

Consolidation of Cadre Harmonisé data

Consolidation of Cadre Harmonisé (CH) data:

1. *Sahel/Nigeria: 2014 – March 2021*
2. *Other countries 2017 – March 2021*

Context

The Cadre Harmonisé (CH) is to national and regional food crisis and prevention systems, a comprehensive analytical framework, coordinated by CILSS (<http://www.cilss.int>), that takes into account various indicators of food and nutrition security outcomes and the inference of contributing factors to classify and estimate food insecurity.

13 participants from several UN agencies and NGOs (ACF, FAO, OCHA, IFRC UNICEF and WFP) joined together to consolidate CH data they use in the framework of their missions. This database, consolidated and consensually built, is the result of the work of the technicians of these different agencies present at this meeting. The purpose of this work and this database is to facilitate analysis and reporting on food security in West Africa. Another objective of this work is to make the mapping of these data easier thanks to the integration of the geocodes used by the different agencies (WFP/FAO and OCHA). In order to share the methodological approach that we used for this consolidation, below is a summary of the different stages of this work:

Steps:

Step 1: Collect all the raw excel files and the fiche de communication of Cadre Harmonisé exercises since 2014 and put them together in one folder

Step 2: Decide on a common data structure (see Annex 1)

Step 3: Compile the data between 2014 - 2020

Step 4: Create a geographic dictionary with common names and codes for COD / GAUL <https://goo.gl/m9oBS6> (using the COD <https://data.humdata.org/dashboards/cod>) so to standardize the different spellings / arrangements of location information.

Step 5: Data Quality Assurance 1: Compare the country totals for Phase 3 - 5 in the data compiled into the numbers in the Regional fiche de communication / presentation (see Annex 2 for a list of countries and periods for which the data compiled and the communication do not match)

Step 6: Data quality assurance 2: Create random sub-samples of the global data at the lowest level and verify against the original data (10 - 20 observations per country)

Step 7: Contact CILSS and the CH technical committee for sharing and for the purpose

to collaborate given the limitations of this work (e.g some data not available or differences in data vs fiche de communication) This step is still in progress - see appendix 2 for more information

Step 8: Archive and work on the process documentation for sharing with the technical committee and other partners on HDX

Annex 1: Data Structure

Column	Explanation
adm0_name	country name
adm0_gaulcode	country GAUL geospatial code
adm0_pcod3	country geospatial ISO3 version of the p-code
adm0_pcod2	country geospatial ISO2 version of the p-code
region	Location which is above administrative level 1 (i.e. Santiago in Cabo Verde)
adm1_name	administrative level 1 name
adm1_pcod3	administrative level 1 geospatial ISO3 version of the p-code
adm1_pcod2	administrative level 1 geospatial ISO2 version of the p-code
adm1_gaulcode	administrative level 1 GAUL geospatial code
adm2_name	administrative level 2 name
adm2_pcod3	administrative level 2 geospatial ISO3 version of the p-code
adm2_pcod2	administrative level 2 geospatial ISO2 version of the p-code
adm2_gaulcode	administrative level 2 GAUL geospatial code
population	total population analysed in each geographic area
phase_class	classification of the analysed area (adm1, adm2 or specific area)
phase1	population in phase 1 (minimal)
phase2	population in phase 2 (stressed)
phase3	population in phase 3 (crisis)
phase4	population in phase 4 (emergency)
phase5	population in phase 5 (famine)
phase35	total phase 3 - 5 population
chtype	current or projected estimate

exercise_code	period when the estimate is made – code
exercise_label	period when the estimate is made – label
exercise_year	year of the period when the estimate is made
reference_code	period for which the estimate is made for – code
reference_label	period for which the estimate is made for – label
reference_year	year of the period for which the estimate is made for – code
foodconsumption_phase	Food consumption outcome classification of area
livelihoods_phase	Evolution of Livelihoods outcome classification
nutrition_phase	Nutrition status outcome classification
mortality_phase	Mortality outcome classification
usethisperiod	Filter variable to indicate if this the recommended exercise/reference period

Annex 2: Comparison of data with fiche de communication

Looking at phase3-5 total figures, the data are consistent with the fiche de communication for all periods except for the following cases:

1. Some errors due to rounding
2. The 2014-2015 figures in the fiche de communication have been rounded to the nearest thousandth.
3. Typo of an extra 0 in October 2014 data from Burkina Faso in the fiche de Communication: 1,890,000 was reported instead of 189,000.
4. For the October 2015 Burkina Faso exercise projections, the difference between the sum of the phases 3-5 in the fiche de communication (637707) and that of the consolidated data (655619) is 2.7%
5. Difference of less than 1% due to the fact that one cell was not mistakenly included in the total of the fiche de communication for Chad's November 2014 projections for March 2015.
6. For the current estimates for the March 2015 exercise of Mauritania, the difference between the sum of the phases 3-5 on the fiche de communication (264,000) and that of the consolidated data (259,335) is 1.8%

7. For the March 2014 exercises projection for June-Aug 2014 in Niger, the difference between the sum of the 3-5 phases on the fiche de communication (2,186,540) and the sum of the data (2,204,659) is 0.8%.
8. For Niger's March 2015 estimates, the difference between the sum of phases 3-5 on the fiche de communication (757,000) and the sum of the data (784,007) is 3.4%.
9. For the March 2015 exercises projection for June-Aug 2015 in Niger, the difference between the sum of phases 3-5 on the fiche de communication (1,158,000) and the sum of the data (1,178,083) is 1.7%.
10. For Nigeria's October 2015 estimates and projections, the difference between the sum of phases 3-5 on the fiche de communication and that of the data is 0.01%.
11. For the November 2017 estimates from The Gambia, the total used in the fiche de communication (20,903) was incorrect because the calculation did not include one LGA. The correct calculation is the one found in the data: 23,323
12. For the November 2017 Gambia projections, the total used in the fiche de communication (36,401) was incorrect because the calculation did not include an LGA. The correct calculation is the one found in the dataset: 41,241
13. For the Niger's March 2020 current and projected estimates, the estimates reported in the fiche de communication mistakenly do not include the first row, the commune of Aderbissinat.
14. For Burkina Faso's June 2020 update, there is a small discrepancy between the CH presentation and Burkina Faso's fiche in the number of phase3-5 (3,376,265 vs 3,280,800). The figures from Burkina Faso's fiche are used in this dataset.
15. For Nigeria's June 2020 update, there is a small discrepancy between the CH presentation and Nigeria's fiche in the number of phase3-5 in Yobe State (1,267,629 vs 1,287,103). The figures from Nigeria's fiche are used in this dataset.
16. For Nigeria's June 2020 update, in both the CH presentation and Nigeria's fiche, all figures reported for Gombe (population, phase 1, phase35, etc) were accidentally doubled. The correct figures, using the March 2020 projected figures, are used in this dataset.

Annex 3: Geo-codes

A geo-dictionary with common names and geo-codes: <https://goo.gl/m9oBS6> (using the COD <https://data.humdata.org/dashboards/cod>) was used to standardize the different spellings/arrangement of location information.

The user should note the following:

1. For Cabo Verde, due to a difference in classification, p-codes are placed at adm1_pcod3 while for GAUL they are put at adm2_gaulcode
2. For Côte d'Ivoire, due to a difference in classification, p-codes are placed at adm1_pcod3 while for GAUL they are put at adm2_gaulcode
3. For Mali, communes I to V of Bamako, which are part of level 3 of the administrative division, are found in the adm2_name column with the other cercles.
4. For Niger, the arrondissements I to V of Niamey, which are part of level 3 of the administrative division, are found in the adm2_name column with the other cercles.
5. For Niger, some areas, such as Diffa Departement do not correspond to the COD/GAUL administrative level 2 names and are thus not given administrative level 2 codes.
6. For Togo, a few areas, such as Oti-Sud in Savanes, do not correspond to either COD or GAUL names.
7. For March 2020 in Niger, some adm 2 areas were divided into “accessible” or with “limited_access”
8. For Nov 2020 in Niger, similar to March 2020, some adm 2 areas were divided into “accessible” or with “limited_access” . The composition of the accessible vs non accessible areas (adm3) changed from March 2020, in Guidan Roudji and Madarounfa.
9. In Niger, many adm2 areas were divided into “accessible” or with “limited_access” in March and Sep 2020 and March 2021. In some of these areas, the adm3 composition of accessible/limited access changed over the CH rounds and the name of the adm2 reflects both whether it was accessible and when the boundary changed.

Further work is needed to properly classify and standardized admin3 areas (in Niger), urban areas and special geographic regions including areas in Côte d'Ivoire and Nigeria.

Annexe 4: Understanding estimates and projections

Users should be careful not to count twice the projected figures for the same period (because often the projected figures are generated twice a year (September-December and January-May) for the same period (June-August). **It is generally suggested to use projected numbers closest to the date of the projection.**

The variable *usethisperiod* indicates (with Y or N) whether this is the recommended exercise/reference period to use.

Additionally, the recommended exercise/reference periods are highlighted in yellow in the table below:

chtype	exercise_code	exercise_label	exercise_year	reference_code	reference_label	reference_year
current	2	Jan-May	2014	2	Jan-May	2014
projected	2	Jan-May	2014	3	Jun-Aug	2014
current	1	Sep-Dec	2014	1	Sep-Dec	2014
projected	1	Sep-Dec	2014	2	Jan-May	2015
current	2	Jan-May	2015	2	Jan-May	2015
projected	2	Jan-May	2015	3	Jun-Aug	2015
current	1	Sep-Dec	2015	1	Sep-Dec	2015
projected	1	Sep-Dec	2015	3	Jun-Aug	2016
current	2	Jan-May	2016	2	Jan-May	2016
projected	2	Jan-May	2016	3	Jun-Aug	2016
current	1	Sep-Dec	2016	1	Sep-Dec	2016
projected	1	Sep-Dec	2016	3	Jun-Aug	2017
current	2	Jan-May	2017	2	Jan-May	2017
projected	2	Jan-May	2017	3	Jun-Aug	2017
current	1	Sep-Dec	2017	1	Sep-Dec	2017
projected	1	Sep-Dec	2017	3	Jun-Aug	2018
current	2	Jan-May	2018	2	Jan-May	2018
projected	2	Jan-May	2018	3	Jun-Aug	2018
current	1	Sep-Dec	2018	1	Sep-Dec	2018
projected	1	Sep-Dec	2018	3	Jun-Aug	2019
current	2	Jan-May	2019	2	Jan-May	2019
projected	2	Jan-May	2019	3	Jun-Aug	2019
current	1	Sep-Dec	2019	2	Sep-Dec	2019
projected	1	Sep-Dec	2019	3	Jun-Aug	2020
current	2	Jan-May	2020	2	Jan-May	2020
projected	2	Jan-May	2020	3	Jun-Aug	2020
current	1	Sep-Dec	2020	1	Sep-Dec	2020
projected	1	Sep-Dec	2021	3	Jun-Aug	2021
current	2	Jan-May	2021	2	Jan-May	2021
projected	2	Jan-May	2021	3	Jun-Aug	2021

Users should use the June 2020 current period estimates (info below), for Burkina Faso, Nigeria and Togo instead of the Jan-May 2020 projected figures directly above.

current	3	Jun-Aug	2020	3	Jun-Aug	2020
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