



CLIMATE RESEARCH FOR DEVELOPMENT (CR4D) IN AFRICA Regional Workshop on Seasonal to Sub seasonal (S2S)

14 May 2018 Djiboutia, Djiboutia

Seasonal Forecasts at Regional/National

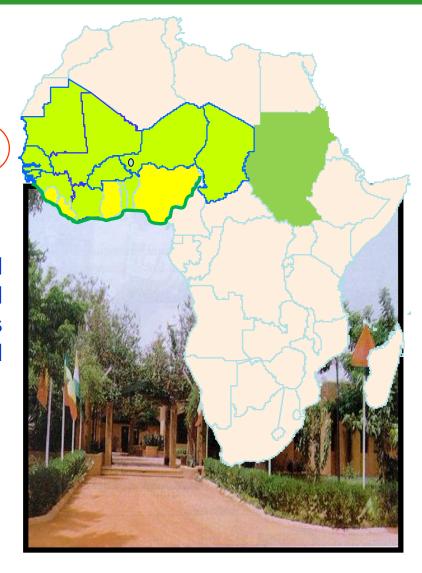
TINNI HALIDOU Seydou **CILSS/AGRHYMET Regional Centre** h.tinni@agrhymet.ne





Centre Régional AGRHYMET

- AGRHYMET created in 1974, after the drought 1970's,
- 14 countries members: But all the products are for the 17 westafrican and ECOWAS countries
- Missions
- Collect data, produce and disseminate information on food security, water resources management, drought and desertification, climate change
- Strength the capacities of the countries members
- Strength the interstate cooperation by shearing good practice between countries







Seasonal forecast

1. Evolution

- **1**998-2010:
 - RR JAS
 - River basin flows
- ☐ 2011: New approach
 - RR JJA et JAS
 - Agrometeorological characteristics of the RR season
 - Onset date
 - Ending date
 - · Length of dry spells
 - River basin flow
- ☐ Onset and ending dates of the rivers flows !!!!





Seasonal forecast

2. Methodology

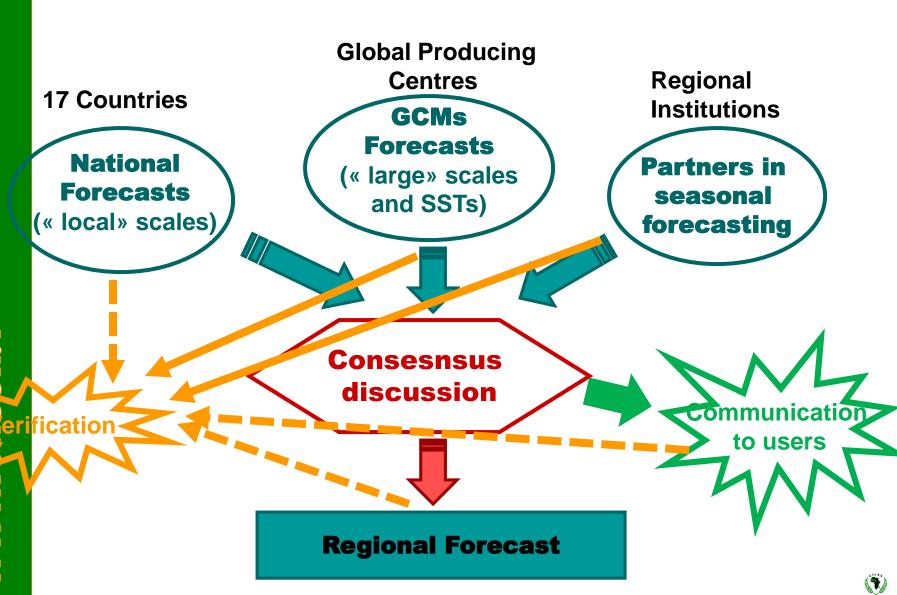
- Include staff from NMHS, regional international
- experts et Three (3) working groups (Agro meteorology, Climatology et hydrology)
- Production of forecasts:
 - RR,
 - Onset and secession dates,
 - Dry spells
 - Rivers discharge
- Users forum
 - farmers
 - Water resources managers
 - NGOs, etc.
- Two (2) workshops since 2011
 - Area with monomodal regime of RR (sahelo-sudanian region)
 - Area with bimodal RR regime (Gulf de Guinea)







Seasonal forecast





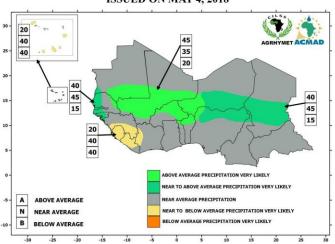
Ongoing processes with partners

- AGRHYMET is the process to be endorse by ECOWAS as RCC
- AGRHYMET will start the demonstration phase to be a WMO-RCC
- AGRHYMET with ECOWAS in the process to finalized a joint GFCS project
- AGRHYMET and ACMAD agreement on AGRHYMET to conduct the seasonal forecast processes in W.A. with the support of others partners (including ACMAD)



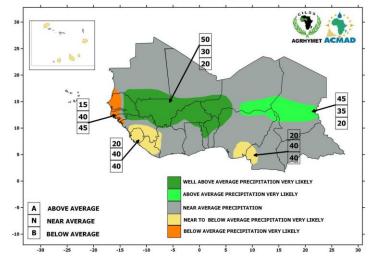


SEASONAL PRECIPITATION FORECAST FOR SUDANO-SAHELIAN REGION OF AFRICA VALID FOR JULY-AUGUST-SEPTEMBER 2018 **ISSUED ON MAY 4, 2018**

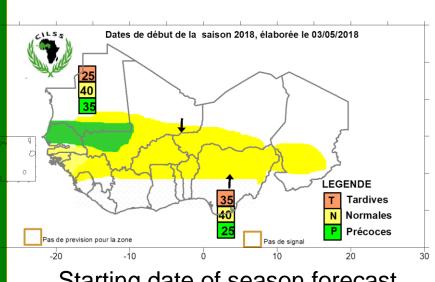


2018 JJA rainfall forecast

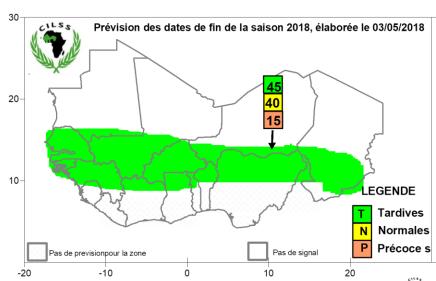
SEASONAL PRECIPITATION FORECAST FOR SUDANO-SAHELIAN REGION OF AFRICA **VALID FOR JUNE-JULY-AUGUST 2018 ISSUED ON MAY 4, 2018**



2018 JAS rainfall forecast



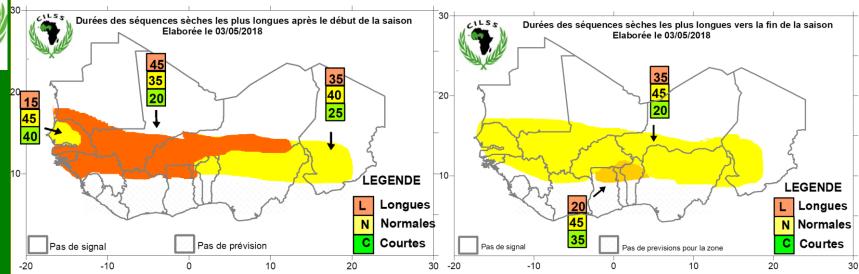
Starting date of season forecast



Ending date of season forecast

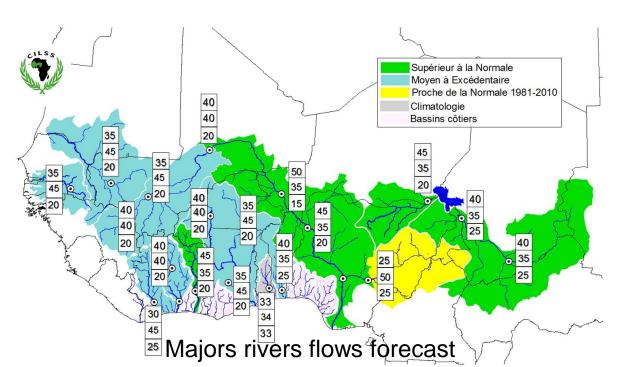






Length of dry spells at the beginning of the season

Length of dry spells at the end of the season





Dissemination and communication

- Presse release
- Special Bulletin
- Mailing list
- AGRHYMET website: WWW.agrhymet.ne

- New approach
 - Communication with users trough some pilots initiatives: CCAFS, ISACIP, ACCIS, ONGs
 - Local radio, farmers, local decisions makers, local technical services, etc.









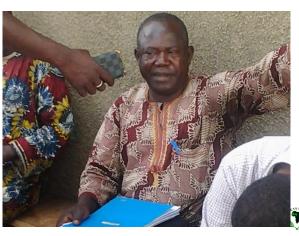














Verification at national Levels

- 4	A	В	C	D	Ε	F	G	н	1	J		K	L	M	N	0	P	Q	R
1	STN	SAVE	KANDI	PARAKOL	MALANVI	BANIKOAR	BEMBER	DJOUGOU	KOUAND	ENATITIN	G NK	KII .	TANGUIETA	TCHAOUF	BETEROU	KALALE	Okpara	OUESSE	
2	LAT	8.03	11.13	9.35	11.87	11.3	10.2	9.7	10.33	10.32	9.93		10.62	8.87	9.2	10.3	9.47	8.5	
3	LON	2.47	2.93	2.6	3.4	2.43	2.67	1.67	1.68	1.38	3.2		1.27	2.6	2.27	3.38	2.73	2.42	
4	1981	117	114	114	187	108	122		144	6 1	9	121	114		119		114	125	
5	1982	101	97						104	4 1	37	126	174		129	105	107	97	
6	1983	101							124	4 t	25	130	138		127	134	141		
7	1984	99							10		96	117	106		99				
8	1985	131					152		104		39	140		117	132				
36	2013								110)7	92				128			
37	2015	77	162	159	184	164	140		125	5 1	77	135			131	129	136	125	
38																			
39																			
40	Tercile Inferieur	97,71										128,4		100					
41	Tercile superieur	113,28	135,14	120,74	169	138,12	125,82	110	127,28	8 116,	12	144	135,82	108,56	114,5	134,36	122,82	115,32	
42																			
43	OBSERVATION	P	T	T	T	T	T		N	T	N				T	N	T	T	
44																			
45	PREVISION	P	T	T	T	T	T		T	T	T				T	T	T	T	
46																			
47	VERIFICATION	٧	٧	٧	٧	٧	٧		F	٧	F				٧	F	٧	٧	
48																			
49																			
50		NOMBRE	DE VRAI	10															
51																			
52		NOMBRE	DEFAUX	3															
53																			
54																			
55								AU TOTAL											
56																			
57																			
							FURNI				000	more	ITACEUDAL	770					
58						NOMBRE D	EVKAI	10			PU	UHILEP	VTAGE VRAI	77%					
59																			
60						NOMBRE D	E FAUX	3			POU	JRCEN'	TAGE FAUX	23%					
61																			
62						NOMBRE D	ESTATIONS	13											
64						INDIVIDRE D	ESTATIONS	15											

				EVALUATI	ONDATED				
				Tercile	Tercile	OBSERV	PREVIS		
STN	LAT	LON	2015	Inferieur	superie	ATION	ION	NOTE	
SAVE	8.03	2.47	77	98	113	Р	Р	٧	
KANDI	11.13	2.93	162	125	135	Т	Т	٧	
PARAKO	9.35	2.6	159	107	121	Т	Т	٧	
MALANY	11.87	3.4	184	143	169	Т	Т	٧	
BANIKO	11.3	2.43	164	115	138	Т	Т	٧	Г
BEMBE	10.2	2.67	140	119	126	Т	Т	٧	
DJOUGO	9.7	1.67		102	110				
KOUAND	10.33	1.68	125	109	127	N	T	F	
NATITIN	10.32	1.38	177	108	116	Т	T	٧	
NIKKI	9.93	3.2	135	128	144	N	Т	F	Г
TANGUI	10.62	1.27		118	136				
TCHAOU	8.87	2.6		100	109				Г
BETERO	9.2	2.27	131	101	115	Т	Т	٧	
KALALE	10.3	3.38	129	115	134	N	T	F	
Okpara	9.47	2.73	136	107	123	Т	Т	٧	
OUESSE	8.5	2.42	125	103	115	Т	T	٧	



Challenges

Use of seasonal forecast in impacts models

- SARRA-H
- Hype
- Etc.,



Thank you