



11 December 2006



Table 1: Shabelle and Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Riverine Basin	Region	UNDP 2005 Total Population ¹	FLOOD MODEL PROJECTED ESTIMATES ²				Current best estimate as of: 08/12 3.00pm ⁵ (total #)	Best Planning Estimate: 10 yr Flood return model ⁶ (total #)
			Based on 1975 Settlements (UNDP 2005 pop) ³		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁴			
			5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period		
Shabelle Riverine		1,695,363	174,975	540,938	179,227	492,095	299,000	541,000
	Hiran	329,811	27,947	62,565	68,309	105,607	104,000	62,500
	Middle Shabelle	514,901	65,251	112,889	79,145	146,963	159,000	113,000
	Lower Shabelle	850,651	81,777	365,484	31,773	239,525	36,000 ⁷	365,500
Juba Riverine		953,045	263,475	361,247	No data available	No data available	155,500	361,000
	Gedo	328,378	28,018	32,059	No data available	No data available	36,000	32,000
	Middle Juba	238,877	36,142	104,444	No data available	No data available	102,000	104,500
	Lower Juba	385,790	199,315	224,744	No data available	No data available	17,500 ⁸	225,000
TOTAL		2,648,408	438,450	902,185			454,500	902,000

Working assumptions:

- Displaced population defined as direct displacement through flood inundation
- Displaced population calculated by multiplying the number of hh's by hh size of 6
- If a range is provided to quantify displacement the upper figure is used

Footnotes:

1. Population estimates by region/district, UNDP Somalia, August 1, 2005. FSAU does not round these population estimates as they are the official estimates provided by UNDP.
2. Flood inundation map overlaid with settlements to estimate population displaced
3. Estimated population based on proportion of 1975 settlements adjusted with UNDP 2005 population estimates
4. Actual UNDP 2005 Settlement Population Figures. Maximum population figures used. *NB:* settlement population data for Juba unavailable
5. Table updated daily with cut-off point for new information 3.00p.m. Figures rounded to the nearest 500.
6. Figures rounded to the nearest 500. Where displaced figures of 08/12 exceed planning figures, use the larger figure
7. Comprehensive reports indicated minimum displacement in Lower Shabelle.
8. Some districts in these regions reported floods but no population displaced was given

Table 2: Shabelle Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES									CURRENT BEST ESTIMATE ⁷		BEST PLANNING #
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period (total #)
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
						5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period						
Hiran		38,533	329,811				62,565	68,309	105,607					104,000	62,565
	Belet Weyne	17,205	172,049	No image available	No radar available	18,818	40,324	39,540	51,360					80,000	40,324
			urban= 30,869							Belet Weyne town (SC-UK, 17/11) assuming this is Belet Weyne District		65,636			
										OCHA Flood Situation Report 16/11: 50000 displaced, 15,000 isolated and 10,000 affected		65,000			
										80% E side & 20% W side displaced from Belet Weyne town (FSAU, 14/11)	5,000	35,000			
										Villages surrounding B Weyne town (FSAU, 14/11)	3,000	21,000			
										Hiran Interagency Flood Coordination meeting/CARE 19/11: 48 villages, 4,035 HH (6 villages isolated & 42 villages displaced)	4,035	24,210	Town plus rural village estimate.		
										Hiran Interagency Floods Coordination meeting minutes 23/11 /CARE: East 15611 HH, West 4013HH displaced	19,624	117,744	Note: CARE 23/11 report includes all affected and displaced		
										Agrocare 'Report on the flood situation in M.Shabelle and Hiraan regions' (received 27/11): An estimated 35,000 people have been displaced to East Mountains and west mountains by floods in the villages in and around Beletweyne. The worst affected areas are Beletweyne town and the villages to the east and west of the town, including Hawo Tako, Howl Wadaag, Irida Amin and Horseed (Bundaweyn).		35,000			

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				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
						5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period						
	Bulo Burti	16,656	111,038	No image available	No radar available	7,931	17,449	27,239	40,609					9,000	17,449
										Hiran Interagency Flood Coordination meeting/CARE 19/11: 19 villages, 1158HH	1,158	6,948	Recent updates from Hiran Interagency Meeting, figure rounded to the next 500		
										Hiran Interagency Floods Coordination meeting minutes 23/11 /CARE: 1478HH displaced	1,478	8,868			
										Agrocare 'Report on the flood situation in M.Shabelle and Hiraan regions' (received 27/11): more than twelve villages are flooded and waterlogged - Jameeco Mubaarak, Gooyaale, Helo Banaan, Mubaarak, Shiin, Cadi Jameeco, Sooglow, Galmadoobe, Dhagaxyaale, Kili Gubadle, Jicbow, Imaayaal, and Samatara village are heavily flooded.	no number				
	Jalalaqsi	4,672	46,724	No image available	No radar available	1,198	4,792	1,530	13,638					15,000	4,792
										Displacement between Mahaday and Jalalaqsi (FSAU, 14/11)	1,000	6,000	Rounded number between Hiran Interagency Report and Agrocare report		
										Hiran Interagency Flood Coordination meeting/CARE 19/11: 9 villages, 770HH	770	4,620			
										Hiran Interagency Floods Coordination meeting minutes 23/11 /CARE: 2293HH displaced	2,293	13,758			
										Agrocare 'Report on the flood situation in M.Shabelle and Hiraan regions' (received 27/11): 15,000 displaced from the area surrounding Jalalaqsi town		15,000			

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				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period (total #)
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period												
Middle Shabelle		60,790	405,264			65,251	112,889	79,145	146,963					159,000	112,889
	Jowhar/Mahadey ⁸	40,389	269,257	No image available	No radar available	29,325	67,981	61,205	119,715					126,000	67,981
										OCHA/WFP/WHO 20/11: 82 villages are badly hit with approximately 66,000 displaced		66,000			
										Agrocare 'Report on the flood situation in M.Shabelle and Hiraan regions' (received 27/11): worst affected villages in Jowhar and Mahaday districts are Diinlow, Adalow, Mansuur, Tugaarey, Mooyko, Duduble, Iji, Bulo Fermo, Maagaay, Kongo, Oobaale, Burcodheer and Huriwaa in Jowhar and Mahaday districts. Mansuur, Adalow, Mooyko, Huriwaa and Bulo Fermo villages were completely flooded. In an assessment conducted in and around Jowhar and Mahaday areas, thirteen villages were damaged and 6 found to be surrounded by water.		no number	Based on the recent field evidence which is consistent with upstream 1st regional assessment. Also consistent with UNDP 2006 settlement data		
										OCHA/Middle Shabelle Regional Administration 27/11: In total 113 villages affected due to breakage in Keeshow, Moiko, Tugaarey, Nabadda Canal (Shines canal) and Huiwaa (not accessible due to flooding, damage unknown)		21,002	126,012		

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				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period (total #)	
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)				
						5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period							
											FSAU Field Report Jowhar 29/11: Most vulnerable villages affected in terms of priority and respective displaced families in Jowhar, Mahaday and Chinese canal include: Jowhar (Abdi galadey, Bulo Sheik Hiliowle, Dorale, Bulo Sicow, Bulo Banan, Garash, Danyerey, Bulo Tayeg); Mahadey (Huriwa); Chinese Canal (Majabale, Maqarey, Afgoye Yarey, Dancad)	1,410	8,460			
	Balad ⁶	20,401	136,007	No image available	No radar available	35,926	44,908	17,940	27,248						33,000	44,908
											9 villages (OCHA Flood matrix, 20 Nov)		no number			
											SRCS 22/11: Flooding reported in the following villages; Mukay Dhare, Bulo Sheikh, Bulo Bananey, Bulo Donka, Bulo Goley, Xanlaay, Raqayle, Raxow, Haji Ali, Qalaal, Wargaabo, Marerey, no numbers			Based on the recent field evidence which is consistent with upstream 1st regional assessments i.e. >= 10yr contingency planning figure		
											SRCS 22/11: Location unclear reported flooding in 12 villages including Xawadley, Farbarako, Damley, Jameco Misra, Baqdad, Raqaylow, Kulmis, Maqdis					
											OCHA/Middle Shabelle Regional Administration 27/11: In total 31 villages affected from damage by Shabelle River flooding	5,445	32,670			

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				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period												
Lower Shabelle		135,763	695,008	30,839	15,882	95,776	351,485	31,773	239,525				36,000	365,484	
	Afgooye ⁸	21,171	211,712	1,357	3,000	32,571	69,214	2,423	41,415				9,000	69,214	
				New radar 24/11 show a decrease in inundated population from 43,428 to 1,357						FSAU 22/11: West bank burst in the night of 21-22/11					
										Monthly Food Security Report Afgoi-Mogadishu FSAU 29/11: 16 villages west and eastern side of the river inundated (Mubaarak, Daresalaam, Awdegle, Malable, Briire, Shaan, B/Balow, Afgoi, Sagaalad, Bal Gure, Sabiid-Anoole, Mareerey, Galawar, Sagaalad, Mordille and Belet Aamiin). 1500HH displaced	1,500	9,000	Based on recent field reports from FSAU		
	Marka	57,882	192,939	15,073	3,390	0	114,558	6,542	61,895				0	114,558	
				Based on visual minimum flooding						No reported displacement (FSAU, 21/11)					
										CARE Flooding Rapid Needs Assessment 3-8 Nov; no displacement					
										FSAU 23/11: Reports of flood threats to some villages of Jenale areas such as Sigale, Malable and Buulo Arundi Majabto etc, no numbers reported			Based on WFP confirmation of CARE reports, FSAU reports and visual radar analysis, no displacements		
										Monthly Food Security Report FSAU 28/11: Several villages such as Cadiimoole, Malable, Muraale, etc. are already surrounded by water; however, no displacement has occurred so far					

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5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period												
	Qorioloey	33,551	134,205	754	1,650	15,833	93,491	790	72,390				0	93,491	
				Based on visual minimum flooding						CARE Flooding Rapid Needs Assessment 3-8 Nov; no displacement					
										Aerial Survey Flood Update 25/11 WFP/FSAU: Several villages along the riversides (Gayuroow, Jaziira, Haduuman, Bandar/Dharshenleey and Aramooy) have already indicated river overflow and increased seepages, no numbers reported			Revision based on WFP confirmation of previous CARE reports of no displacement and recent CARE reports of 110 people displaced		
										CARE Flood Rapid Need Assessment (Lower Shabelle) 29/11: In 17 villages, a total of 8,511 people affected, some 110 people are reported displaced in Farhaane and Jasiira villages		110			
	Kuurtunwarey	11,089	55,445	7,921	4,122	6,337	36,435	3,186	33,576				19,000	36,435	
										Muruq-maal 100% of 450 (FSAU, 20/11); Dhayaneey >15% of 300 (FSAU, 20/11); Bulo Warbo 100% of 200 (FSAU 20/11); Bululo Xajii 100% of 170; Mustaqbal 30-40% of 700 FSAU, 20/11; Alfaawe 'some displacement' 10% of 120 (FSAU, 14/11); Towliiq 10-15% of 400 (FSAU, 20/11); Kobrativo 100% of 80 (FSAU, 20/11)		1,297	7,782		
										12 villages (COSV, Emergency situation update, 20/11)		15,000			

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				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period (total #)	
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)				
5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period													
										Interagency Coordination Meeting in Merka 18/11: 11 villages reported flooded, no numbers						
										Aerial Survey Flood Update 25/11 WFP/FSAU: The "affected" populations are estimated at 6500-7000 households, of which 1700-2000 households were displaced i.e. Mustabbal 60% of 700-800HH; Bulo Xaaji 100% of 150-200HH; Kobrativ 100% of 50-60HH; Duraay 15% of 500-600HH; Towliiq 10% of 400-500HH; Garowladay/Hababshe 30% of 600-750HH; Dhaayaneey 10% of 300-350; Muuqmaal 100% of 400-500HH; Bulo Warbo 100% of 200-250HH; Raydableey 100% of 40-60;	2,000	12,000	Revision based on recent FSAU update			
										Monthly Food Security Report FSAU 28/11: Inhabitants from several flood affected villages have moved into Brava area as IDPs; Bulo Haji 270HH, Cooperativo 150HH, Mustaqbal 2000HH, Ray Dabley 170HH. Other IDPs within the district's area include: Tuuraale 50HH, Abaq Dheerow 60HH, Bufoo 50HH, Abaq Dheerow 60HH, Xabaal saqir 60HH, Shidley 150HH, Buulo fitiiq 60HH, Shimbirtoole 100HH	3,120	18,720				

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				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period										
	Sablale	8,611	43,055	No radar available	No image available	3,744	11,232	3,405	4,765					5,000	11,232
										Monthly Food Security Report FSAU 28/11: In Demay zone which are flood prone areas, the river floods have submerged several villages and surrounded others. The worst affected villages include; Caddey Barre 150 HH submerged totally; Baad Faaadumo 100 HH submerged; Balbale 100 HH surrounded by water in all directions; Laamiyaay 200 HH surrounded by water in all sides; Ashraafta 30 HH submerged; Rebow 200HH surrounded by water;	780	4,680	Based on recent FSAU update		
										FSAU Field Report Lower Shabelle 30/11: 22 villages affected, out of which 6 villages (Ashraafta, Laamiyaay, Riigada, Balbale Baad Fadumo, Caddey Barre) displaced	730	4,380			
	Brava	3,459	57,652	3,263	No data available	4,351	7,614	No data available	No data available					3,000	7,614
				New radar 24/11 show an increase in inundated population from 2,263 to 3,263						No fields reports					
										Monthly Food Security Report FSAU 28/11: Several along the swamp areas have been severely flooded causing displacement to several villages such asTuuraale 50 HH, Buffo 50 HH, Abaq Dheerow 60 HH, Xabaal Saqir 60 HH, Shiidley, Buulo Fitiq 60 HH and Shimbiroole 100 HH	280	1,680	Revision based on new radar analysis		

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				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period (total #)
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period												
Combined reports															
										Monthly Food Security Report (Lower Shabelle-Oroiole/Kurtunwareey) FSAU 29/11: Flood hazards have advanced to new areas during November. The heavy rains, combined with river burst at Afgoye-yare village have inundated large farmlands and seriously threatening several settlements, such as Bananeey,Uranuroow,G arowlaayand Afgooye-yare.The affected populations are estimated at 6500-7000HH; 1700-2000HH displaced	2,000	12,000			

- Working assumptions:**
- Displaced population defined as direct displacement through flood inundation
 - Displaced population calculated by multiplying the number of hh's by hh size of 6
 - If a range is provided to quantify displacement the upper figure is used

- Footnotes:**
1. Population estimates by region/district, UNDP Somalia, August 1, 2005. FSAU does not round these population estimates as they are the official estimates provided by UNDP
 2. Radar analysis from "UNOSAT Satellite Identification of Flooded Areas"; http://www.unosat.org/asp/prod_free.asp?id=28 <http://www.unosat.org/asp/prod_free.asp?id=28. Inundated population projected using the UNDP 1975 settlement figures and the Flood Forecasting formula
 3. Flood inundation map overlaid with settlements to estimate population displaced
 4. Estimated population based on proportion of 1975 settlements adjusted with UNDP 2005 population estimates
 5. Updated settlements and population figures using the UNDP 2005 Settlement Survey Population Figures. Maximum population figures used.
 6. From assessment reports, key informant reports, OCHA flood matrix based on latest available evidence- sources include Flood Assessment reports, Flood Coordination meeting reports, secondary sources including information from key informants
 7. Figures rounded to the nearest 500. Update cut off point 3.00p.m. Best estimate is based on triangulation of evidence between field based evidence, radar analysis, UNDP population data and FSAU livelihood population estimates
 8. UNDP population figures indicate totals of two or more districts following lack of official boundaries in some districts

Table 3: Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES									CURRENT BEST ESTIMATE ⁷		BEST PLANNING #
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period
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				5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period								
Gedo						17,682	19,311	No data available	No data available					36,000	32,059
	Dolow ⁸	2,650	26,495	No image available	No data available	8,832	8,832	No data available	No data available					7,200	12,058
										OCHA/Interagency Rapid Assessment 13/11: Estimated affected riverine population 1,200HH	1,200	7,200	No imagery available, based on field evidence which is closer to the 5yr and 10yr contingency planning figure		
	Garbahaarey	Not estimated	38,017	No image available	No data available	6,517	8,146	No data available	No data available					4,800	2,333
										OCHA/Interagency Rapid Assessment 13/11: 800HH displaced in the riverine areas	800	4,800	No imagery available, based on field evidence		
	Baardheere	21,234	106,172	No image available	No data available	2,333	2,333	No data available	No data available					15,000	2,333
										OCHA/Interagency Rapid Assessment 13/11: 2,500 HH displaced in the riverine areas	2,500	15,000	No imagery available, based on field evidence which is larger than the 15yr and 10yr estimates		
	Burdubo	Not estimated	19,006	No boundary	No data available	No boundary	No boundary	No data available	No data available					9,000	No boundary
										OCHA/Interagency Rapid Assessment 13/11: 1,500 HH displaced in the riverine areas	1,500	9,000	No imagery available due to lack of boundary for mapping, based on field evidence		

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		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period										
Middle Juba				62,738		36,142	104,445	No data available	No data available					102,000	104,444
	Jilib	45,366	113,415	39,136	No data available	21,565	71,883	No data available	No data available					70,000	71,883
				New radar 24/11 show an increase in inundated population from 25,558 to 39,136						FSAU 19/11: 14 villages of west Jilib were flooded and people were evacuated; an estimated 10,903HH of the Riverine LZ were displaced by the floods	10,903	65,418			
										FSAU 20/11: Estimated total 11,000hh of riverine Jilib district 'displaced'	11,000	66,000			
										OCHA 15/11 and 17/11: 5,000HH from Riverine community currently displaced in Rabuud Town	5,000	?? 30000			
										OCHA 20/11: Muslim aid registered partially displaced flood affected families in NE Jilib villages - Bulotugar – 20, Farah – 128, Bura Abdurahman – 95, Gabakurey – 194, Kakurey – 130, Bura Hassan – 70, NumAli- 140, Bur Ali – 90, Mushamin, - 140, Kaitoi	1,557	9,342			
										AFREC Flood Update West bank of Middle Juba 20/11: West Bank 50 villages affected; Totally flooded (Kaytoy, Dhaydhaydur, Tafanya, Libanga II, Dambaley, Farah, Jija, Fanoie, Shaladey, Mashani, Kakorey, Tanzania, Bulo-Farhan, HajiTumal, Harawe, Burtule, Kulow, BuloAbdirahman, Libang-1, Sandaria, Buloshiek, Makayuni, Gandoble, Dabayle, BuloMarer, B/Majida, Mobileytabata, Mansur yarey, Marerey, Bardale, Kujenya, BaladulAmin, Shangare, Kalanje). Partially flooded (Osmanmoto, Yontoy-Yarey, Komburera, Sheiknoor, Yaqle, Mansurweyn, Misir, Faragurow, Awramale, Aminey, Buloshidad, Kamdada and Hargeysayarey)	10,000	60,000	West and East Jilib combined from OCHA ~70,000 and whole district from FSAU=66,001		

Table 3: Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES							CURRENT BEST ESTIMATE ⁷		BEST PLANNING #		
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)			
		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period										
										Interagency Flood Response Meeting at UNICEF 20/11: 79 villages (east & west Jilib) flooded no numbers					
										OCHA 22/11: Kandanda village completely flooded; Gomaleh village completely flooded, no numbers reported					
										Assessment Report in Jilib 22/11: Field visit to 39 villages where 30 villages were totally flooded, 4	6,155	36,930			
										OCHA Juba Flood Update 23/11: River levels started decreasing though depressions still full and areas still flooded. The entire people of Jalalijai village are displaced no numbers					
										OCHA Field Report 29/11: Floods started to recede. 23 villages are inaccessible for more than two weeks. No numbers reported					
										Interagency Assessment OCHA/UNICEF 26-29/11: 9677HH affected by the floods. No numbers displaced numbers reported					
										Somali Aid Foundation Report 6/12: Villages displaced in West Jilib are an estimated 5211HH.	5,211	31,266			
										Email from Mollu McCloskey dated 07/12, Subject "Flood Update": 300 families displaced to elevated points at the vicinity of 3 villages (Badwi, Bilaq Marow and Busey	300	1,800			

Table 3: Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES									CURRENT BEST ESTIMATE ⁷		BEST PLANNING #	
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period	
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)				
		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period											
	Buale	29,745	59,489	16,657	No data available	11,105	19,830	No data available	No data available						17,000	19,830
				New radar 24/11. Imagery previously unavailable						OCHA 15/11: Buale Town completely flooded with an estimated 400HH displaced	400	2,400	Based on latest reports from Somali Aid Foundation and new radar analysis			
										FSAU20/11: From key informants, estimated total population displacement from the district is 8000hh	8,000	48,000				
										OCHA 15/11: Riverine areas 2,000HH displaced	2,000	12,000				
										Interagency Flood Response Meeting at UNICEF 20/11: 80 villages flooded		15,000				
										"World Vision Steps up support for Flood victims" received 28/11: 90,000 people were displaced following the floods which took place nearly four weeks ago		90,000				
										OCHA Field Report 29/11: Floods started to recede no numbers reported						
										Somali Aid Foundation Report 6/12: Floods in Buale District Villages with an estimated 1498HH displaced. Floods in the East Bank of the Juba River in Buale with an estimated displacement of 1296 HH.	2,794	16,764				
	Sakow/Salagle	19,792	65,973	6945	No data available	3,472	12,732	No data available	No data available					15,000	12,732	
				New radar 24/11. Imagery previously unavailable						FSAU 20/11: From key informants, Salagle estimated total population displacement from the 'district' is 2000hh	2,000	12,000	Best estimate from FSAU in terms of displacement, taking number between the two reports			
										FSAU 20/11: from key informants, estimated total population displacement from the 'district' is 3000hh	3,000	18,000				

Table 3: Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES									CURRENT BEST ESTIMATE ⁷		BEST PLANNING #	
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)	10 yr Flood return Period	
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)				
		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period											
Lower Juba				17,288		191,035	211,496	No data available	No data available					17,500	224,744	
	Jamame	45,202	129,149	17,288	No data available	119,997	124,064	No data available	No data available					17,500	124,064	
				New radar 24/11 show an increase in inundated population from 9,152 to 17,288						FSAU 20/11: All basins flooded--Mallayley, Borini, Marashoy, Bulo Mamo, Kamsuma, Yontoi, Makalango, Mugambo and flood water has reached the coastal sand dune area						
										OCHA 15/11: Estimated 700 - 800HH currently displaced in the villages of Kamsuma, Gomeyni, Qumane Rooble, Far Aweys, Degay Moofi, Bugey, Boodboode, Bandar Jaldiid, Malayley, Beled Rahmo, Mogambo, Far Googol	800	4,800				
										OCHA 20/11: 16 villages affected				Based on new radar analysis and recent reports indicating displacement but no numbers reported		
										OCHA 22/11: Balaq basin completely full likelihood of flooding in surrounding villages, no numbers reported						
										OCHA/FAHRO 22/11: 20 villages affected in Kamsuma area	600	3,600				
										OCHA Juba Flood Update 23/11: All villages still flooded						
										OCHA Flood Update 25/11: Masigiro village flooded 24/11, no numbers reported						
										OCHA Field Report 29/11: New waves of floods coming from the western side of the river are destroying the villages. No numbers reported						
										Interagency Assessment OCHA/UNICEF 26-29/11: 4925HH affected by floods. No displaced numbers reported.						

Table 3: Juba Riverine Basin Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES						CURRENT BEST ESTIMATE ⁷		BEST PLANNING #		
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm (total #)
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)		
		5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period									
	Kismayo	16,667	166,667	No image available	No data available	71,038	87,432	No data available	No data available				??	87,432
										Youth for Development Association/UNDP 27/11: Estimated population for IDS in the following flooded locations: Kanjaron, Birole Gobwein, Yontoy, Luglow, Bula Gudud, Bula Xaji and Saamoja		531		
Combined reports														
										OCHA/FAHRO 22/11: 1-12/11 Kismayo, Afmadow and Jilib affected	2,346	14,076		
										OCHA/FAHRO 22/11: 15-20/11 Buale, Jilib and Dhobley affected	1,320	7,920		
										OCHA/FAHRO 22/11: 20-25/11 Dhobley, Marerey, Gadudey and Dif	1,744	10,464		

Working assumptions:

- Displaced population defined as direct displacement through flood inundation
- Displaced population calculated by multiplying the number of hh's by hh size of 6
- If a range is provided to quantify displacement the upper figure is used

Footnotes:

1. Population estimates by region/district, UNDP Somalia, August 1, 2005. FSAU does not round these population estimates as they are the official estimates provided by UNDP
2. Radar analysis from "UNOSAT Satellite Identification of Flooded Areas"; http://www.unosat.org/asp/prod_free.asp?id=28 <http://www.unosat.org/asp/prod_free.asp?id=28. Inundated population projected using the UNDP 1975 settlement figures and the Flood Forecasting formula
3. Flood inundation map overlaid with settlements to estimate population displaced
4. Estimated population based on proportion of 1975 settlements adjusted with UNDP 2005 population estimates
5. Updated settlements and population figures using the UNDP 2005 Settlement Survey Population Figures. Maximum population figures used.
6. From assessment reports, key informant reports, OCHA flood matrix based on latest available evidence- sources include Flood Assessment reports, Flood Coordination meeting reports, secondary sources including information from key informants
7. Figures rounded to the nearest 500. Update cut off point 3.00p.m. Best estimate is based on triangulation of evidence between field based evidence, radar analysis, UNDP population data and FSAU livelihood population estimates
8. UNDP population figures indicate totals of two or more districts following lack of official boundaries in some districts

Table 4: Non Riverine areas Population Displacement Estimates - Deyr seasonal rains 2006

Region	District	FSAU riverine population (by livelihood)	UNDP 2005 total district population ¹	EVIDENCE: FLOOD POPULATION DISPLACEMENT ESTIMATES								CURRENT BEST ESTIMATE ⁷		BEST PLANNING #			
				RADAR ESTIMATES 24/11 ²		FLOOD MODEL PROJECTED ESTIMATES ³				FIELD ASSESSMENT ESTIMATES ⁶			Rational for best estimate	Current estimate as of 08/12 3.00pm ⁵ (total #)	10 yr Flood return Period		
				Based on 1975 Settlements (UNDP 2005 pop)	Based on 2005 UNDP Settlements (UNDP 2005 pop)	Based on 1975 Settlements (UNDP 2005 pop) ⁴		Based on 2005 UNDP Settlements (UNDP 2005 pop) ⁵		Source, date, settlements displaced	Estimated displaced population (total hh)	Estimated displaced population (total #)					
						5yr Flood Return Period	10yr Flood Return Period	5yr Flood Return Period	10yr Flood Return Period								
	Afmadow/Xagar	Not estimated	51,334	552	No data available	8,280	13,247	No data available	No data available					38,000	13,247		
				New radar 24/11. Imagery previously unavailable						OCHA 20/11: No displacement but received significant amount of water from Juba River			Based on new field reports				
										FSAU 20/11: Doblei and Dif are partially evacuated							
										FSAU 20/11: From key informants, estimated total population displacement from the 'district' is 2000hh	2,000	12,000					
										AFREC Flood Update Westbank of Middle Juba 20/11: Hagar Experiencing flooding not numbers reported							
										AFREC Flood Report in Afmadow and Haggar districts 23/11: 18 villages affected (Dasheg, Jana-Abdala, Tari, Tofora, Qaba, Qasanguur, Weimarow, Warabees, Nasiriya, Anani, Warkaded, Hudi, Qalawiley, Shabeley, Magar, Yeye, jamar, Figbol)		1,694					
										OCHA Juba Flood Update 23/11: Total displacement from Tabta village		700					
										Somali Aid Foundation 6/12: Hagar estimated 6281HH displaced by floods.	6,281	37,686					
	Wanle Weyne	Not estimated	155,643	2,471	3,720	32,940	18,941	15,427	25,484					0	32,940		
				New radar 24/11. Imagery previously unavailable						Interagency Coordination Meeting in Merka 18/11: Reports of breaches near Mahaday canal with water heading towards villages within the district. Reports suggest same routes of water of 1981 and 1997/98, no numbers			No imagery and no field estimates available				

Working assumptions:

- Displaced population defined as direct displacement through flood inundation
- Displaced population calculated by multiplying the number of hh's by hh size of 6
- If a range is provided to quantify displacement the upper figure is used

Footnotes:

1. Population estimates by region/district, UNDP Somalia, August 1, 2005. FSAU does not round these population estimates as they are the official estimates provided by UNDP
2. Radar analysis from "UNOSAT Satellite Identification of Flooded Areas"; http://www.unosat.org/asp/prod_free.asp?id=28 <http://www.unosat.org/asp/prod_free.asp?id=28
3. Flood inundation map overlaid with settlements to estimate population displaced
4. Estimated population based on proportion of 1975 settlements adjusted with UNDP 2005 population estimates
5. Updated settlements and population figures using the UNDP 2005 Settlement Survey Population Figures. Maximum population figures used.
6. From assessment reports, key informant reports; OCHA flood matrix based on latest available evidence- sources include Flood Assessment reports, Flood Coordination meeting reports, secondary sources including information from key informants
7. Figures rounded to the nearest 500. Update cut off point 3.00p.m. Best estimate is based on triangulation of evidence between field based evidence, radar analysis, UNDP population data and FSAU livelihood population estimates