ስር ነበሩ። በነዚህ አካባቢዎች ላይ በተከታታይ እየተስተዋለ ያለው ደረቃማ የእርጥበት ሁኔታ የነበረውን የእርጥበት እጥረት ከማሻሻል ጋር ተያይዞ በአርብቶ አደርና ከፊል አረብቶ አደር አካባቢዎች ለግጦሽ ሳርና የመጠጥ ውኃ አቅርቦት ላይ አዎንታዊ ጎን ነበረው።

ባለፈው የኤፕሪል ወር ለወቅቱ ዝናብ መኖር አመቺ ሁኔታን የሚፈጥሩ የአየር ሁኔታ ክስተቶች በበልግ አብቃይ እና ተጠቃሚ በሆኑ የሀገሪቱ አካባቢዎች ላይ ተጠናክረው ተስተውለዋል። ይህም በአብዛኛው የበልግ አብቃይ እና ተጠቃሚ የሀገሪቱን ክፍሎችን ያዳረሰ የእርጥበት ሁኔታ ነበረው። ይህም ሁኔታ ቀደም ብለው ተዘርተው በተለያዩ የእድገት ደረጃ ላይ ለሚገኙ የበልግ ስብሎች ቀጣይ እድገታቸው ላይ የጎላ ጠቀሜታ የነበረው ሲሆን፤ እንዲሁም ለረጅም ጊዜ ስብሎች የማሳ ዝግጅትና ለዘር እርሻ እንቅስቃሴ፣ ለቋሚ ስብሎች የውሀ ፍላጎት መሟላት በተጨማሪም ለአርብቶ አደሮችና ከፊል አርብቶ አደሮች አመቺ ሁኔታን የፈጠረ ነበር። በተለይም በደቡብና

በጥቂት ሰሜን ምስራቅ የሀገሪቱ አካባቢዎች ላይ በአንዳንድ ስፍራዎች የነበረው ከባድ መጠን ያለው ዝናብ ለአዝዕርቱ የውሃ ፍላጎት መሟላት፣ ለግጦሽ ሳርና ለመጠጥ ውሀ አቅርቦት አመቺ ሁኔታን ቢፈጥርም፣ በአንዳንድ ከላይ በተጠቀሱ አካባቢዎች የነበረው ከባድ ዝናብና ቅጽበታዊ ኅርፍ በተለያዩ የእድገት ደረጃዎች ላይ ባሉ ሰብሎች እንዲሁም በሰው እና በንብረት ላይ አሉታዊ ተፅዕኖ ነበረው። በሌላ በኩል ባለፈው የሚያዚያ ወር በማዳካስካር አካባቢ በተከታታይ በተፈጠረው ዝቅተኛ የአየር ግፊት ምክንያት በዚህ ወቅት በዋናነት ዝናብ በሚጠበቅባቸው የቦረናና ጉጂ እንዲሁም የደቡብ ምስራቅ የሀገሪቱ ክፍሎች ላይ አልፎ አልፎ ከነበራቸው አነስተኛ መጠን ያለው እርጥበት በስተቀር በአብዛኛው የእርጥበት እጥረት የነበራቸው ሲሆን፣ ይህም ሁኔታ በእነዚህ አካባቢዎች ለአርብቶ አደሮችና ከፊል አርብቶ አደሮች በተወሰነ መልኩ አሉታዊ ተጽእኖ ነበረው ።



## **SUMMARY**

### **APRIL 2022**

During the first dekad of April 2022, which is under review, there was day to day strengthening of rain bearing meteorological phenomenon over Belg rain beneficiary areas. In line with this, the analysed Agro meteorological information indicated that moderate to heavy rainfall was experienced over high lands of southern, south-western and western parts of the country received relatively better amount of rainfall. This situation expect to improve moisture status, agricultural activities such as land preparation and sowing of Belg and long cycle meher crops, availability of drinking water and pasture over pastoral and agro pastoral areas which stayed under influence of long dry spell. Farmers and concerned bodies are advised to use available moisture wisely and effectively. On the other hand, dry, sunny and windy Bega weather condition was prevail over the rest parts of the country might have negative impact on Belg season general agricultural activities, moisture requirement of perennial plants and dirking water and pasture availability in pastoral and agro pastoral low lands.

During the second dekad of April 2022, which is under review, there was day to day strengthening of rain bearing meteorological phenomenon over Belg rain growing and beneficiary areas. In line with this, the analyzed Agro meteorological information over southern, western and central and eastern Oromia, south-western Ethiopia, SNNP, Sidama, Gambela, south and eastern Somali received light to heavy amount of rainfall. This situation favorable to satisfy the water need of Belg season crops and has positive effects for Belg agricultural activities and perennial plants. In addition, the condition can be suitable to plant long cycle crops, such as maize and Sorghum over long cycle crop growing areas. This also has benefit for availability of pasture and drinking water and re-charging of natural and artificial holes and ponds over the pastoral and agro pastoral community which stayed under influence of long dry spell. On other hand over southern half s of the country the Belg rain bearing situation is more enhanced and in relation with this some areas experienced heavy fall within 24hrs and at some station like Negele 37.3 and 77.0, Arjo 36.4, Bedele 30.3, Bure 30.7, Moyale 07.7, Ejaji 40.6, Limugenet 65.5, Dire dewa 37.8, Tepi 40.7 and 52.0, Sawola 39.5, Aman 34.6, Jinka 67.8, and Mash 30.6 heavy fall were observed with 24hrs. This situation might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit. Moreover the observed widespread rainfall distribution could also have indispensable contribution on the availability of pasture and drinking water for pastoral areas. In addition to

that, the received amount of rainfall played crucial role to reduce the moisture stress which had been prevailing in some parts of the country during the last few dekads.

During the third dekad of April 2022, According to the analyzed agro-meteorological information, most of Belg crop growing as well as Belg season rain benefiting areas experienced enhanced moisture situation. In relation with the enhanced moisture condition particularly all Oromia zones, most of Amhara, south-western Ethiopia, SNNP, Sidama, Gambela, northern part of Somali region, Harari and Dire dawa, southern parts of Afar and souther parts of Benshangul-Gumuze exprienced slight to moderate rainall. This situation was improve moisture status, agricultural activities such as land preparation and sowing of long cycle meher crops, availability of pasture and drinking water over pastoral and agro pastoral areas which stayed under influence of long dry spell. Farmers and concerned bodies are advised to use available moisture wisely and effectively. On the other hand heavy rainfall amounts at least 30mm and above during 24hrs period was reported at several agrometeorological stations including western, south-western, and southern parts of the country. This situation might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit. Moreover the observed widespread rainfall distribution could also have indispensable contribution on the availability of pasture and drinking water for pastoral areas. However, the observed heavy fall in some places negatively affected Belg crops.

In general, during the month of April 2022, rain bearing meteorological phenomena was strengthening in amount and distribution over much of Belg rain benefiting area of the country. This situation might have positive impact on moisture requirement of different Belg and Meher long cycle crops found at various phases of growth, perennial plants, general agricultural activities, improve pasture and drinking water availability in pastoral and agro pastoral low land areas. Besides, the observed heavy rainfall particularly southern half, central, eastern and south-western parts of the country might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit. On the other hand, the observed extreme heavy fall may cause flood and water logging on crops field in low lying areas and soil erosion on sloppy areas as well as it could affect the by washing away the newly sown Meher crops in areas where sowing activities are the main practices at this time of the year.

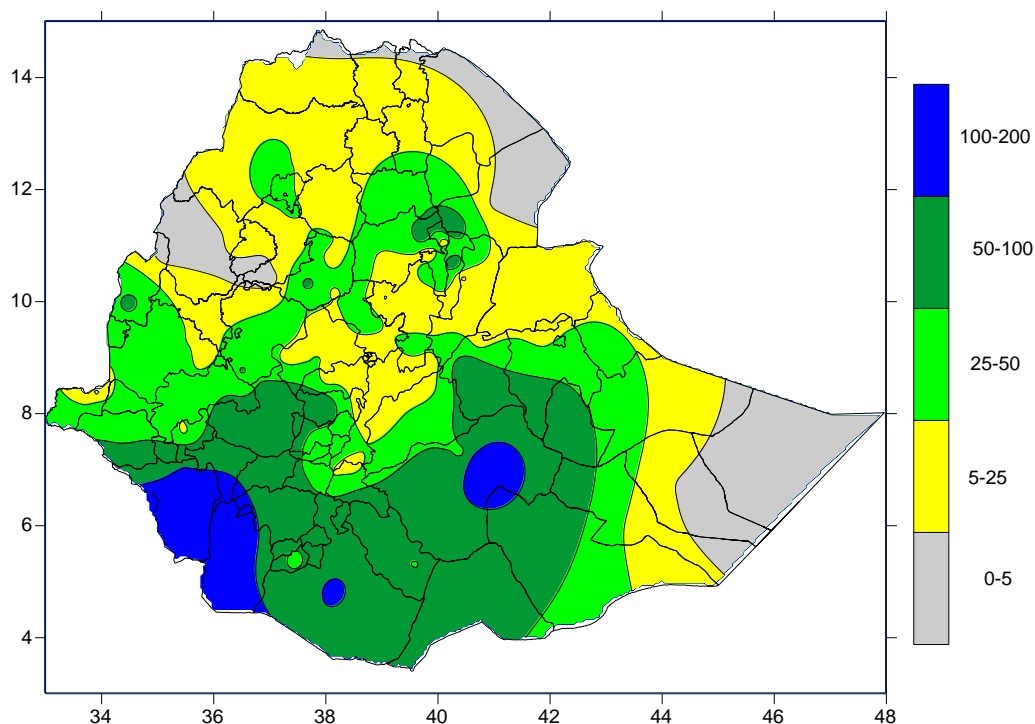


Fig 1. Rainfall distribution in mm (21 – 30) April 2022

## 1. WEATHER ASSESSMENT

### 1.1. Rainfall amount (21 – 30) April 2022

During the third dekad of April 2022, pocket area of Bench Maji, Basketo, South Omo, Derashe, Konso, Gamo gofa, Amaro, Borena, Bale and Afder exhibited 100-200mm Rainfall. Oromia especial zone, Assosa, Jimma, Godere, Dawuro, YEM, Gurage, Selti, KT, Welayita, Gamo gofa, Gedeo, Guji, west and east Harergie, Konso, Amaro, Borena, Bale, Liben, Afder, Gode and Fik exhibited 50-100mm Rainfall. south and north Wollo, north and south Gonder, Oromia especial zone, Afar zone 1, 5 & 4, east Gojam, west and south west Shewa, Tongo, Assosa, Kamashi, Illubabur , zone 1, 2, & 3, Jimma, YEM, Bench Maji, Basketo, Hadiya, Alaba, Sidama, Welayita, Arsi, Liben, Afder, west and east Harergie, Jigjiga, Fik, Deghabur and Gode exhibited 25-50mm Rainfall. south , north, east and central Tigray, Bahir Dar, Agew-Awi, north and south Wollo, Afar zone 1, 2, 3, 4 & 5, Shinille, west and east Gojam, east Wellega, Addis Ababa zone, north, west and south west Shewa, Gambela zone 1, Hadiya, Jigjiga, Gode, Deghabur and Warder exhibited 5-25mm Rainfall. The rest parts of the country exhibited 0-5mm Rainfall.

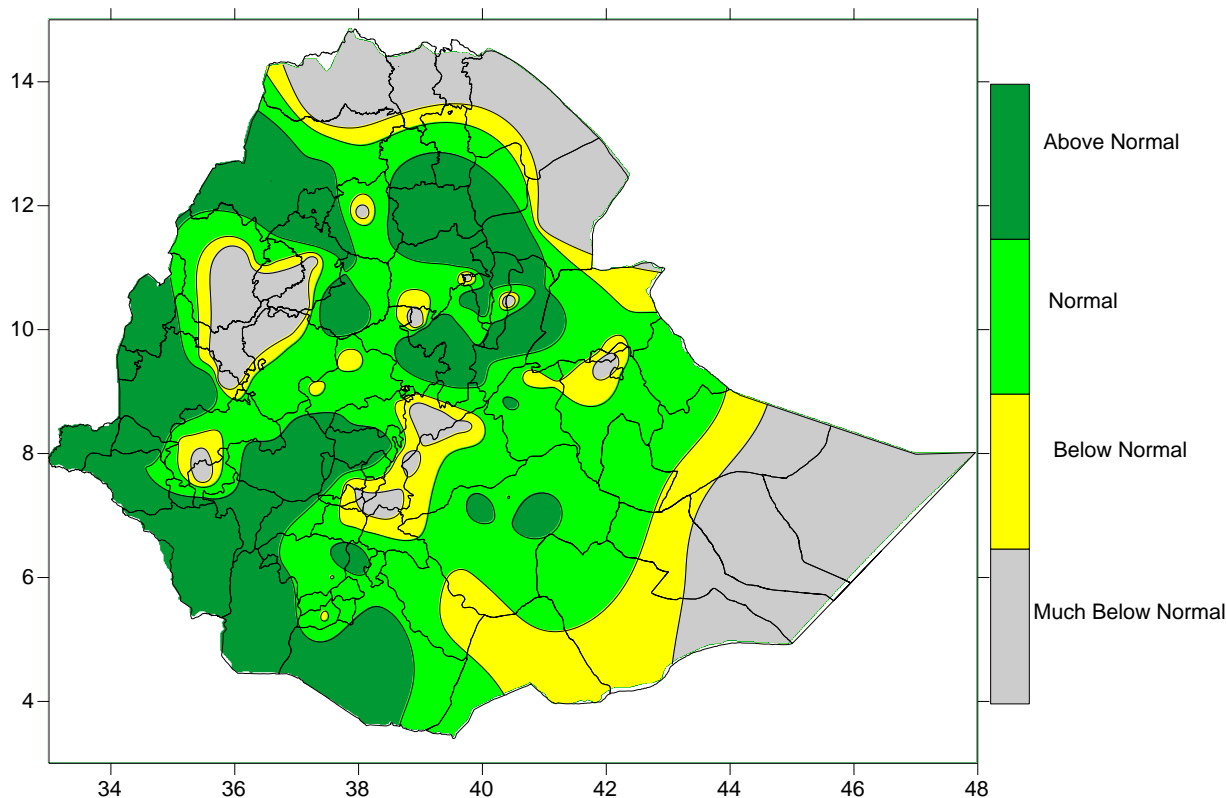


Fig. 2 Percent of normal rainfall distribution (21 – 30) April 2022

### Explanatory notes for the Legend

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

### 1.2. Rainfall Anomaly (21 – 30 April 2022)

During the third dekad of April 2022 west, east and central Tigray, north and south Wollo, Metekel, Kamashi, Agew-Awi, Sheka, north, west and south west Shewa, Addis Ababa zone, Afar zone 1 & 2, west and east Harergie, Harer, Fik, Deghabur, Illubabur, Jimma, Godere, Keffa, Dawuro, KT, Alaba, Selti, Gurage, Hadiya, Welayita, Sidama, Bench Maji, Basketo, South Omo, Derashe, Addis Ababa zone, Konso, Amaro, Borena, Burji, Gedeo, Guji, Liben, Degahabour, Afdar and Gode receive Below Normal too Much Below Normal. The rest parts of the countries receive Normal to Above Normal.

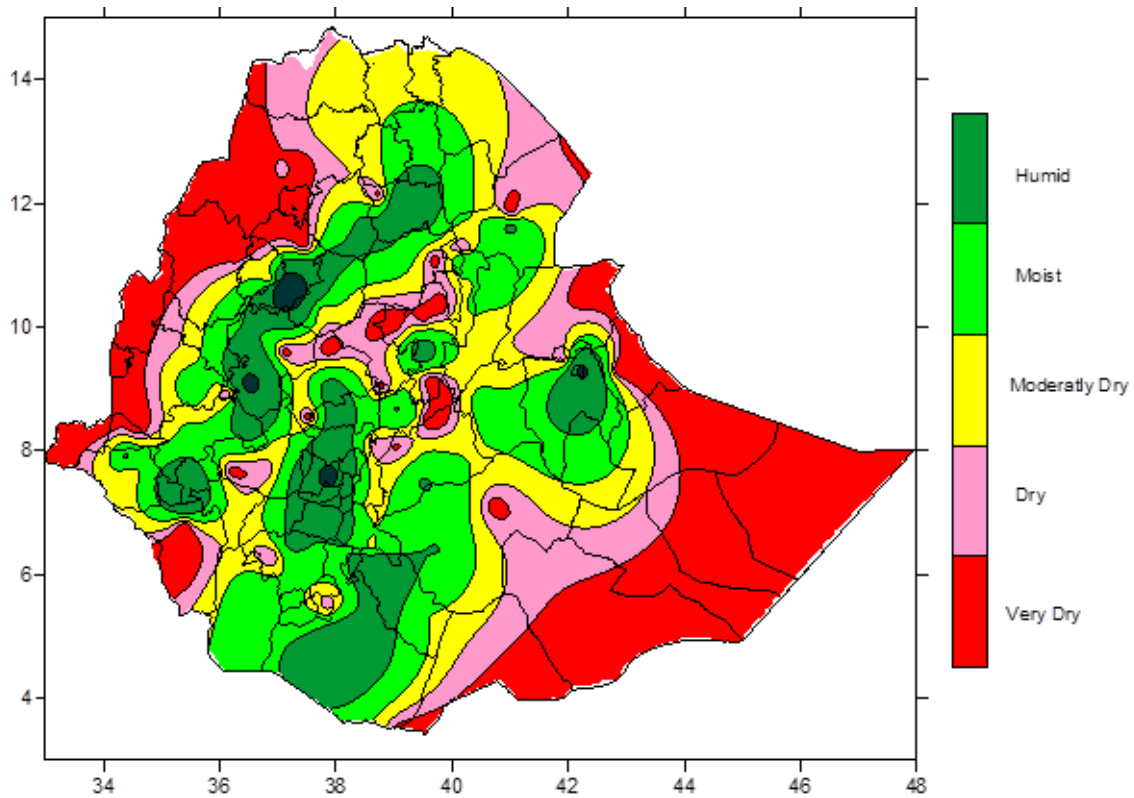


Fig. 3 Moisture Status (21-30 April 2022)

### 1.3. Moisture status (21 – 30 April 2022)

During third dekad April 2022 north and south Wollo, Oromia especial zone, north, west and south west Shewa, Addis Ababa zone, Afar zone 3 & 5, west and east Harergie, Harer, , Illubabur, Jimma, Godere, Keffa, Dawuro, KT, Alaba, Selti, Gurage, Hadiya, Welayita, Sidama, Bench Maji, Basketo, South Omo, Derashe, Konso, Amaro, Borena, Burji, Gedeo, Guji, Bale, exhibited Moist to Humid. The rest parts of the countries exhibited Moderately Dry to Very Dry.

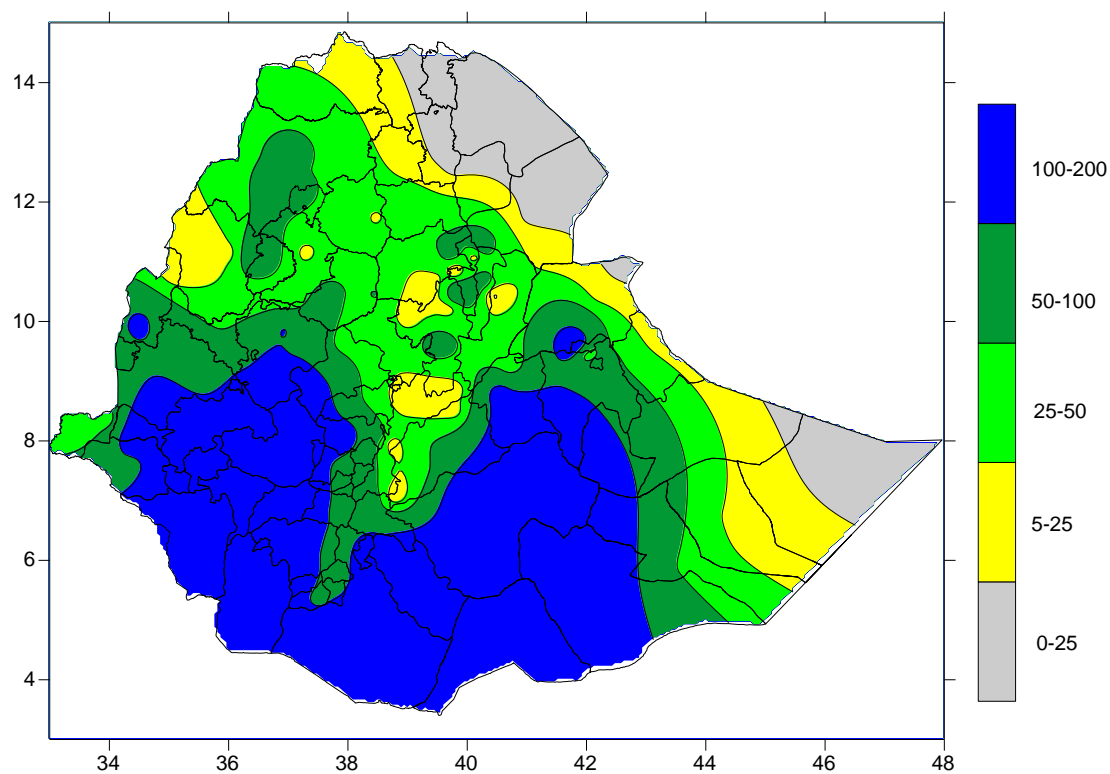


Fig. 3 Rainfall amount in mm for the month of April 2022

#### 1.4. Rainfall amount on the month of April 2022

During the Month of April 2022 On month of April 2022 pocket area of Bench Maji, Basketo, South Omo, Derashe, Konso, Gamo gofa, Amaro, Borena, Bale and Afer Oromia especial zone, Assosa, Jimma, Godere, Dawuro, YEM, Gurage, Selti, KT, Welayita, Gamo gofa, Gedeo, Guji, west and east Harergie, Konso, Amaro, Borena, Bale, Liben, Afer, Gode and Fik exhibited 100-200mm Rainfall. south Wollo, Oromia especial zone, Afar zone 1 & 4, east Gojam, west and south west Shewa, Addis Ababa zone, Jimma, YEM, Bench Maji, Basketo, Gamo gofa, Derashe, South Omo, Konso, Amaro, Borena, Guji, Bale, Liben, Afer, west and east Harergie, Fik, Deghabur and Gode exhibited 25-50mm Rainfall. south Tigray, north and south Wollo, Afar zone 1, 2, 3, 4 & 5, Shinille, east Gojam, east Wellega, Addis Ababa zone, north, west and south west Shewa, Arsi, Gurage, Illubabur, Sheka, Godere, Keffa, Bench Maji, Dawuro, KT, Welayita, Alaba, Gedeo, Guji, east Harergie, Harer, Jigjiga, Gode, Deghabur and Warder exhibited 5-25mm Rainfall. The rest parts of the country exhibited 0-5mm Rainfall.

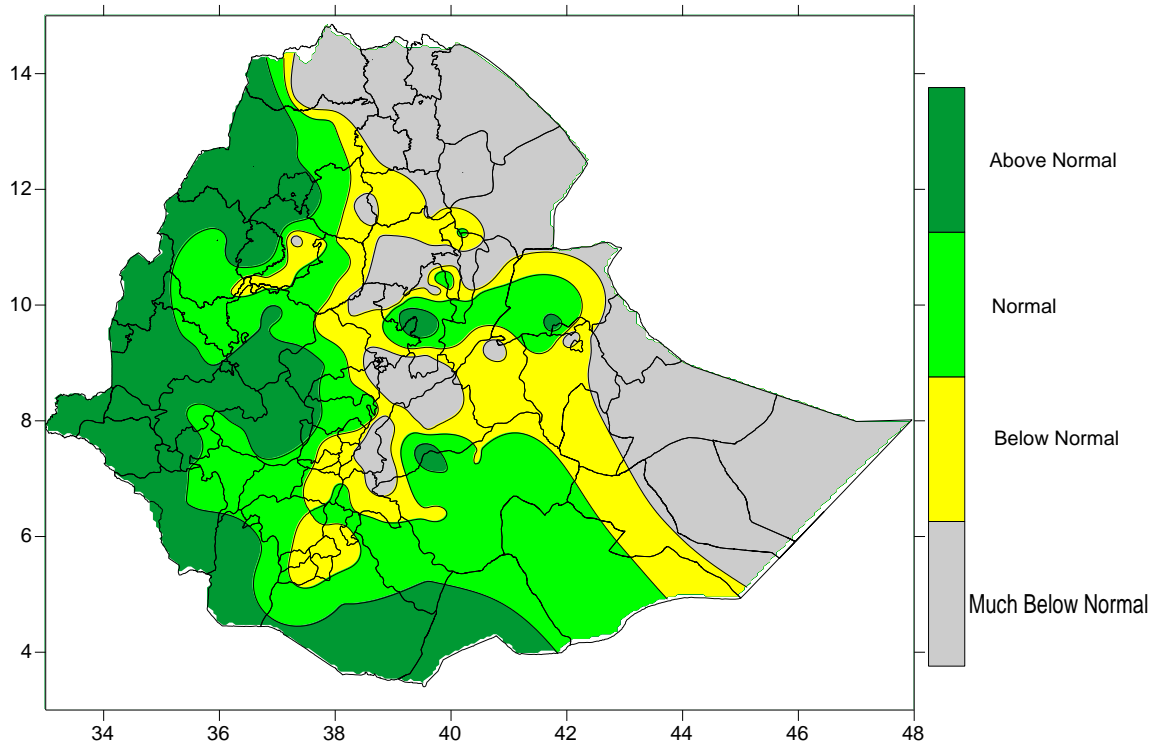


Fig. 4 Percent of Normal Rainfall for the month of April 2022

#### Explanatory notes for the Legend

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

#### 1.5. Rainfall Anomaly on the month of April 2022

On the Month of April 2022 west, east and central Tigray, north and south Wollo, , Afar zone 1, 2, 3, 4 & 5, Alaba, Selti, Gurage, Hadiya, Welayita, Sidama, Bench Maji, Basketo, South Omo, Derashe, Konso, Amaro, Borena, Burji, Gedeo, Guji, Liben, Degahabour, Afder and Gode receive Below Normal too Much Below Normal. The rest parts of the countries receive Normal to Above Normal.

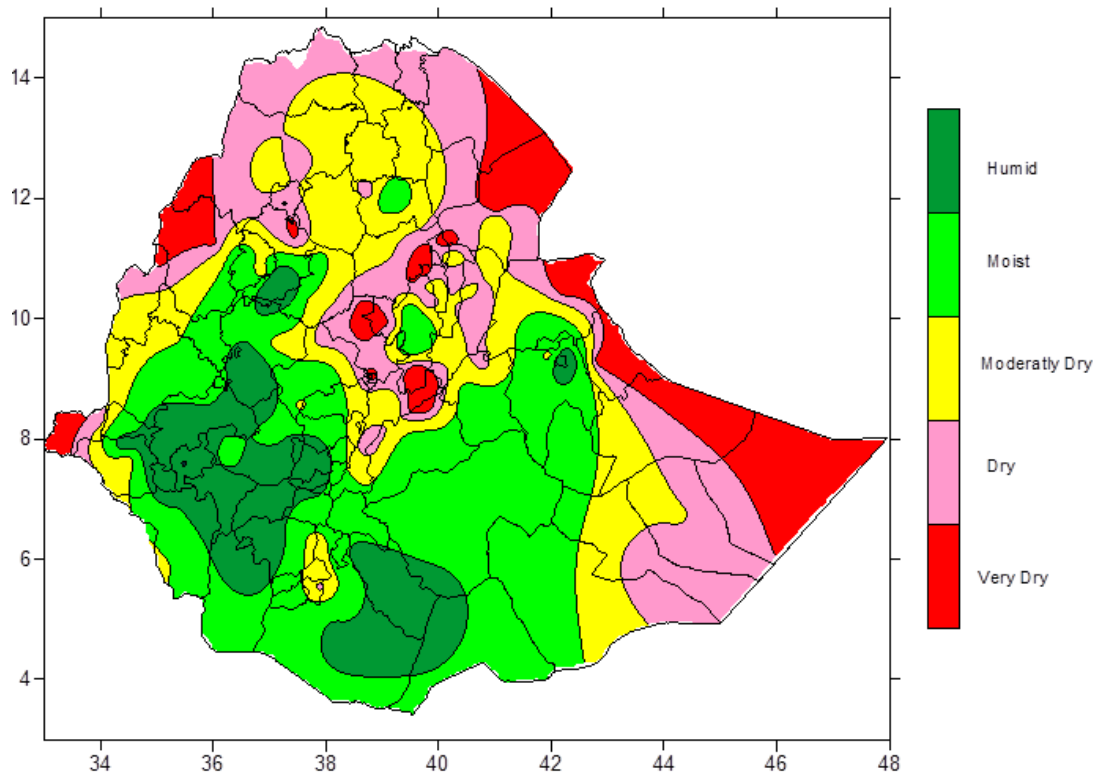


Fig. 5 moisture status for the month of April 2022

### 1.6. Moisture status on the month of April 2022

In accordance with the moisture status map above i most of belg rain benefiting and crop producing areas of the country like South and north Wollo, Oromia especial zone, Illubabor, Gambela zone 2, Godere, Jimma, Keffa, Dawero, Welayita, South Omo, Dirashe, Amaro, south west, west and east Wellega, Selite, Addis Ababa zone, Gurage, Alaba, KT, Hadiya, Sidama, Basketo, Gamo gofa, Konso, Burji and Borena exhibited Humid to Moist moisture condition. The rest parts of the countries exhibited moderately dry to very dry.



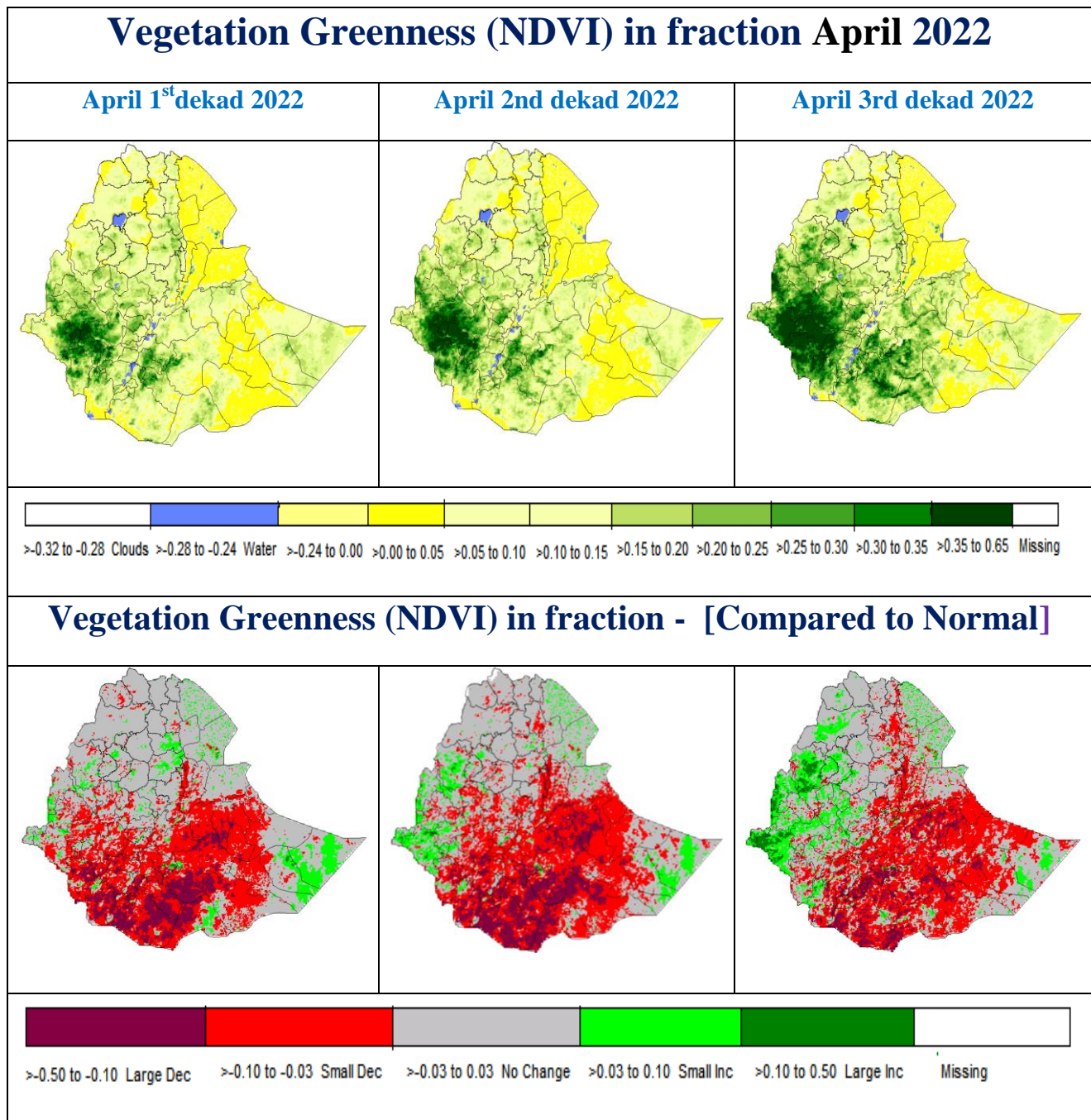


Fig. 6 Vegetation Greenness (NDVI) in fraction and Compared to Normal April 2022

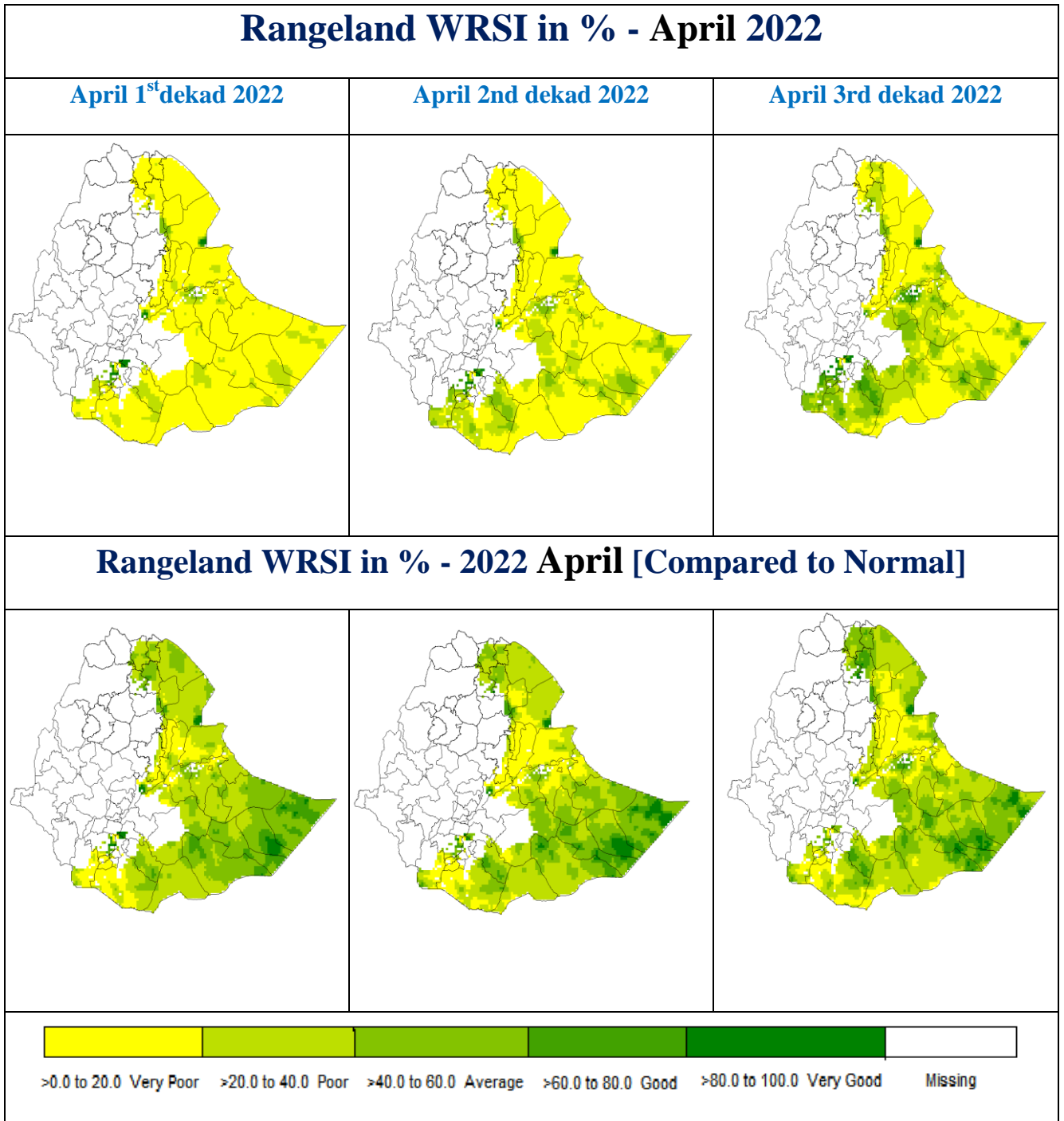


Fig.7. Rangeland WRSI in % and Compared to Normal - April 2022

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

### **2.1. VEGETATION CONDITION AND IMPACT ON AGRICULTURE ON THE MONTH OF APRIL 2022**

Generally during the month of April 2022, rain bearing meteorological phenomena was strengthening in amount and distribution over much of Belg rain benefiting area of the country. This situation might have positive impact on moisture requirement of different Belg and Meher long cycle crops found at various phases of growth, perennial plants, general agricultural activities, improve pasture and drinking water availability in pastoral and agro pastoral low land areas. Besides, the observed heavy rainfall particularly southern half, central, eastern and south-western parts of the country might have positive impact on the ongoing Belg agricultural activities normally moisture deficit areas and water harvesting where that can be used in time of deficit. On the other hand, the observed extreme heavy fall may cause flood and water logging on crops field in low lying areas and soil erosion on sloppy areas as well as it could affect the by washing away the newly sown Meher crops in areas where sowing activities are the main practices at this time of the year.

### **2.2. EXPECTED WEATHER IMPACT ON AGRICULTURE DURING THE COMING MONTH OF MAY 2022**

In the coming month of May 2022, the meteorological forecast information indicates that the seasonal rainfall activity is expected to continue most parts of the country specially southern and western half of Belg rainfall benefiting areas of the country. In line with this, Oromia region of eastern and western Wellega, Jimma, Ilubabor, All zones of shewa, eastern and western Harerge, Arsi, Bale, Borena Guji, Addis Ababa, Dire dewa, Harery, Gambella, All zones of Benshangul, , Amhara region of south and north Wello, north shewa, western and eastern Gojam, Bahir dar zuria, Agew awi, north and south Gonder, all zones of Tigray region, Afar region of zone 3, 4 and 5, SNNPR zones of Hadya, Gurage, Sidama, Keffa, Bench Maji, Wolita, Dawero, Gamogofa, south Omo, Segen people and most zones of Somali region most of the area expected near normal and in some parts above normal rain fall. This situation expect to improve moisture requirement of Belg crops found at different phases of growth, perennial plants, pasture and drinking water availability in pastoral and agro pastoral areas and the anticipated better rainfall distribution towards the western half of the country would favour sowing activities of cereal crops like maize and sorghum and land

preparation for the coming Meher season as well. And also some improvement will expect over south and south eastern low lands which continuous persistent of dry conditions was observed for the previous dekads. However, the expected heavy fall over some areas of the aforementioned areas would have a negative impact on crop fields' particularly over low-lying areas Thus, proper attention should be undertaken to minimize the risk in areas where there is no proper drainage system and low-lying areas making furrow and channel in order to reduce the effect of excess rain. Moreover, in areas where moist and warm condition with erratic rainfall is anticipated there would be a possibility of pest outbreak since the expected weather condition is favourable for the event. Thus, attention should be given for sensitive areas by continuous monitoring farm fields ahead of time to control the possible risk below economic threshold level.

### **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.

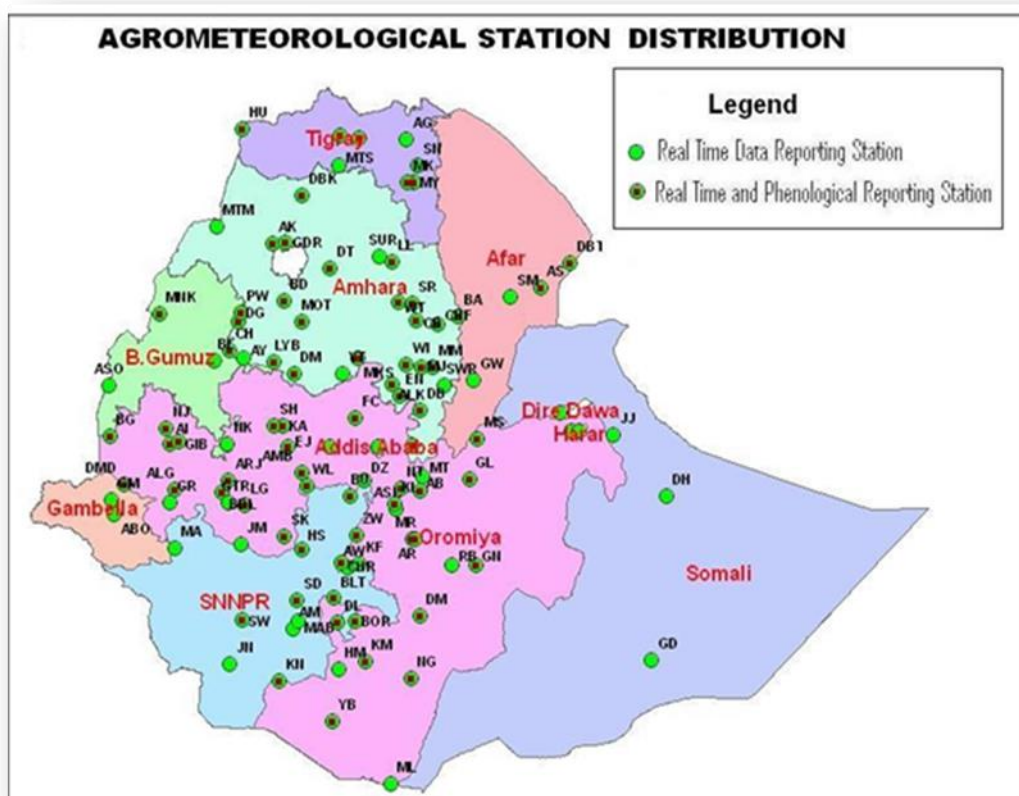
**DEKAD:** - First or second ten days or the remaining days of a month.

**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



Station	Code	Station	Code	Station	Code	Station	Code
A. Robe	AR	D. Zeit	DZ	Humera	HU	Nazereth	NT
A.A. Bole	AA	D/Dawa	DD	Jijiga	JJ	Nedjo	NJ
Adigrat	AG	D/Mena	DOM	Jimma	JM	Negelle	NG
Adwa	AD	D/Odo	DO	Jinka	JN	Nekemte	NK
Aira	AI	D/Tabor	DT	K.Dehar	KD	Pawe	PW
Alemaya	AL	Dangla	DG	K/Mingist	KM	Robe	RB
AlemKetema	ALK	Dilla	DL	Kachise	KA	Sawla	SW
Alge	ALG	Dm.Dolo	DMD	Koffele	KF	Sekoru	SK
Ambo	AMB	Dubti	DBT	Konso	KN	Senkata	SN
Arba Minch	AM	Ejaji	EJ	Kulumsa	KL	Shambu	SH
Asaita	AS	Enwary	EN	Lalibela	LL	Shire	SHR
Asela	ASL	Fiche	FC	M.Meda	MM	Shola	SG
Assosa	ASO	Filtu	FL	M/Abaya	MAB	Gebeya	SR
Awassa	AW	Gambela	GM	Maichew	MY	Sirinka	SD
Aykel	AK	Gelemso	GL	Majete	MJ	Sodo	SD
B. Dar	BD	Ginir	GN	Masha	MA	WegelTena	WT
Bati	BA	Gode	GD	Masha	MA	Woliso	WL
Bedelle	BDL	Gonder	GDR	Mekele	MK	Woreilu	WI
BUI	BU	Gore	GR	Merraro	MR	Yabello	YB
Combolcha	CB	H/Mariam	HM	Metehara	MT	Ziway	ZW
D. Berehan	DB	Harer	HR	Metema	MTM		
D. Habour	DH	Holleta	HL	Mieso	MS		
D. Markos	DM	Hossaina	HS	Moyale	ML		
				M/Selam	MSL		