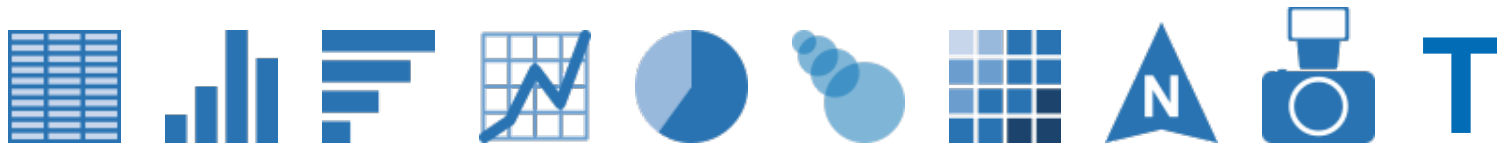


Data Visualization

ENTRi course on New Media:
Tools and Techniques for Civilian Crisis Management
Berlin, 17- 21 March 2014

Representing Data

Tables, Charts, Matrices, Maps, Photos, Text



Design principles

Above all else, show the data...

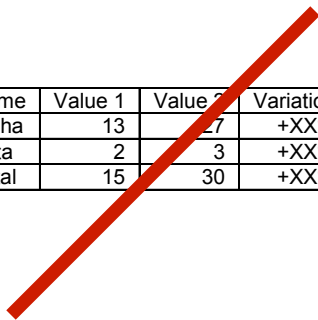
Maximize the data-ink ratio

- Erase non-data-ink
- Erase redundant data-ink

Table

The first infographic





Name	Value 1	Value 2	Variation
Alpha	13	27	+XX%
Beta	2	3	+XX%
Total	15	30	+XX%

Name	Value 1	Value 2	Variation
Alpha	13	27	+XX%
Beta	2	3	+XX%
Total	15	30	+XX%

[illegible]

Project code (click on hyperlinked project code to open full project details)	Title	Appealing agency	Requirements (\$)	Priority	Location
SOM-12/H/48435	Provision of Emergency Health, Nutrition and WASH Services in Mudug region of Somalia	MERLIN	760,000	A - HIGH	North East
SOM-12/H/48445/8896	Provision of Live Saving Health Care Services in Mogadishu, Wanlaweyn and Hiraan	WARDI	633,610	B - MEDIUM	South Central
SOM-12/H/48446/124	Provision of maternal, neonatal and child health services through delivery of essential medicines, medical supplies, bundle vaccines, equipment to health facilities; capacity building of health workers; and establishment of community based care by village	UNICEF	16,764,231	A - HIGH	Multi Zone
SOM-12/H/48447	Provision of Mobile Ambulance Services in Mogadishu and Af-goi in Banadir and Lower Shabelle Region	AVRO	230,672	A - HIGH	South Central
SOM-12/H/48451/122	Provision of quality basic and comprehensive emergency obstetric care to displaced populations and populations affected by the nutritional crisis in South Central Somalia	WHO	1,190,406	A - HIGH	South Central
SOM-12/H/48473	Saving the Lives of drought Affected Children and Women in Somalia by Ensuring their Access to Basic and Emergency Life-Saving Health Services	SC	10,620,000	C - LOW	Multi Zone
SOM-12/H/48486	Strengthening access to PHC services in areas affected by emergency and with high IDP influx in Benadir and Hiraan Regions	CISP	650,000	C - LOW	South Central
SOM-12/H/48488	Strengthening and improving Primary Health Care services, epidemic diseases prevention and treatment for vulnerable men and women in Galgaduud and Mudug Regions	CISP	1,138,960	C - LOW	Multi Zone
SOM-12/H/48495	Support for Primary Health Care (MCH/OPD) in Sool Region.	DIAL	596,600	B - MEDIUM	North West
SOM-12/H/48496	Support for Primary Health Care Delivery in Kismayo District.	DIAL	589,800	A - HIGH	South Central
SOM-12/H/48509/122	Surveillance, response to and control of communicable disease outbreaks in IDP camps and settlements in Somalia.	WHO	2,715,339	A - HIGH	Multi Zone
SOM-12/H/48516	To Increase Access to Emergency Obstetric and Neonatal Health Care Services and Information to 250,000 Vulnerable Individuals in South Central Somalia	IRW	2,232,000	A - HIGH	South Central
Sub total for HEALTH			84,868,472		

Nutrition (continued)



Priority	Agency	Project title	\$ Requirements	Project code	Location
High	ACF US	Treatment of acute malnutrition in Warrap and Northern Bahr-el-Ghazal	2,518,615	SDN-11/H/38891	South
High	CARE SD	Unity state nutritional support project (USNSP)	480,831	SDN-11/H/38912	South
High	IMC UK	Mitigating malnutrition in Akobo county	594,083	SDN-11/H/38905	South
High	MEDAIR	Integrated provision of nutrition services through PHC in Upper Nile and response to nutrition emergencies in southern Sudan	767,052	SDN-11/H/38920	South
High	MERLIN	Provision and expansion of nutrition services in selected counties of Eastern Equatoria and Jonglei states	820,618	SDN-11/H/38924	South
High	SP	Nutrition programs in under-served parts of Bahr-el-Ghazal and Jonglei	540,000	SDN-11/H/38899	South
High	TEARFUND	Provision of integrated lifesaving nutrition services	269,943	SDN-11/H/38910	South
High	UNICEF	Expanding partnership for addressing emergency nutrition needs in under-served states in southern Sudan	2,357,200	SDN-11/H/39158	South
High	UNICEF	Support to the nutrition pipeline for emergency therapeutic responses	9,111,115	SDN-11/H/38996	South
High	World Relief	Nutrition and capacity building project in complex humanitarian emergency	405,900	SDN-11/H/38879	South
High	WV SD	Response to emergency nutrition needs for displaced and transitory food insecure populations in Warrap state	1,860,696	SDN-11/H/38859	South
Medium	BRAC	Nutritional assessment and support to children, pregnant & lactating women	693,240	SDN-11/H/38885	South
Medium	CCVS	Support basic nutrition services in southern Sudan	315,000	SDN-11/H/38995	South
Medium	CRADA	Management of severe acute malnutrition for children below 5 in Pochalla	750,000	SDN-11/H/38894	South
Medium	CRS	Strengthening provision of nutrition services in Bor and Duk counties	193,281	SDN-11/H/38915	South
Medium	HSO	Improving provision of nutrition services through health facilities and community centres in Guit county, Gogrial East, and Panyikwara Payam	459,830	SDN-11/H/38994	South
Medium	Malaria Cons.	Addressing emergency nutrition needs of vulnerable groups through community based structures	1,305,400	SDN-11/H/38917	South
Medium	NHDF	Improving the status of nutrition in the community living in pigu county	200,000	SDN-11/H/38992	South
Medium	SC	Extending emergency nutrition assessment and response capacity	1,200,000	SDN-11/H/38993	South
Total			75,303,096		

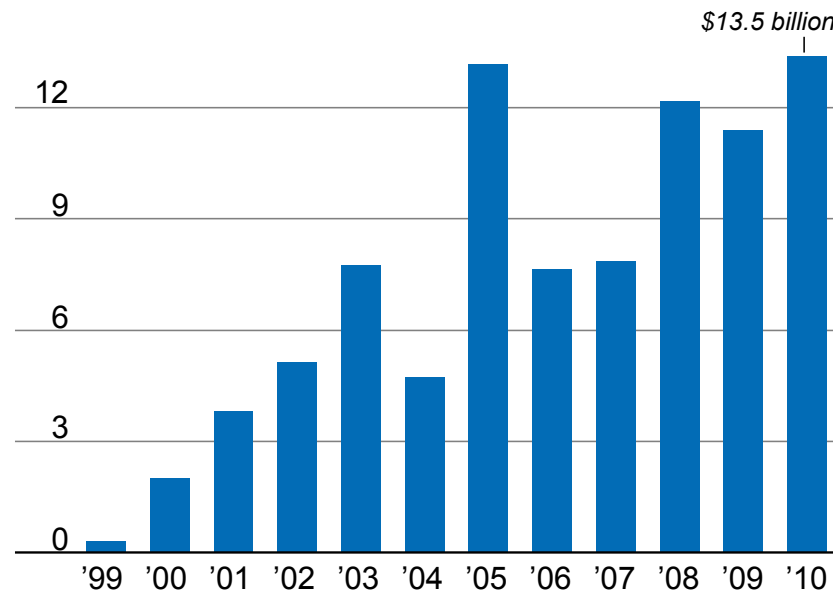
Bar charts

The most common infographic



Annual contributions to consolidated appeals in billions

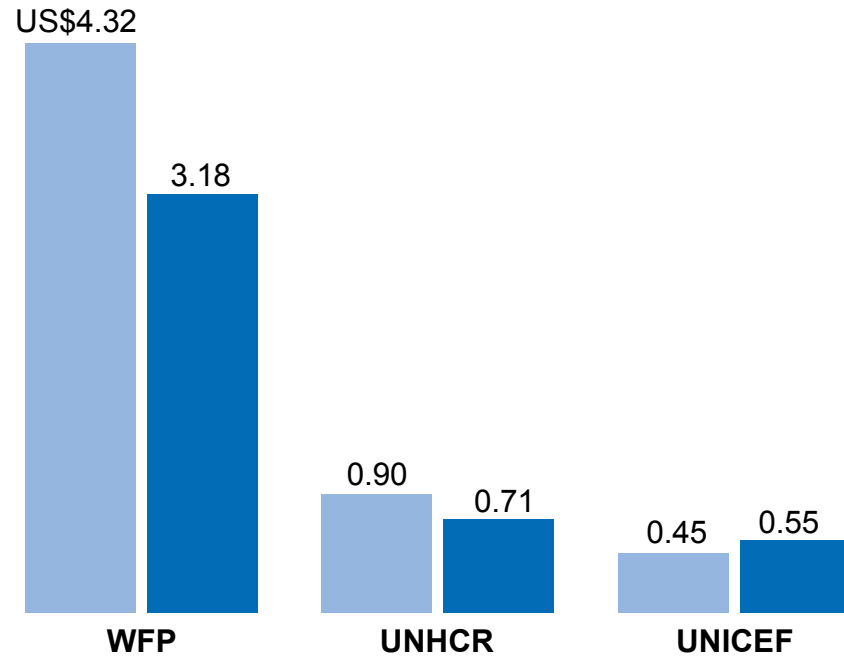
US\$15



Source: FTS

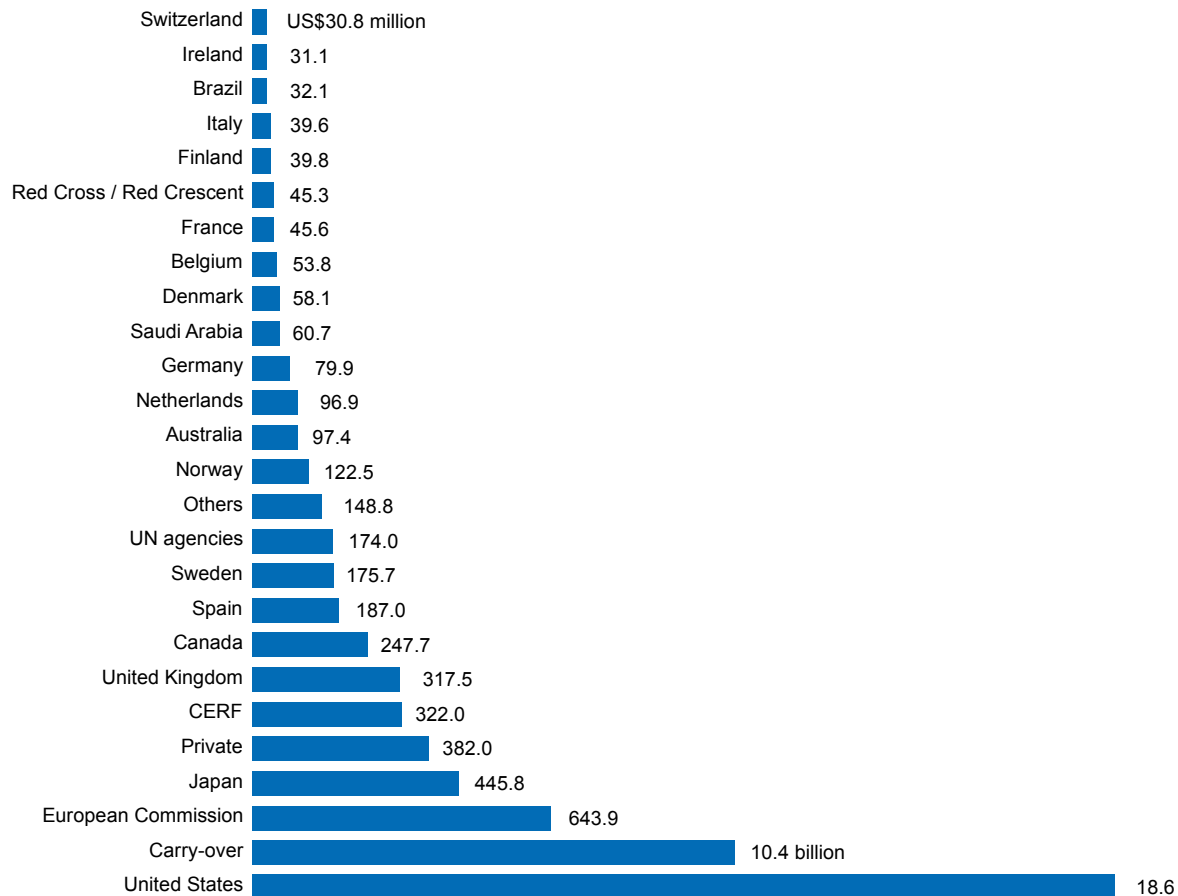
Annual contributions to top UN agencies in billions

■ 2009 ■ 2010



Source: FTS

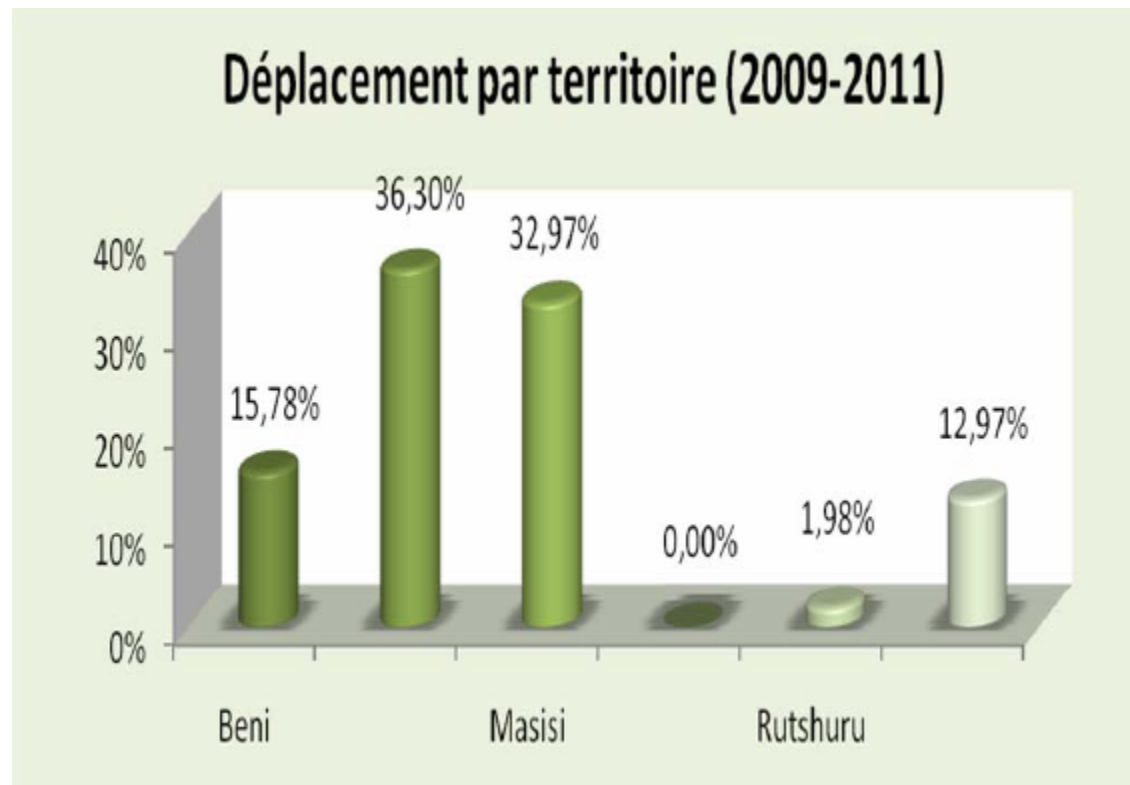
Contribution to appeals by country in 2010

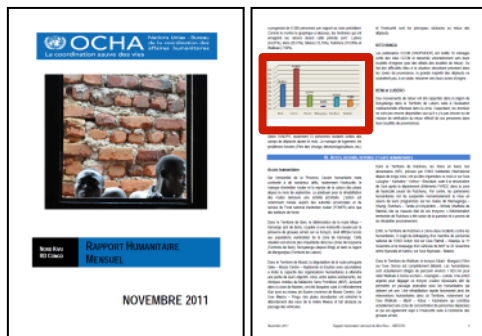


Source: FTS

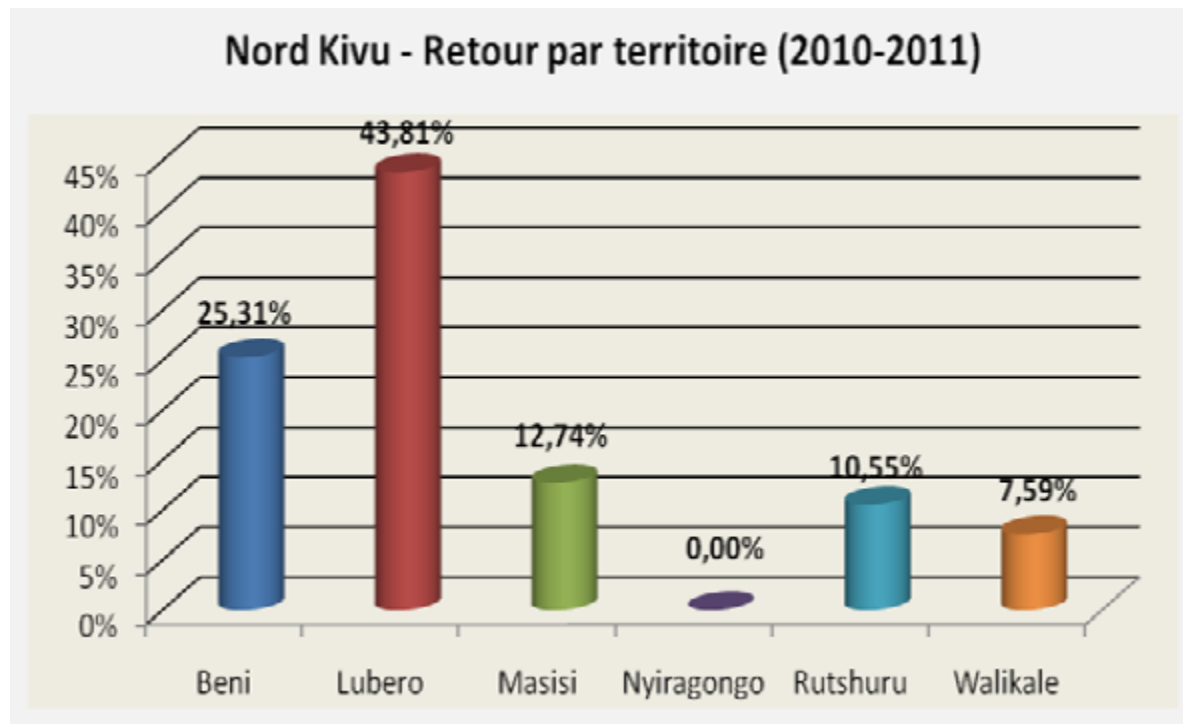


Nord Kivu

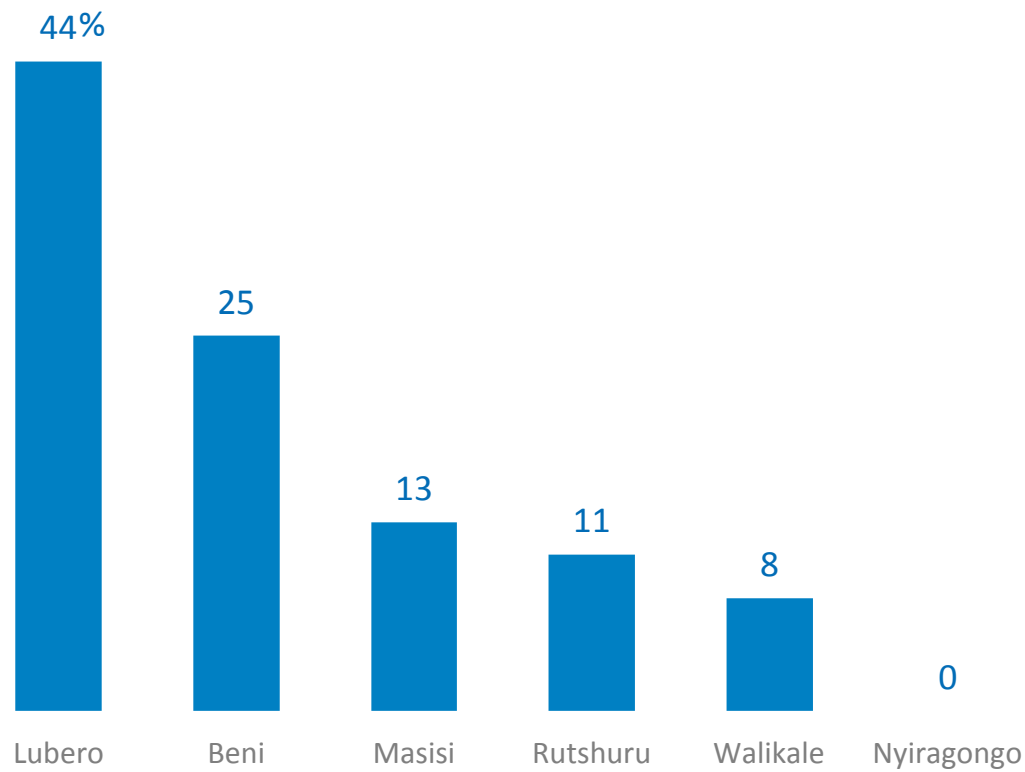




Nord Kivu



Nord Kivu – Retour par territoire (2010-2011)

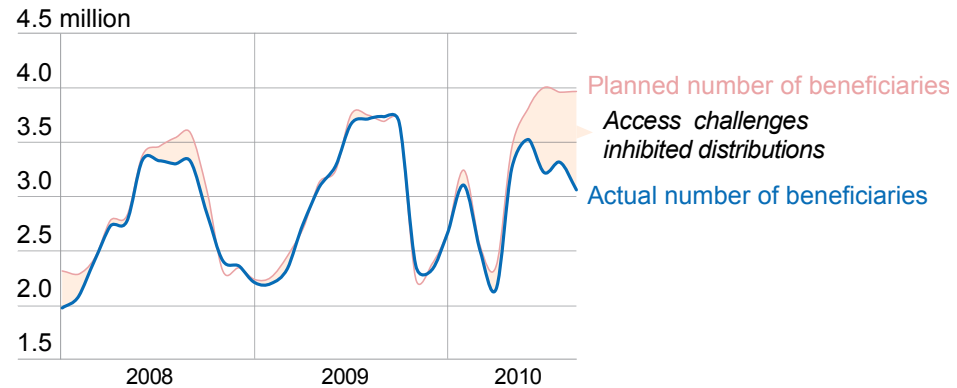


Line charts

Best solution to present a time series referring to a single value that changes at regular intervals

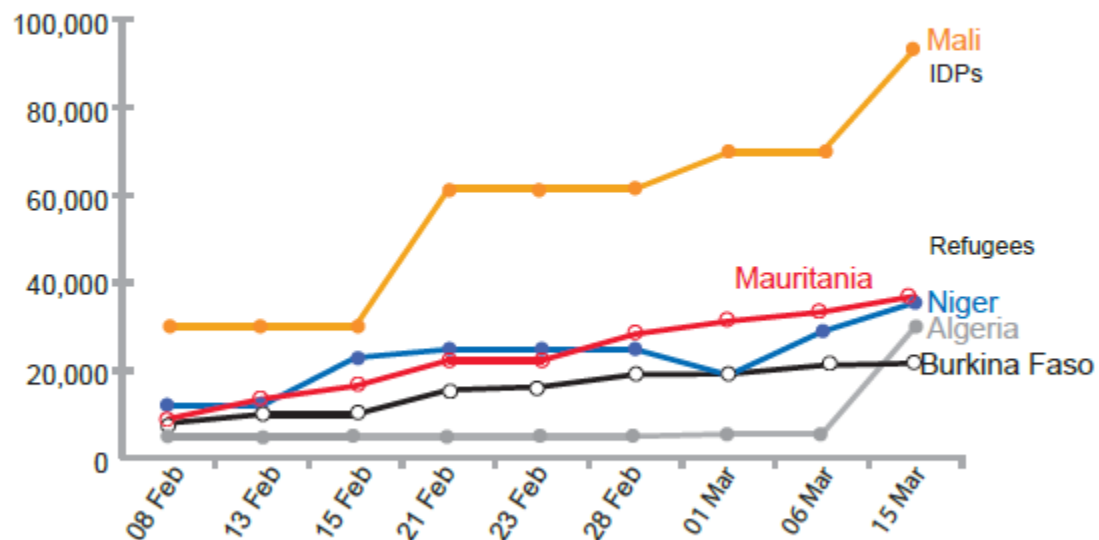


Monthly planned and actual beneficiaries of food distributions in Darfur



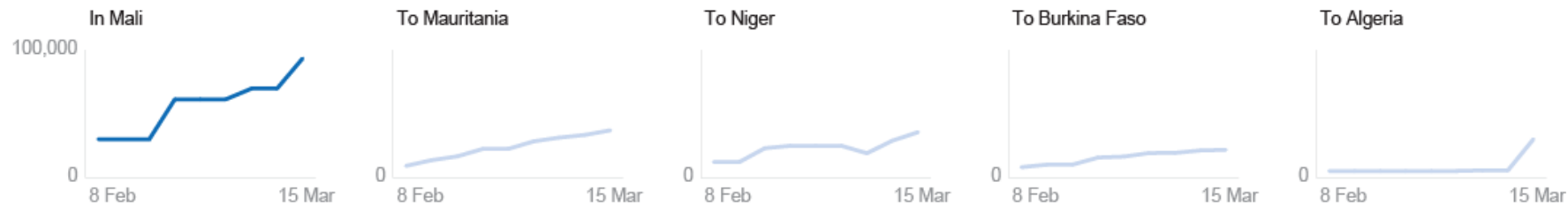
Source: WFP Sudan, Food Distribution Statistics September 2010

POPULATIONS DISPLACED DUE TO THE CONFLICT IN MALI



Evolution of displaced populations per country (as of 15 March 2012)⁵

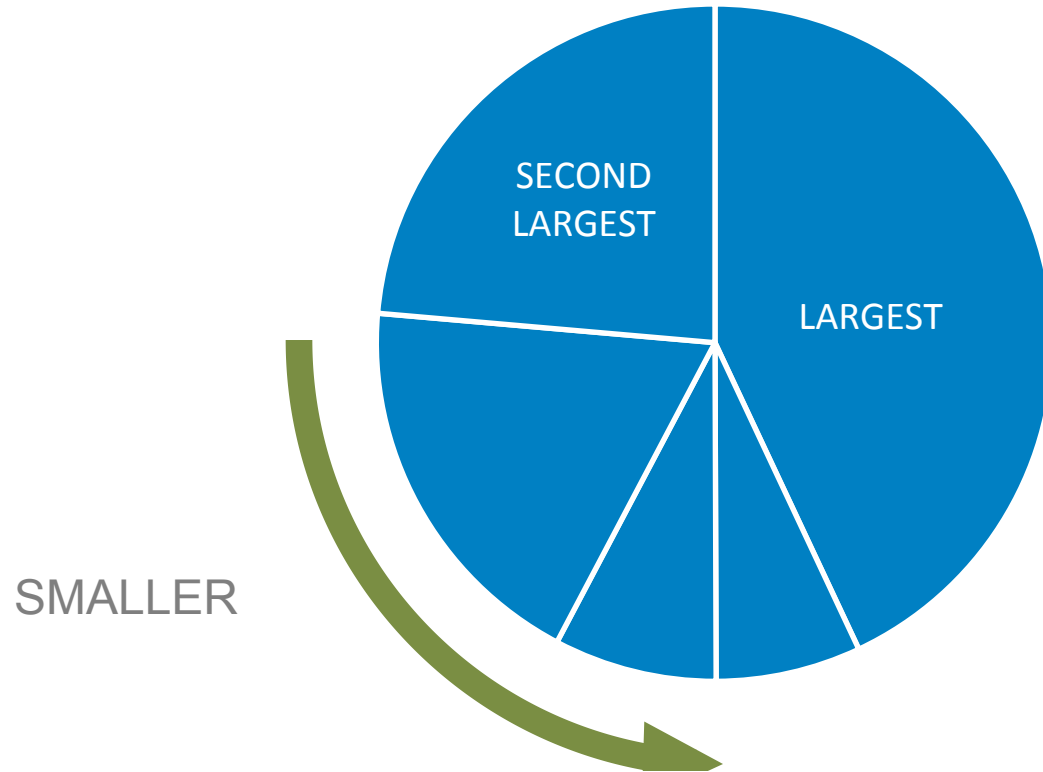
Number of displaced due to the conflict in Mali



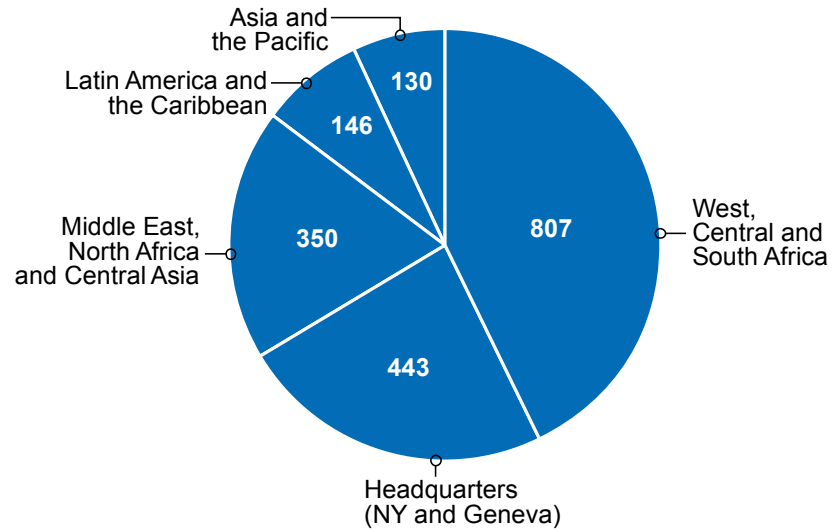
Pie chart

Popular choice to help readers understand the relative sizes of similar values



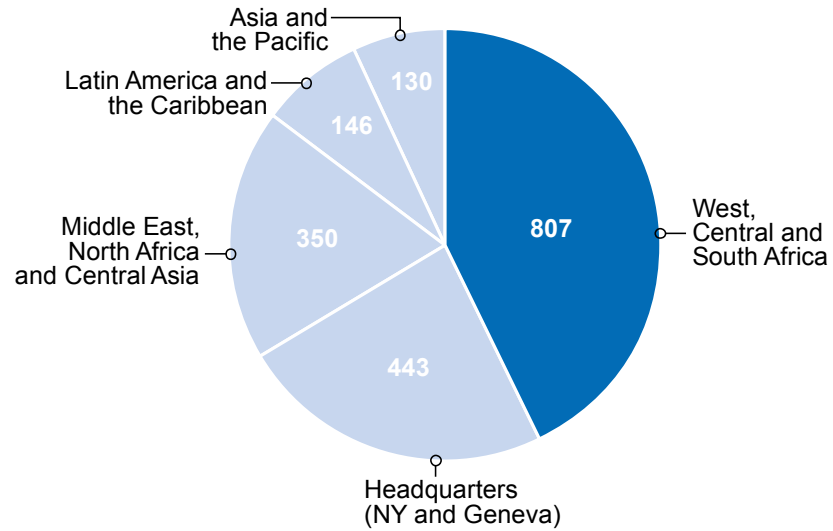


OCHA's 1,876 staff members by region



Source: OCHA

OCHA's 1,876 staff members by region



Source: OCHA



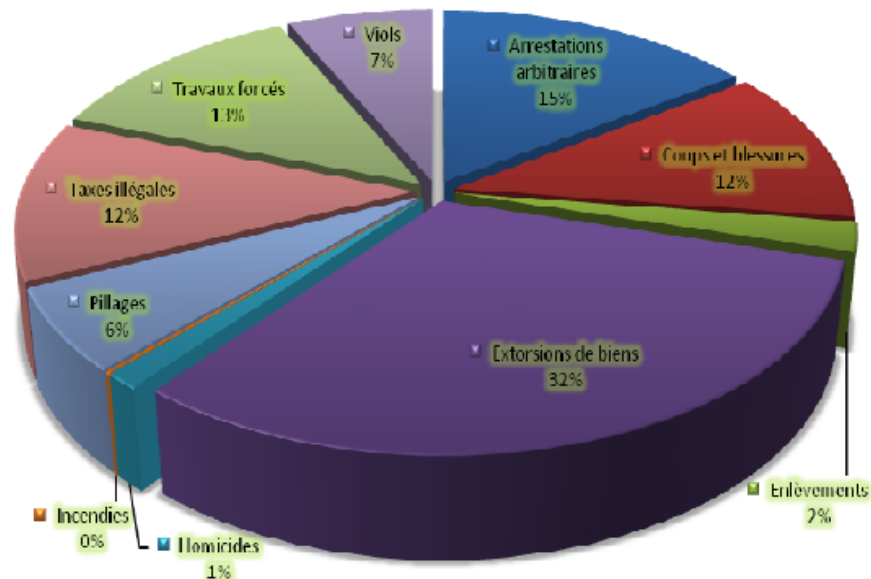
Le 10^{ème} anniversaire d'Action Humanitaire est célébré ce 10 novembre 2011. C'est une date importante pour notre organisation, car elle marque le début de notre action humanitaire au Sud-Kivu. Depuis 2001, nous avons pu aider plus de 100 000 personnes à surmonter les difficultés liées à la guerre et à la violence.

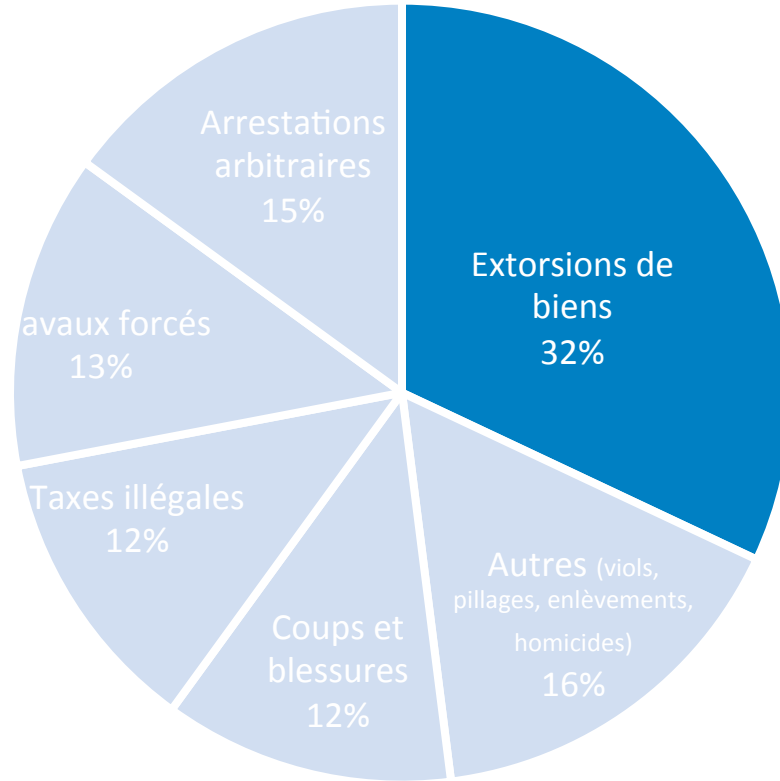
10. Données et réponses humanitaires urgentes

Dans cet annuaire et dans l'annuaire

Annuaire 2011

Année	Nombre de personnes aidées	Nombre de projets	Nombre de bénéficiaires
2001	10 000	10	10 000
2002	15 000	15	15 000
2003	20 000	20	20 000
2004	25 000	25	25 000
2005	30 000	30	30 000
2006	35 000	35	35 000
2007	40 000	40	40 000
2008	45 000	45	45 000
2009	50 000	50	50 000
2010	55 000	55	55 000
2011	60 000	60	60 000





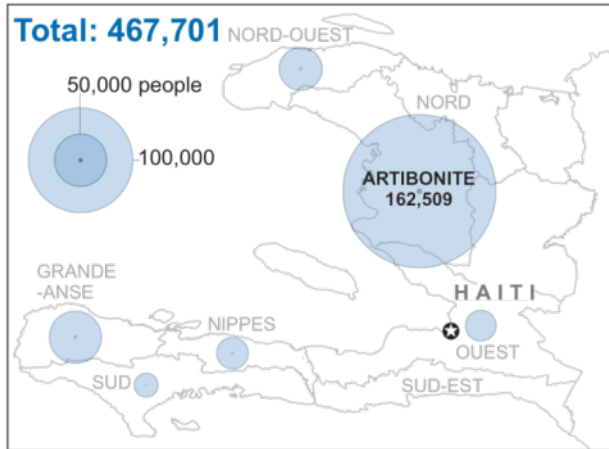


Surface area chart

To compare values



Number of displaced people by province



Source: SNGRD. Bilan des dégâts #12. 9 Feb 2010.

OCHA's 1,876 staff members by region

807 West, Central and Southern Africa	350 Middle East, North Africa and Central Asia		244 Headquarters, Geneva
	146 Latin America and the Caribbean	130 Asia and the Pacific	199 Headquarters, New York

Matrices




















Useful way of representing large datasets and highlight gaps



Number of partners by department and by cluster

Number of partners



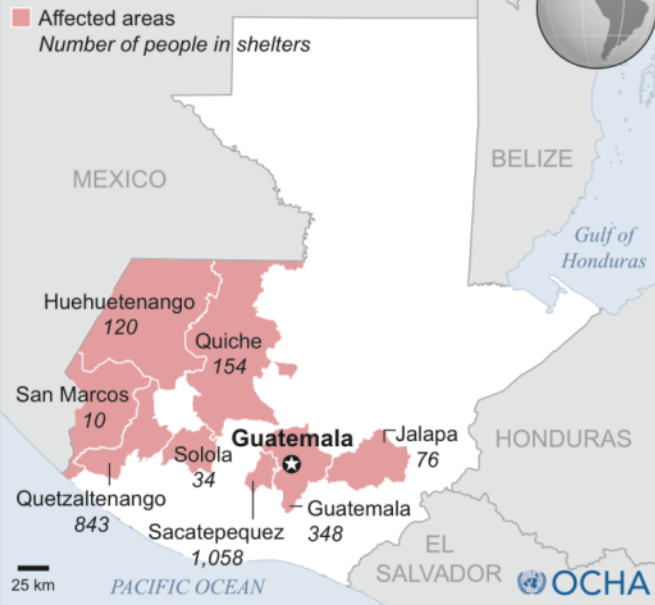
										Total
Ouest 	32	32	14	11	79	16	11	13	8	216
Centre 	10	7	1	1	3	0	0	2	2	26
Artibonite 	14	0	4	1	2	2	2	0	0	25
Sud-Est 	18	22	1	1	14	4	3	0	0	59
Sud 	9	23	2	4	1	1	1	0	0	57
Nord-Est 	8	17	0	0	1	3	0	0	6	35
Nord 	12	9	2	0	2	0	0	3	0	28
Grande-Anse 	2	6	5	1	0	0	1	0	0	15
Nord-Ouest 	7	12	2	0		2	0	0	0	23
Nippes 	3	0	0	2	0	2	0	0	0	7

Maps

Useful to show geographical extent



GUATEMALA: Cold Wave



5 Dec 2011 - More than 2,643 people were accommodated in shelters due to freezing temperatures that started mid-November. Coordinadora Nacional para la Reducción de Desastres has provided 13 shelters in 7 districts.

Map Sources: UNCS, Europa Technologies, GAUL.

Reference: Gov't Guatemala. *Boletín Informativo* No. 2290 - Albergues activos atienden a más de dos mil seiscientas personas. 5 Dec 2011.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Map created on 20 Dec 2011.

Photos

An image is worth 1,000 words



Migrants return to Niger after fleeing unrest in Libya in April 2011



Text

Easy infographic by playing with font style

T

[illegible]

13.3 million
affected by the crisis

1. 2. 3.

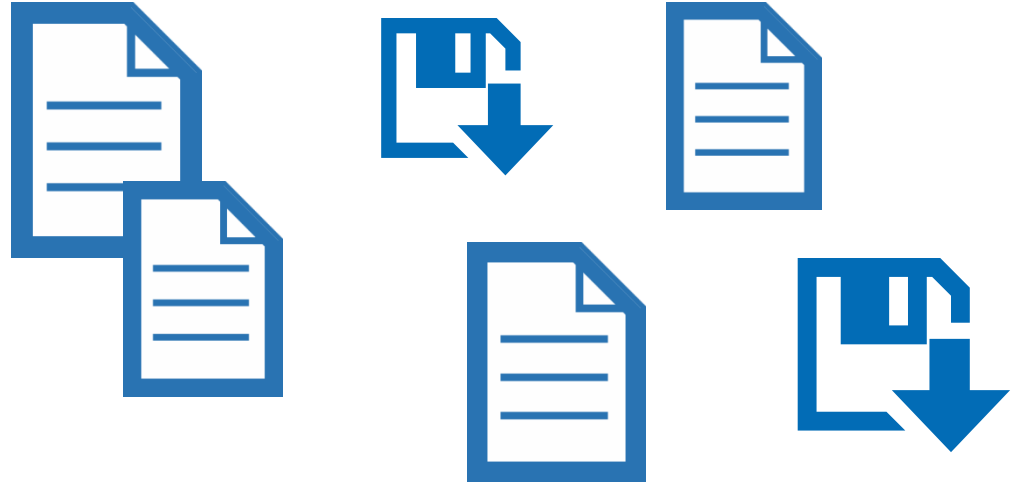
Create an effective chart

Step by step



1. Define Key Messages

Think – audience & purpose

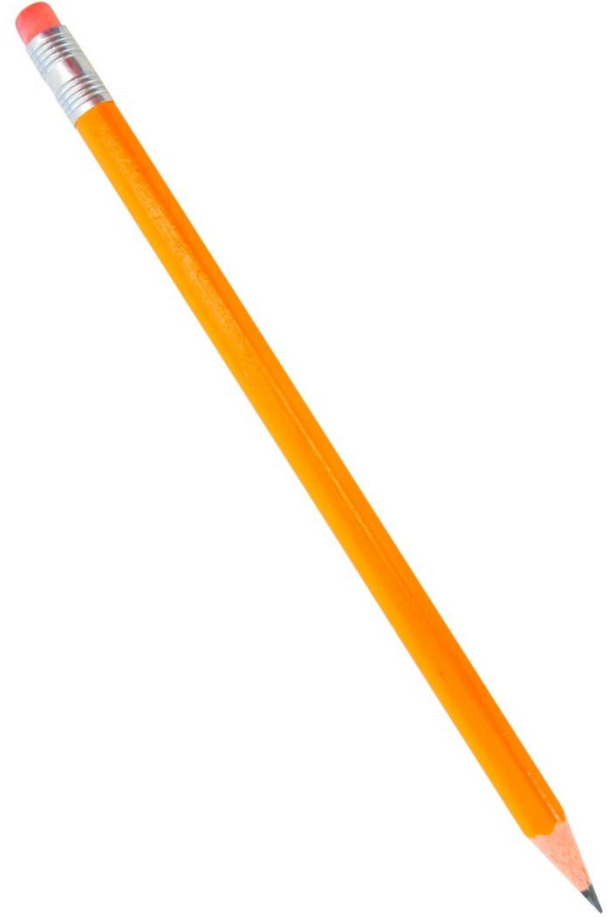


2. Collect data

Up to date and quality data

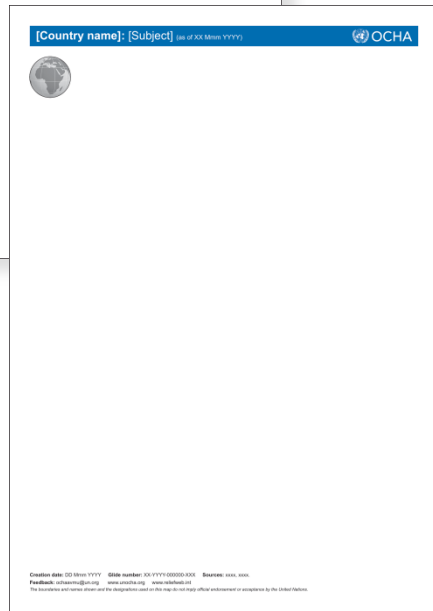
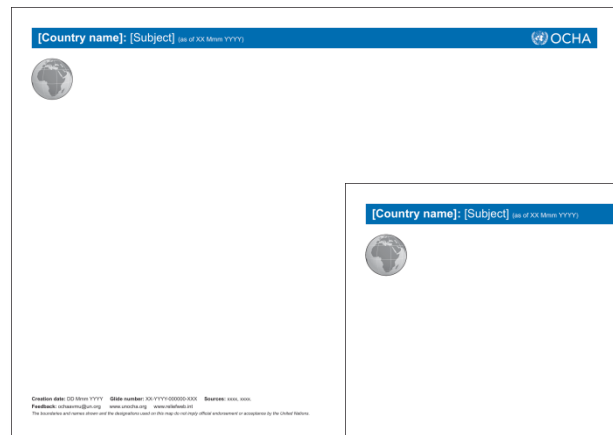
3. Sketch the information

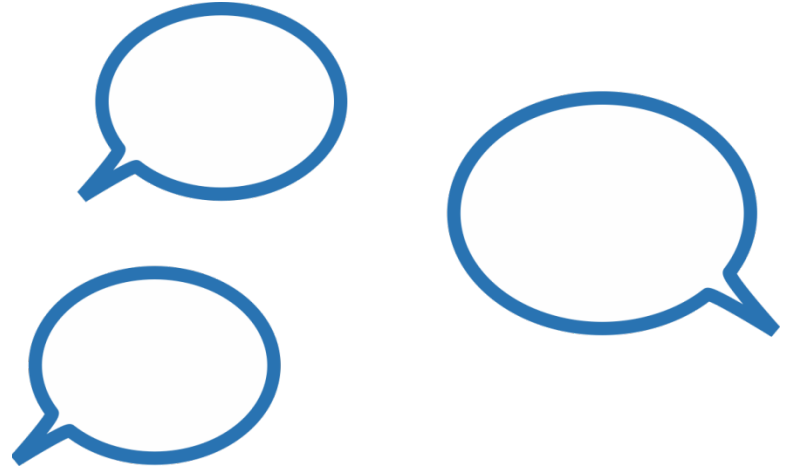
Determine the best medium



4. Design

Use templates & styles





5. Feedback

Quality control and usability

5. Final proofing

Edits and clearance

<input checked="" type="checkbox"/>	_____
<input checked="" type="checkbox"/>	_____
<input checked="" type="checkbox"/>	_____

Simplification

the simpler, the better

+

Standardization

Inspiration

New York Times, Economist, etc.

Exercise

Talking points for all States briefing on OCHA in 2012-2013

“In 2012, we launched a consolidated appeal for \$US 7.7 bn to help 51 million in 16 countries – and there will be more.

There was a time when a billion dollar appeal for work in a country was almost unimaginable. This year, both the Sudan and the Somalia appeals are over \$1bn.”

1. Key messages

“In 2012, we launched a consolidated appeal for **\$US 7.7 bn to help 51 million in 16 countries** – and there will be more.

There was a time when a billion dollar appeal for work in a country was almost unimaginable. This year, **both the Sudan and the Somalia appeals are over \$1bn.**“

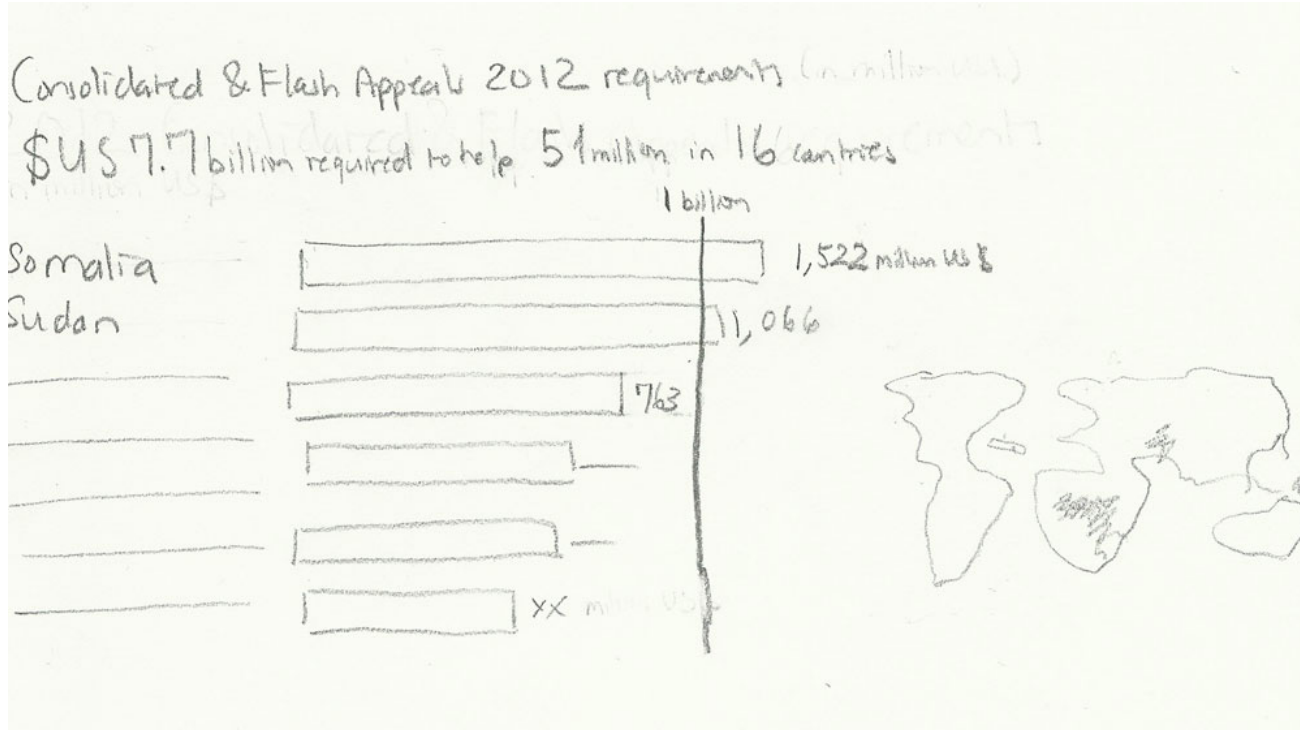
2. Collect data

FTS > Global Overview

- > Consolidated Appeals Process
- > Summary of requirements and contributions
- > per Appeal in 2012

	Appeal Launch Date	Original requirements USD A	Revised requirements USD B	Funding C	% Covered C/B	Unmet requirements USD B-C	Uncommitted pledges USD D
2012+ Kenya Emergency Humanitarian Response Plan	14-Dec-11	763,757,858	763,757,858	77,077,684	10%	686,680,174	0
Afghanistan 2012	14-Dec-11	437,140,634	437,140,634	40,000,000	9%	397,140,634	0
Central African Republic 2012	14-Dec-11	134,457,734	134,457,734	66,667	0%	134,391,067	6,000,000
Chad 2012	14-Dec-11	455,173,291	455,173,291	66,512,593	15%	388,660,698	14,000,000
Cote d'Ivoire 2012	14-Dec-11	173,089,333	173,089,333	0	0%	173,089,333	8,000,000
Democratic Republic of the Congo 2012	14-Dec-11	718,555,610	718,555,610				
Djibouti Appeal 2012	14-Dec-11	79,071,305	79,071,305	10,296,316	13%	68,774,989	4,000,000
Haiti 2012	14-Dec-11	230,544,824	230,544,824	0	0%	230,544,824	8,000,000
Niger 2012	14-Dec-11	229,150,372	229,150,372	16,406,715	7%	212,743,657	0
occupied Palestinian territory 2012	14-Dec-11	416,701,603	416,701,603	5,418,719	1%	411,282,884	0
Philippines Humanitarian Action Plan 2012	14-Dec-11	66,489,287	65,522,154	7,803,542	12%	57,718,612	4,000,000
Republic of South Sudan 2012	14-Dec-11	763,192,505	763,192,505	63,328,085	8%	699,864,420	20,000,000
Somalia 2012	14-Dec-11	1,521,930,554	1,521,930,554	82,542,279	5%	1,439,388,275	2,488,281
Sudan 2012	14-Dec-11	1,065,780,789	1,065,780,789	217,155	0%	1,065,563,634	0
Yemen Humanitarian Response Plan 2012	14-Dec-11	447,138,200	447,138,200	52,739,270	12%	394,398,930	0
Zimbabwe 2012	14-Dec-11	268,376,059	268,376,059				
Grand Total:		7,770,549,958	7,769,582,825	422,409,025	5%	6,360,242,131	66,488,281

3. Sketch



4. Design

- Remove unnecessary data

	Original requirements USD A
2012+ Kenya Emergency Humanitarian Response Plan	763,757,858
Afghanistan 2012	437,140,634
Central African Republic 2012	134,457,734
Chad 2012	455,173,291
Cote d'Ivoire 2012	173,089,333
Democratic Republic of the Congo 2012	718,555,610
Djibouti Appeal 2012	79,071,305
Haiti 2012	230,544,824
Niger 2012	229,150,372
occupied Palestinian territory 2012	416,701,603
Philippines Humanitarian Action Plan 2012	66,489,287
Republic of South Sudan 2012	763,192,505
Somalia 2012	1,521,930,554
Sudan 2012	1,065,780,789
Yemen Humanitarian Response Plan 2012	447,138,200
Zimbabwe 2012	268,376,059

4. Design

- Clean the country label
- Round to million

	Original requirements USD A
Kenya	764
Afghanistan	437
Central African Republic	134
Chad	455
Cote d'Ivoire	173
DR of the Congo	719
Djibouti	79
Haiti	231
Niger	229
occ. Palestinian territory	417
Philippines	66
South Sudan	763
Somalia	1,522
Sudan	1,066
Yemen	447
Zimbabwe	268

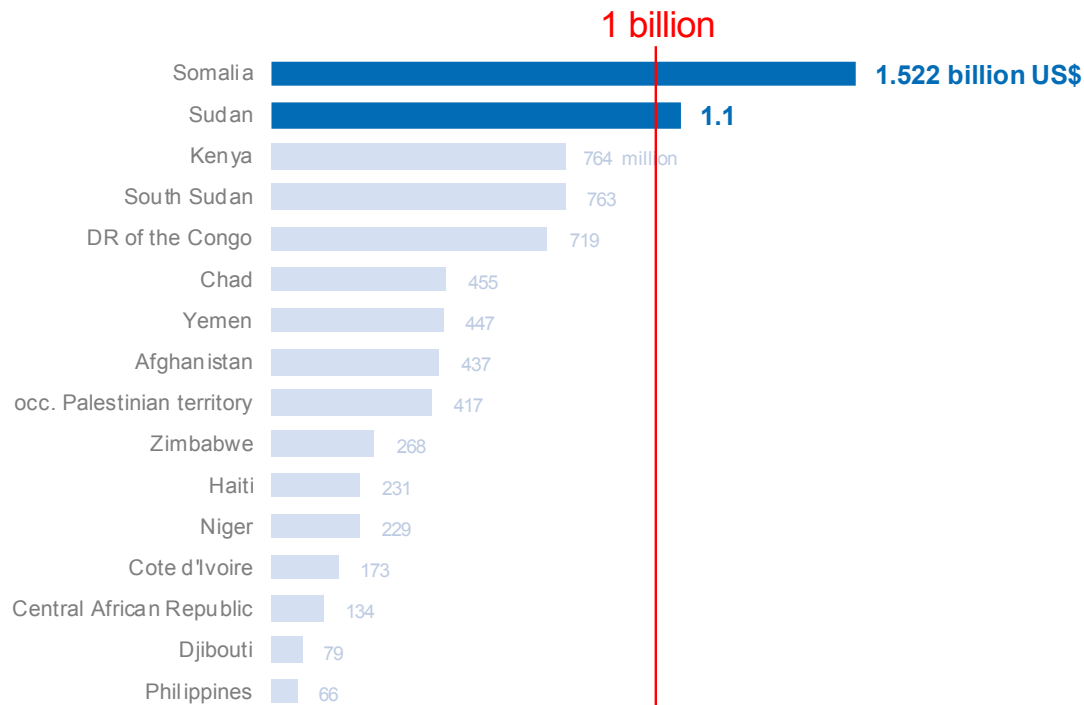
4. Design

- Sort the data

	Requirements
Somalia	1,522
Sudan	1,066
Kenya	764
South Sudan	763
DR of the Congo	719
Chad	455
Yemen	447
Afghanistan	437
occ. Palestinian territory	417
Zimbabwe	268
Haiti	231
Niger	229
Cote d'Ivoire	173
Central African Republic	134
Djibouti	79
Philippines	66

Consolidated & Flash Appeals 2012 requirements

\$US 7.7 billion required to help **51 million** in **16** countries



5. Feedback

What do you think?

6. Final proofing

Ok?