

Gu 2015 Rainfall Performance

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Summary

The Gu 2015 rainy season started off early in many parts of the country during the third dekad of March and continued to spread spatially in the first and second dekads of April. The season was generally good in most parts of the country, with many places recording normal to above normal rains. However, some places recorded significantly below normal rains. These include north western areas in Somaliland which had a prolonged dry spell in April, entire coastal areas, a few pockets in Sanaag region and parts of Belet Hawa and Elwak districts in the southern areas bordering Kenya, Figure - 1. The good rains led to improved water availability and favorable soil moisture conditions for both crop and pasture growth. However, there were negative impacts such as floods, displacement of people, destruction of properties and infrastructure and loss of livestock. The rains ended early in the south and central parts of the country, which is a cause for concern in the agriculture and livestock sectors.

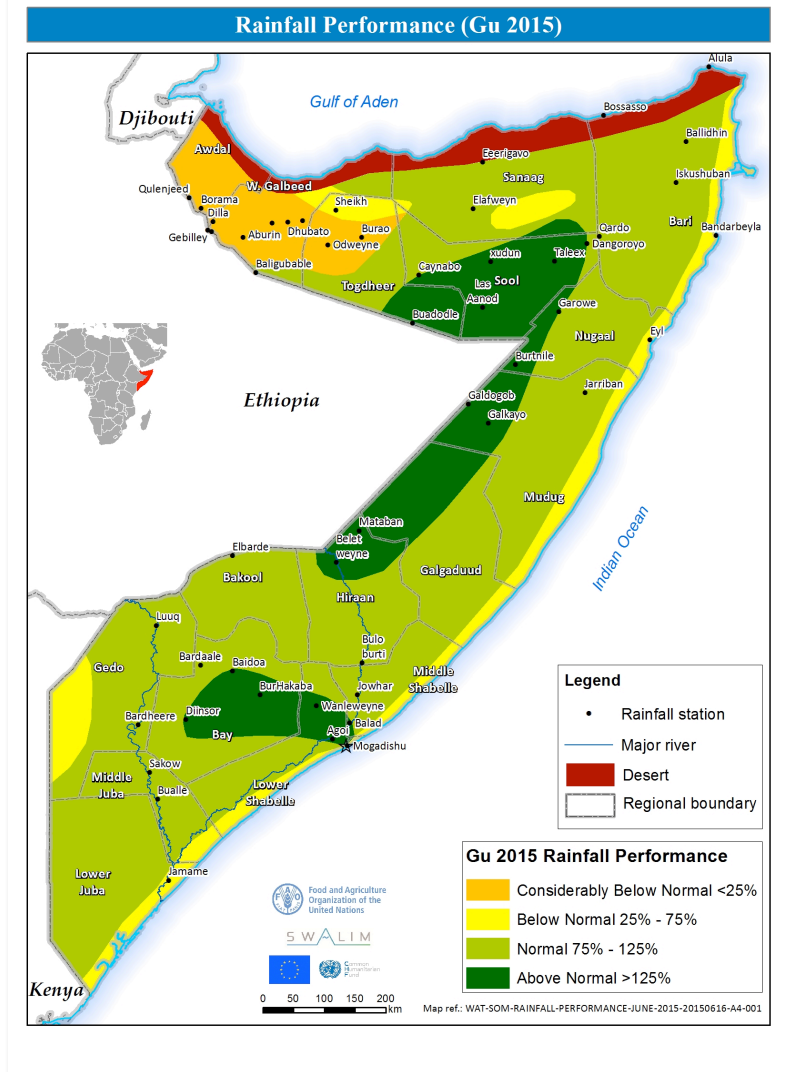


Fig 1: Spatial distribution of Gu 2015 rainfall (Source: SWALIM)

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Overall Gu Rainfall Performance

In the northern areas, the Gu rains normally start in the second dekad of March, while in southern areas the rains start in April. This season, the rains had an early start that kicked off in the third dekad of March 2015. These areas include most parts of the northern regions and Hiraan, Middle and Lower Shabelle, Bay, Bakool and most parts of Galgaduud and Mudug regions. Elsewhere, the rains started during the first dekad of April.

There was also an early cessation of the rains in the south and central parts of the country during the first and second week of May. However, after the long dry spell in April, the northern parts continued to receive rain in the month of May and June but with less intensity. This is normal at this time of the year for these areas as well as the southern coastal areas - to receive rains that are locally known as Hagga.

South and Central

Several places in the southern parts of the country received good rains. Notably, the

sorghum belt of Bay and Bakool, Lower Shabelle and Lower Juba regions which are known as the bread basket of the country received normal to above normal rains. Some areas in these regions however recorded below normal rains including parts of Elwak and Belet Hawa districts in Gedo region.

The rains came to an early end in the first and second week of May, which is a cause for concern especially in the agriculture sector. Figure 2 shows the Gu 2015 cumulative rainfall amounts compared to the Long Term Mean (LTM) for the same season for some selected areas in south and central regions. Bur Hakaba, Dinsoor and Baidoa, all in Bay region, recorded the highest amounts of rainfall of 415.0, 414.0, and 397.0 respectively. The rains were well distributed especially in the month of April with 10 to 14 days of rainfall. Annex 1 shows the total amounts of rainfall during the Gu 2015 season for individual stations compared to the long term average for the Gu.

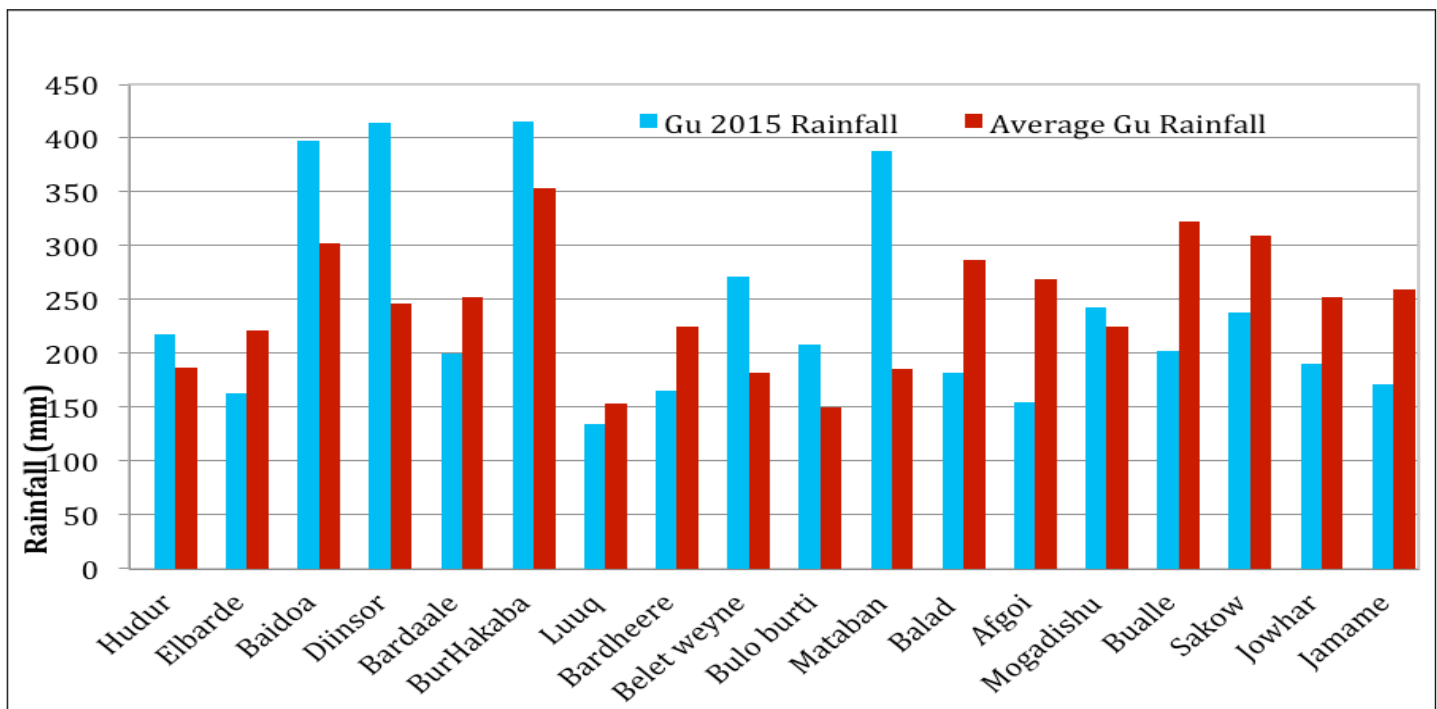


Fig 2: Rainfall Performance in South and Central Somalia (Source: SWALIM)

Overall Gu Rainfall Performance

North Western

Rains started well on time but a prolonged dry spell in April was experienced in the western part of the region with some stations recording below normal rains. These include Boroma, Gebilley, Hargeisa and Aburin within the Guban and west Golis livelihood zones. Most of the rain occurred during the month of May. The other areas recorded normal to above

normal rains except some pockets around Sheikh and Elafwyeen that experienced slightly below normal rains. Figure 3 shows the rainfall performance for selected stations within the north-western regions. Caynabo and Qulanjeed stations recorded high amounts of 255.0 mm and 191.0 mm. Most stations recorded depressed rains including Odweyne (2.0mm), Daraweyne (46.0mm) and Malawle (56.0mm) as seen in Annex 1.

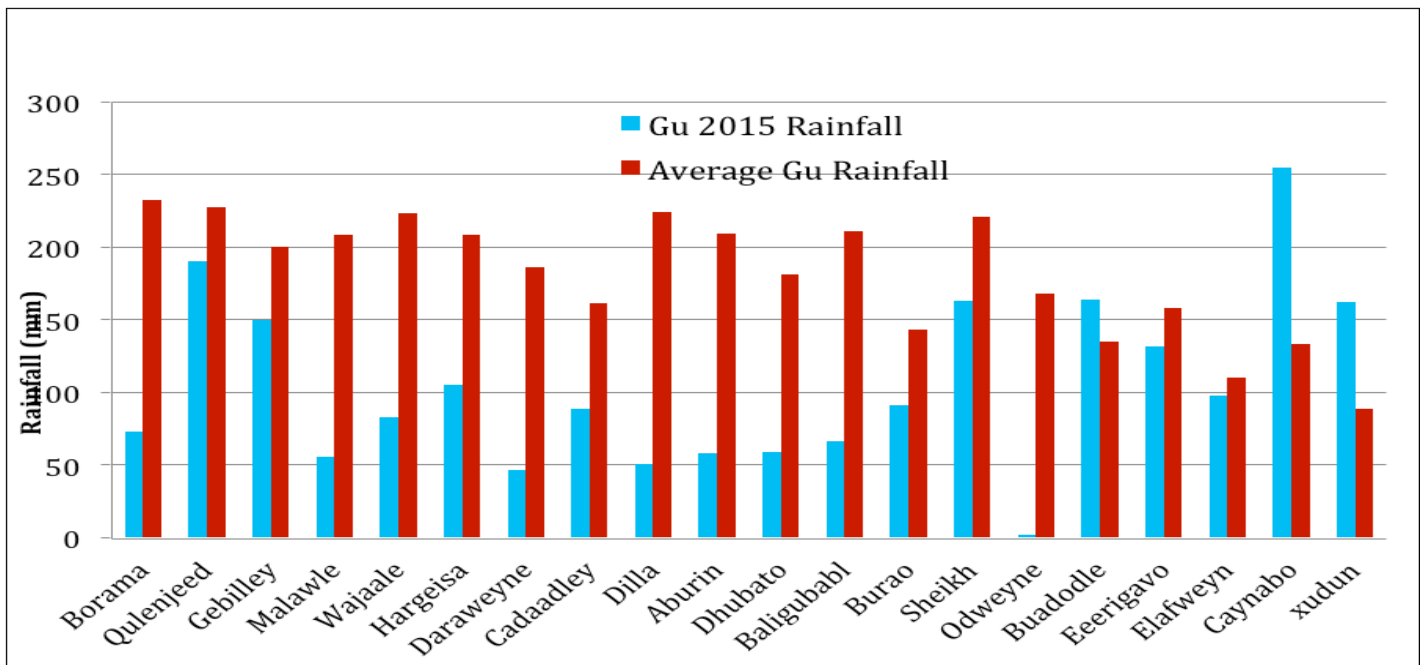


Fig 3: Rainfall Performance in North Western Somalia (Source: SWALIM)

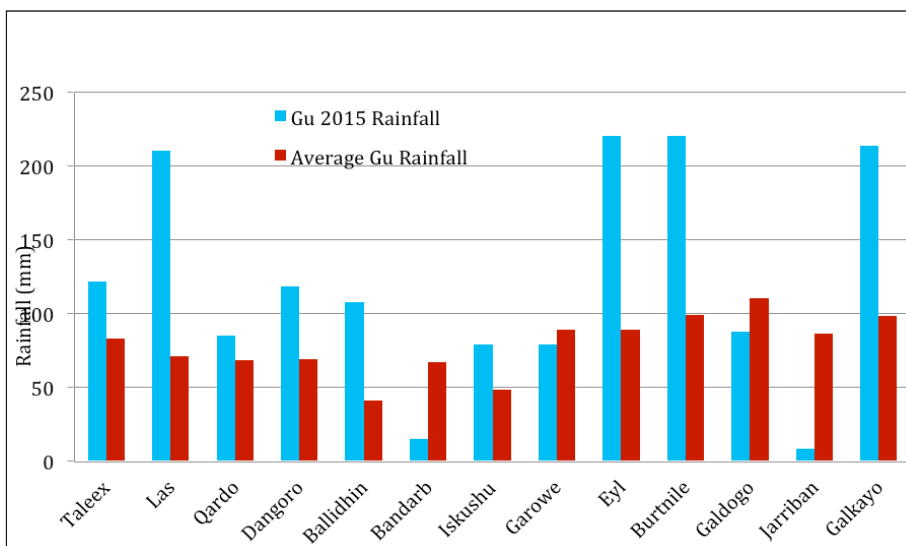


Fig 4: Rainfall Performance in North Eastern Somalia (Source: SWALIM)

North Eastern

Apart from the coastal zones of these regions that had depressed rains, other parts recorded average to above average rains during the Gu season. Las Anod, Eyl, Burtinle and Galckayo recorded the highest cumulative amounts of rain exceeding 200mm. The area, which is mostly pastoral has benefited immensely from the seasonal rains.

Vegetation Conditions

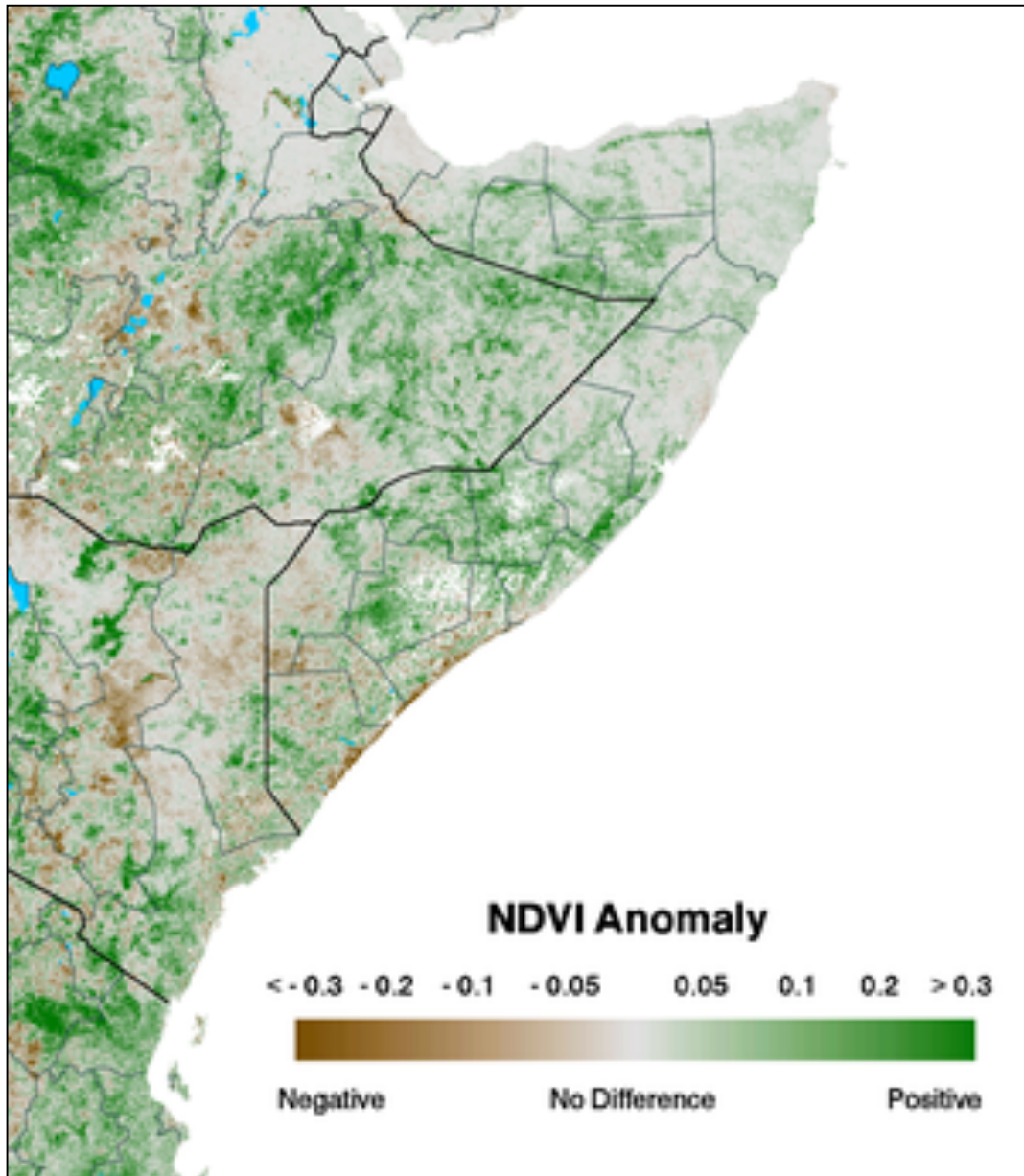


Fig 5: Vegetation conditions at the end of Gu 2015 rainy season (Source: USGS)

Satellite-derived vegetation condition is used to assess the spatial distribution of vegetation during the season. Most areas in Somalia indicate good or positive conditions compared to the long-term average. This was particularly due to the significant rains recorded in April and May, which boosted the growth of pasture and crops. The southern parts

however show mixed vegetation conditions, with pockets of negative anomalies in areas where there were rainfall deficits such as the areas south of Gedo, and the coastal areas of Juba and Shabelle basins, and the north western parts of the country, Figure - 5.

The water resources sector benefited from the good rains. This is seen in the increased river flow along the Juba and Shabelle rivers, which was good for irrigation, livestock and domestic use. The northern parts of the country also benefited immensely from the good rains in May by replenishing of ground water, which is the major source of water in the regions.

The heavy rains seen during the Gu 2015 rainy season within the Juba and Shabelle river basins inside Somalia and in the Ethiopian highlands translated to increased river levels in Somalia in the two rivers. Figures 6, 7 and 8 show the river levels at Belet Weyne (upper Shabelle) and Luuq (upper Juba) during the season respectively.

Levels remained high from mid-April to mid-May along the Shabelle with the middle reaches experiencing overbank flow that led to floods, Figure - 7. The floods in Middle Shabelle began in Mid-April causing extreme human suffering and economic damage. Over 1,500 households were displaced by the floods and more than 9,000 hectares of cropland were inundated. There were also reported river breakages in the region some of which have been closed while others including Duduble, Sabuun, Magadley and Kulmis Yarow remain open to date.

River levels along the Juba were high during the month of April but there were no riverine floods; only a few isolated cases of localised flooding were reported.

Annex 2 shows the list of affected villages and the displaced number of households as well as the acreage of inundated cropland. Annex 3 shows some pictures of flooded areas during the season.

Flash floods were observed in the north-eastern parts of the country due to unusually heavy rains during the last week of March. In May, flash floods occurred in Galckayo displacing about 2,700 people.

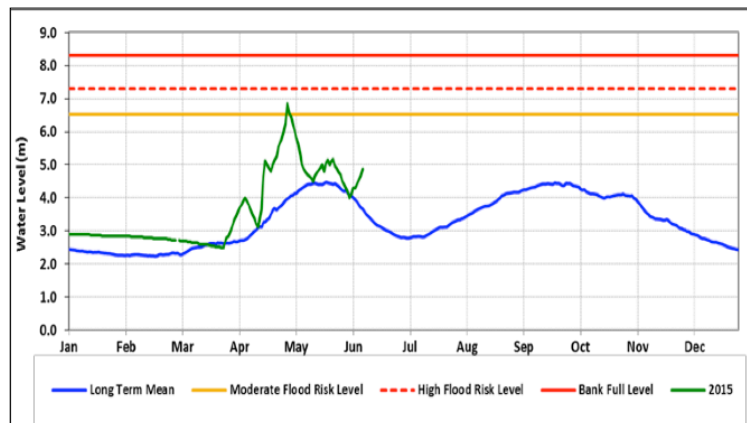


Fig 6: Observed river levels at Belet Weyne (Source: SWALIM)

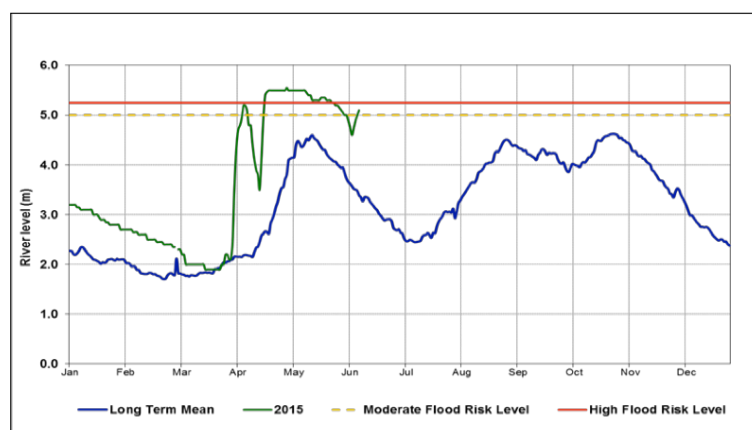


Fig 7: Observed river levels at Jowhar (Source: SWALIM)

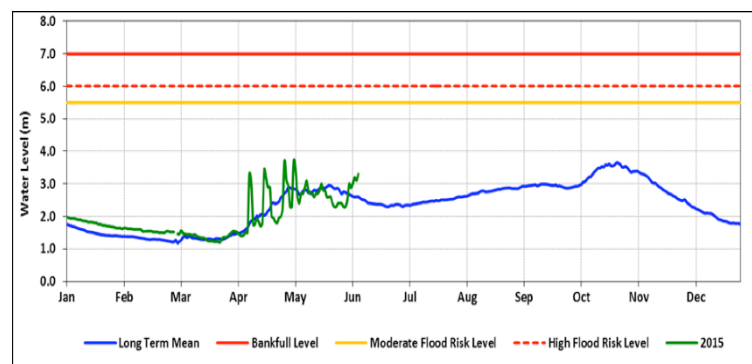


Fig 8: Observed river levels at Luuq (Source: SWALIM)

Further, the rains helped ground-water recharge as well and this came as a relief to the majority of the country that is dependent on these resources for most water uses. On the negative side, however, such heavy rainfall in Somalia is usually associated with a degradation of water quality due to high sedimentation.

Annex 1 – Gu 2015 station rainfall performance

Station Name	Region	GU 2015 Rainfall (mm)	GU LTM Rainfall (mm)	Percent of Normal (%)		
Las Aanod	Sool	210.0	71.0	295.8		
Ballidhin	Bari	107.2	41.0	261.5		
Eyl	Nugaal	220.0	89.0	247.2	Above normal	
Burnile	Nugaal	220.0	99.0	222.2	Normal	
Galkayo	Mudug	213.5	98.0	217.9	Below normal	
Mataban	Hiraan	387.5	186.0	208.3	Considerably below normal	
Caynabo	Sool	255.0	133.0	191.7		
Xudun	Sool	162.5	89.0	182.6		
Dangoroyo	Bari	118.4	69.0	171.6		
Diinsor	Bay	414.3	247.0	167.7		
Iskushuban	Bari	79.0	48.0	164.6		
Belet Weyne	Hiraan	271.0	182.0	148.9		
Taleex	Sool	121.5	83.0	146.4		
Bulo Burti	Hiraan	208.5	150.0	139.0		
Baidoa	Bay	397.5	302.0	131.6		
Qardo	Bari	85.0	68.0	125.0		
Buadodle	Togdheer	163.8	135.0	121.3		
Burhakaba	Bay	415.5	354.0	117.4		
Hudur	Bakool	218.0	187.0	116.6		
Mogadishu	Banadir	242.5	225.0	107.8		
Elafweyn	Sanaag	98.0	110.0	89.1		
Garowe	Nugaal	78.5	89.0	88.2		
Luuq	Gedo	135.0	154.0	87.7		
Quienjeed	Awdal	190.5	227.0	83.9		
Eerigavo	Sanaag	131.5	158.0	83.2		
Galdogob	Mudug	87.5	110.0	79.5		
Bardaale	Bay	200.0	252.0	79.4		
Sakow	Middle Juba	238.5	310.0	76.9		
Jowhar	Middle Shabelle	190.0	252.0	75.4		
Gebilley	Wogooyi Galbeed	150.0	200.0	75.0		
Bardheere	Gedo	166.0	225.0	73.8		
Sheikh	Togdheer	163.0	221.0	73.8		
Elbarde	Bakool	163.1	222.0	73.5		
Jamame	Lower Juba	171.0	260.0	65.8		
Burao	Togdheer	91.0	143.0	63.6		
Balad	Lower Shabelle	182.2	287.0	63.5		
Buulle	Middle juba	202.0	323.0	62.5		
Afgoi	Lower Shabelle	155.0	269.0	57.6		
Cadaadley	Wogooyi Galbeed	89.0	161.0	55.3		
Hargeisa	Wogooyi Galbeed	105.5	208.0	50.7		
Wajaale	Wogooyi Galbeed	83.0	223.0	37.2		
Dhubato	Wogooyi Galbeed	59.0	181.0	32.6		
Borama	Awdal	73.0	232.0	31.5		
Baligubable	Wogooyi Galbeed	66.0	211.0	31.3		
Aburin	Wogooyi Galbeed	58.5	209.0	28.0		
Malawle	Wogooyi Galbeed	55.5	208.0	26.7		
Daraweyne	Wogooyi Galbeed	46.3	186.0	24.9		
Dilla	Wogooyi Galbeed	51.0	224.0	22.8		
Bandarbeyla	Bari	15.0	67.0	22.4		
Jarriban	Mudug	8.0	86.0	9.3		
Odweyne	Togdheer	2.0	168.0	1.2		
Berbera	Wogooyi Galbeed	11.5	0.0	0.0		
Alula	Bari	0.0	4.0	0.0		
Wanleweyne	Bay	171.5	0.0	0.0		

Annex 2 –Flood Affected Population and Cropland

Name of Village	District	Associated River Breakage	Number of House Hold dispalced	Number of innudated Cropland in Hectares
Magaay	Jowhar	Kulmis yarow	15	552
Bayahow	Jowhar	Overflow itself		156
Raqayle	Jowhar	Overflow itself		110
Gaashaanle	Jowhar	Overflow itself		185
Tuugaareey	Jowhar	Overflow itself		101
Baardheere	Jowhar	Kulmis yarow		194
Primo Azenda	Jowhar	Bayaxoow		88
Sabun	Jowhar	Sabuun		357
Magadley	Jowhar	Magadley		221
Kulmis yarrow	Jowhar	Kulmis yarow	20	138
Gaafay	Jowhar	Magadley		160
Geedo Berkan	Jowhar	Magadley	20	250
Timire	Jowhar	Timire		191
Abdi galadi	Jowhar	Timire		198
Bulo Sheik Hilowle	Jowhar	Timire		120
Bulo Waray	Jowhar	Magadley		134
Bur Bisharo	Jowhar	Magadley		177
Moyko	Jowhar	Overflow itself		180
Gunbe	Jowhar	Gunbe		209
Lafo Malay	Jowhar	Sabuun		52
Mansur	Mahaday	Duduble		360
Diinlawe	Mahaday	Duduble		281
Dinlow	Mahaday	Duduble		125
Shan	Mahaday	Duduble		205
Dhin Garas	Mahaday	Duduble		70
Duduble	Mahaday	Duduble	1026	2976
Maqdas	Bal'ad	Kulmis yarow	17	230
Jameeco	Bal'ad	Kulmis yarow	40	246
Damaley	Bal'ad	Kulmis yarow	20	287
Farbaraki	Bal'ad	Kulmis yarow	15	180
Koreebe bari	Bal'ad	Kulmis yarow	23	294
Muki- dheere bari	Bal'ad	Kulmis yarow	30	329
Muki- dheere	Bal'ad	Kulmis yarow	0	250
Galckayo	Galckayo	Flash floods	450	
Wanle Weyne	Wanle Weyne	Flash floods	20	

Annex 3 –Flood Photos and List of Breakages



Timire (Jowhar)



Gaafay (Jowhar)



Magaay (Jowhar)



Sabuun (Jowhar)

River breakages	Current status
Baareey	Closed
Bayahow	Closed
Dangale	Closed
Duduble	Open
Gufey	Closed
Gumbe	Closed
Guuleey (2)	Closed
Kulmis Yarow	Closed
Magadley	Open
Mahadaay	Closed
Mandheere	Closed
Mukayle	Closed
Mukidheere	Closed
Sabuun	Open
Timiire	Closed

This information is compiled by SWALIM, FSNAU and FEWSNET with data drawn from

<http://frrims.faoswalim.org>