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 Harmonise (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 Harmonise 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 arrondisements 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\_acess”
8. For Nov 2020 in Niger, similar to March 2020, some adm 2 areas were divided into “accessible” or with “limited\_acess” . The composition of the accessible vs non accessible areas (adm3) changed from March 2020, in Guidan Roumdji and Madarounfa.
9. In Niger, many adm2 areas were divided into “accessible” or with “limited\_acess” 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 |