

Role of geo-information in emergency management in West & Central Africa

Abdoulaye DIEYE, GIS Officer/Information Analyst UNOCHA/ROWCA Beijing, 23 November 2011 dieye3@un.org www.unocha.org http://reliefweb.int/

PLAN

 Geo-Information supporting regional cholera outbreak

 Geo-Information supporting post-electoral crisis in Côte d'Ivoire

Geo-Information supporting floods management

Preparedness for Emergencies in Outlook

Introduction

West and Central Africa is a region with recurrence of environmental problems (floods, drought, soil degradation...etc.), socio-political problems (elections!!!), socio-economical problems (Food Price Rise Impact), Health problems (Diseases), etc.

However, 2011 is marked by 2 main events which have a regional impacts: The Cholera Outbreak and the Côte d'Ivoire crisis

Less floods than the 5 past years but drought in outlook for some areas in the Sahel region

Geo-Information supporting regional cholera outbreak: background

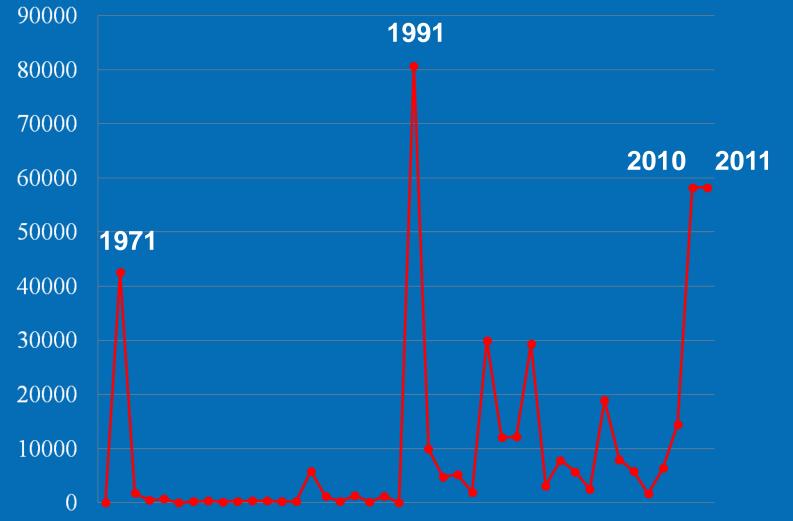
- A major cholera epidemic has been spreading across West and Central Africa since January 2011,
- More than 90,000 cases and over 2,500 deaths reported over the last nine months and an average case fatality rate of 2.9 per cent.

Geo-Information supporting regional cholera outbreak: Hubs

• Three major epidemic hubs: the Lake Chad Basin (Chad, Cameroon, Nigeria and Niger – since May 2010), the West Congo Basin (DRC, Congo-Brazzaville and the Central African Republic – since May 2011) and to a lesser extent Lake Tanganyika (eastern DRC and Burundi).

 The majority of the cases are in the Lake Chad Basin, which has seen more than 59,000 cases including 1,917 deaths.

Geo-Information supporting regional cholera outbreak: evolution in lake Chad Basin



Sources: UNICEF 2010 & WHO 2011

Geo-Information supporting regional cholera outbreak: regional map

OCHA West and Central Africa: Cholera Outbreak (As of 23 October 2011) A major cholera epidemic has been The majority of the cases spreading across West and Central Africa are in the Lake Chad LIBYA since January 2011, with more than Basin, which has seen more than 59,000 cases 90,000 cases including more than 2,500 ALGERIA including 1,917 deaths. deaths over the last nine months. MALI Response 100.000 1.193² 90,903 NIGER 78,533 MAURITANIA CERF: 7.3 (Chad) 80,000 2.176 CERF: 4 (DRC) 49² 60,000 CHAD CERF: 0,392 (Niger) 50¹ 40,000 CHF Emergency: 0,234 (CAR) 16.648 SUDAN 20,000 IFCR: 0,141 (Mali) 2.806 > 2,500 **BURKINA FASO** 22,157² 444² 2010 2011 Evolution of cholera outbreak in West and BENIN in million USS NIGERIA Central Africa between 2010 and 2011² Gaps COTE UNICEF required on 10 Number of cases GHANA Number of deaths CAR October 2011 US\$ 9 million D'IVOIRE 704² CAMEROON 10,226 of which US\$ 4.3 million SUDAN 1.138 16¹ 172 1 urgently. The budgets of 18.933² 350 101² 16² WHO and other field Background partners also fall short. **2**² 719² The cholera outbreak in West and EQUATORIA The boundaries and names shown Central Africa intensified this year. and the designations used on all maps GUINEA More than 90,000 cases including more 000 Number of cases do not imply official endorsement or CONGO acceptance by the United Nations. than 2,500 deaths have been reported Creation date: 13 Oct 2011 642 since January 2011. The cumulative 000 GABON Updated: 02 Nov 2011 Number of deaths DEMOCRATIC REPUBLIC Glide: EP-2011-000093-WCAFR effects of two consecutive years of Data sources: Europa Technologies, OF CONGO major epidemics in this region (2010 WFP, DevInfo, DCW, AGD and 2011) have created a significant References 30¹ Reported by UNOCHA/ROWCA (23 16.365 humanitarian issue. UNICEF and WHO October, 2011) Reported by WHO (23 October, 2011) have proposed a regional strategy to 467¹ tackle the outbreak. The CERF has Niger: as of early October 2011 allocated a total of USD 11.7 million 300 Km Congo-Brazzaville: on 30 September this year to UNICEF and WHO's emergency response against the cholera epidemic: USD 7.3 million for Three major epidemic hubs: the Lake Chad Basin (Chad, Cameroon, Chad in July and October, USD 4 Feedback ochaavmu@un.org Nigeria and Niger - since May 2010), the West Congo Basin (DRC, dieye3@un.org million for DRC in July, and USD http://ochaonline.un.org/rowca Congo-Brazzaville and the Central African Republic - since May 2011) http://www.reliefweb.int 400,000 for Niger in October.

and to a lesser extent Lake Tanganyika (eastern DRC and Burundi).

Geo-Information supporting post-electoral crisis in Côte d'Ivoire (1)

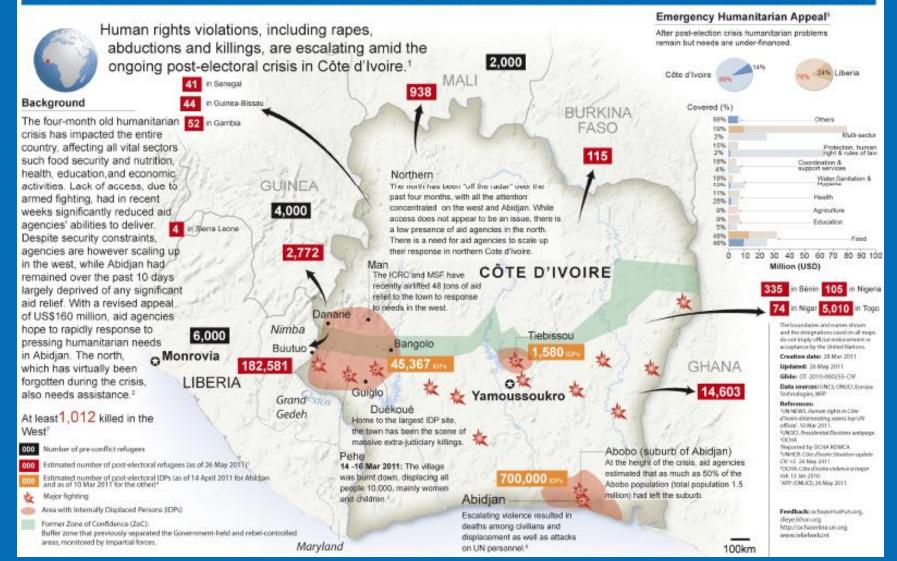
 After the civil war of 2002 which a Government controlled South and an Opposition held North, Côte d'Ivoire remains in Uncertainty.

- The presidential election of 2010 was meant to advance the peace process
- Unfortunately, Côte d'Ivoire has been plunged into turmoil after the results of the 28 November second round
- Escalating violence between the 2 parts around the half south of the country
- More than 700,000 IDPs
- More than 200,000 refugees
- At least 1,000 killed in the West

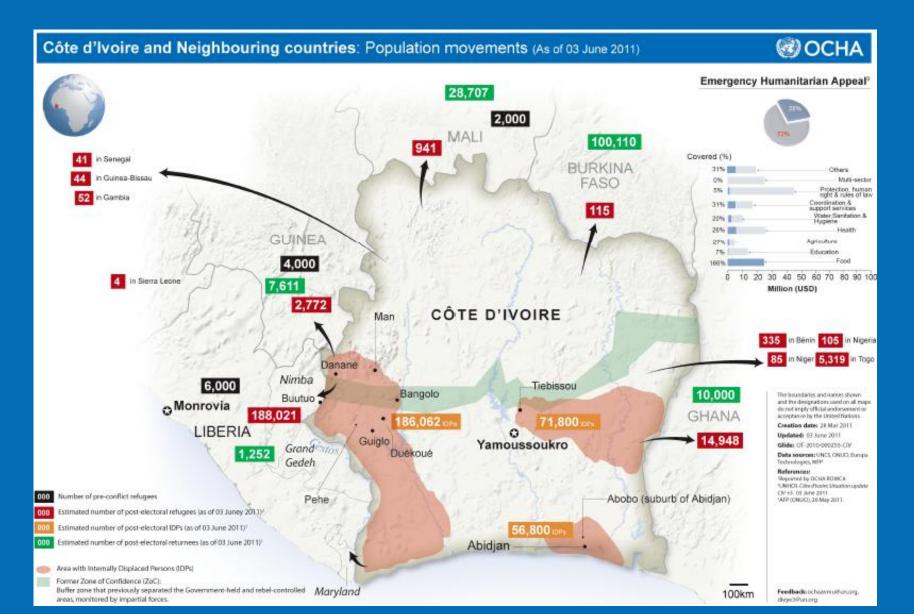
Geo-Information supporting post-electoral crisis in Côte d'Ivoire (2)

OCHA

Côte d'Ivoire: Electoral Violence and Displacement (This map is a completion of events that occurred since the declaration of election results and only refugees in neighbouring countries are updated as of 25 May 2011; IDPs and violences are as of April 2011)



Geo-Information supporting post-electoral crisis in Côte d'Ivoire (3)

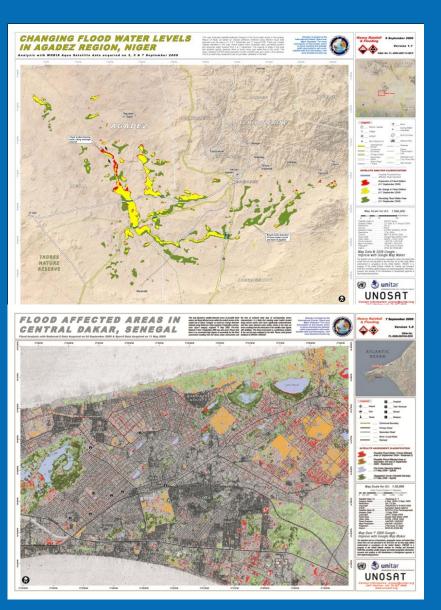


Geo-Information supporting floods management

Affected populations by floods in West Africa (2005-2010)

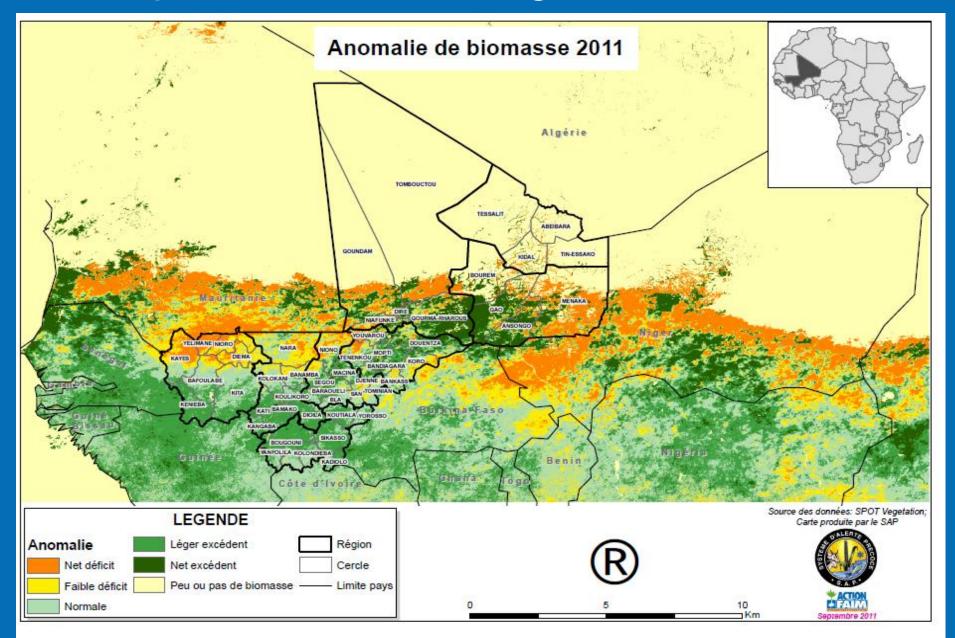


Support in geo-spatial information and rapid mapping (Charter et SAFER)

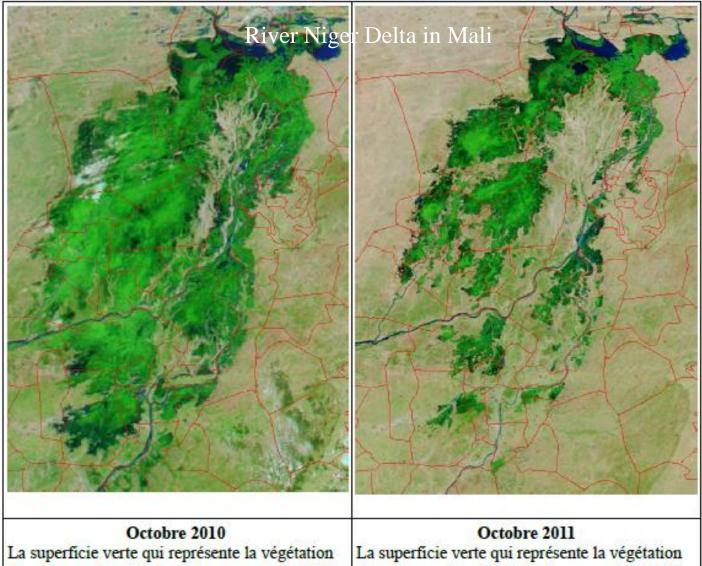




Preparedness for Emergencies in Outlook

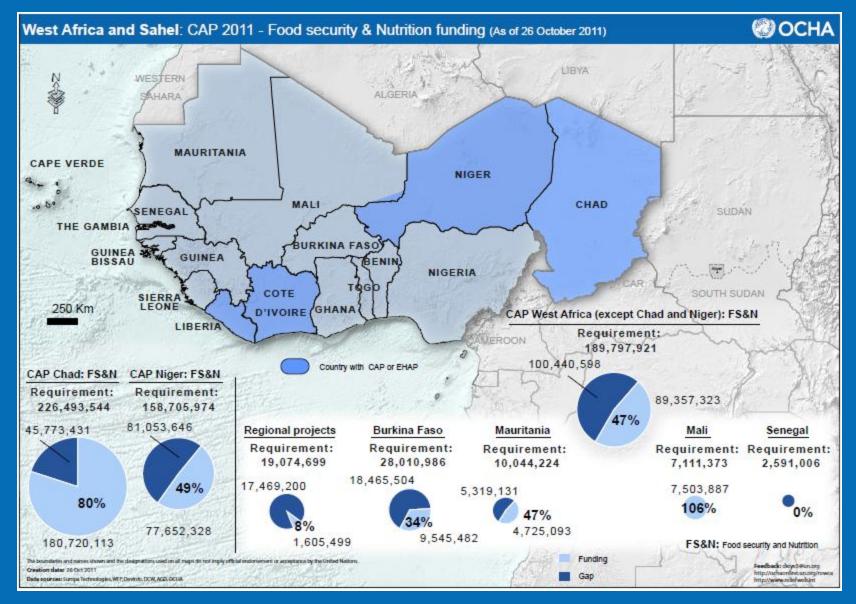


Preparedness for Emergencies in Outlook



La superficie verte qui représente la végétation dans la zone humide du Delta est environ 9741 km². La superficie verte qui représente la végétation dans la zone humide du Delta est environ 4644 km², moins que la moité (48%) de l'année 2010.

Preparedness for Emergencies in Outlook: funding tracking



Preparedness for Emergencies in Outlook

- Data preparedness mission for priority countries (Burkina Faso)
- Common Operational Datasets for priority countries (Burkina Faso: http://cod.humanitarianresponse.info/country-region/burkina-fa
- 3W Dynamic maps: Google Earth and Internet (Burkina Faso)

Burkina Faso 🛚

Discuss

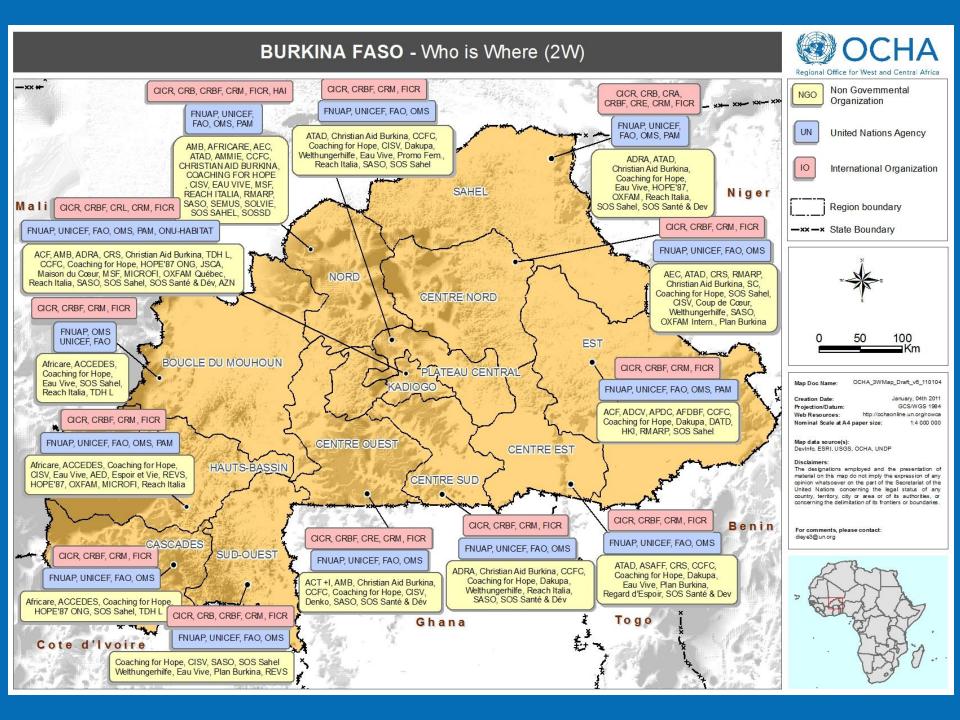
COD/FOD Focal Point Abdoulaye Dieye GIS Specialist UNOCHA/ROWCA -... Read more...

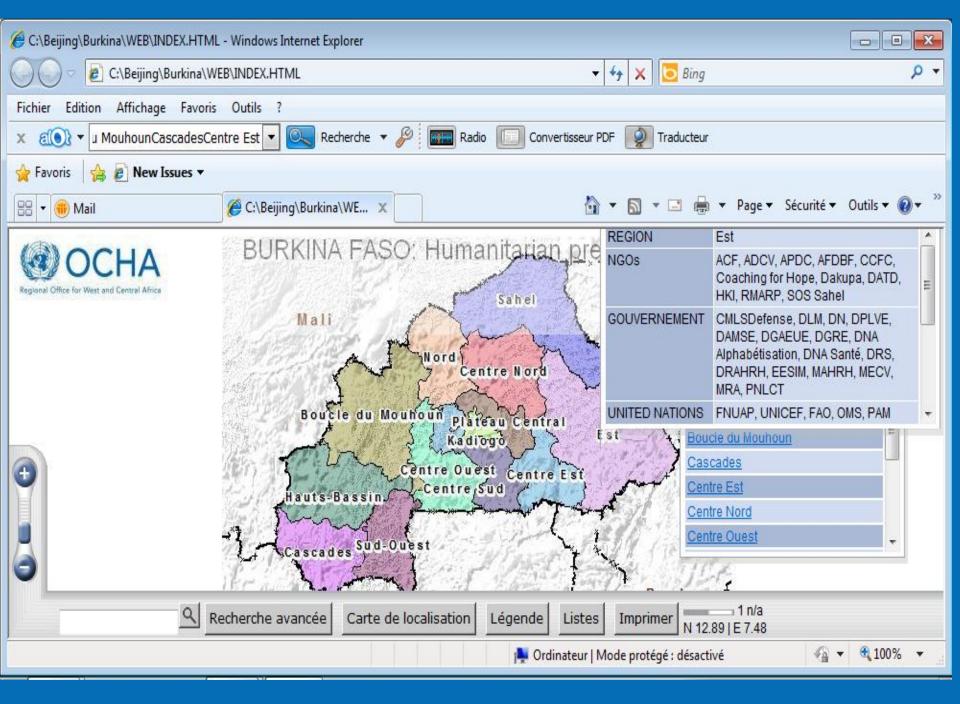
Common Operational Datasets 🥑

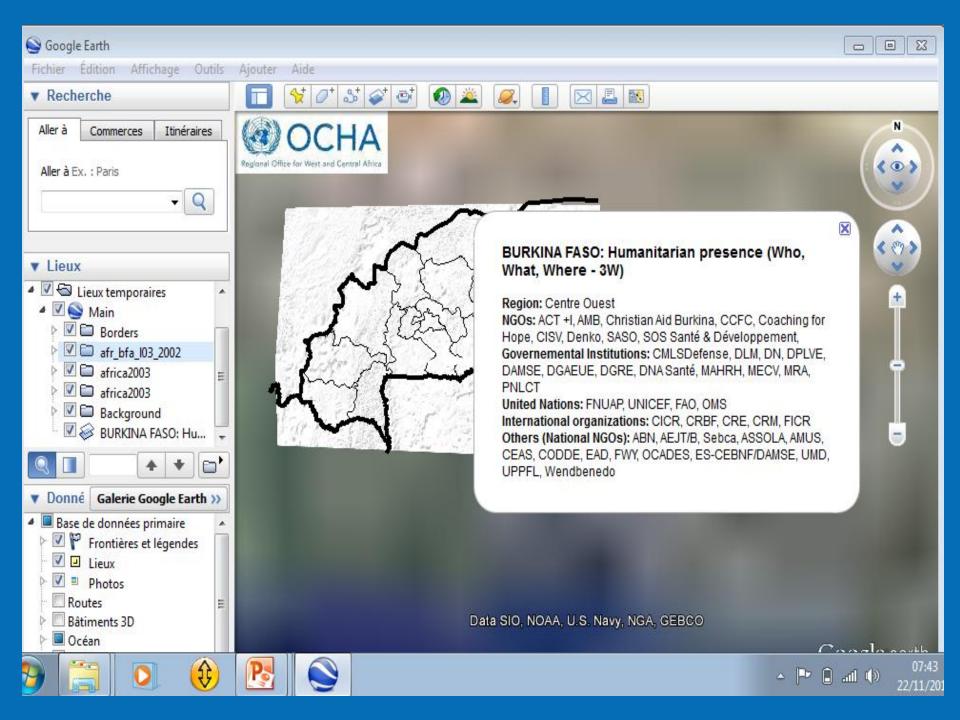
Administrative Boundaries

Category	Title	Abstract	How To Obtain	Date of dataset	Data Type	Most Recent Known Changes
Multiple Categories	Health Districts	The present geodata represents health districts of Burkina Faso. Source: UNOCHA, 2011 Scale: 1 M	bfa_health_dist.zip	23-Aug- 2011	Areas (polygons)	
Multiple Categories	Administrative boundaries	The present geodata represents administrative boundaries (regions and provinces) of Burkina Faso. This is a zipped file for admin level 1 and 2 Source: SALB, 2009 Scale: 1 M	salb_admin.zip	23-Aug- 2011	Areas (polygons)	

Submit another dataset for this theme.









Coordination Saves Lives La coordination sauve des vies La coordinación salva vidas Координация спасает жизни بالتنسيق ننقيذ الأرواح 致力协调, 挽救生命