



IPC Acute Malnutrition Analysis

Country: Burundi
Date: 18 Sept. 2017

Key Findings

- Out of the 18 provinces in the country, 9 are classified as in Phase 2 according to the IPC Acute Malnutrition (IPC AMN) scale; Phase 2 is considered as “Alert” situation requiring monitoring and strengthening of resilience based on the IPC AMN scale.
- Of the nine provinces, 3 provinces (namely Karusi, Kayanza, and Kirundo) have relatively high levels of acute malnutrition levels which require particular attention.
- The major factors contributing to acute malnutrition include very poor quality of food, relatively high prevalence of diseases, and very poor sanitation.
- While the immediate response must focus on treating children with acute malnutrition, it is also vital to plan interventions to address the major contributing factors in order to reduce acute malnutrition levels.

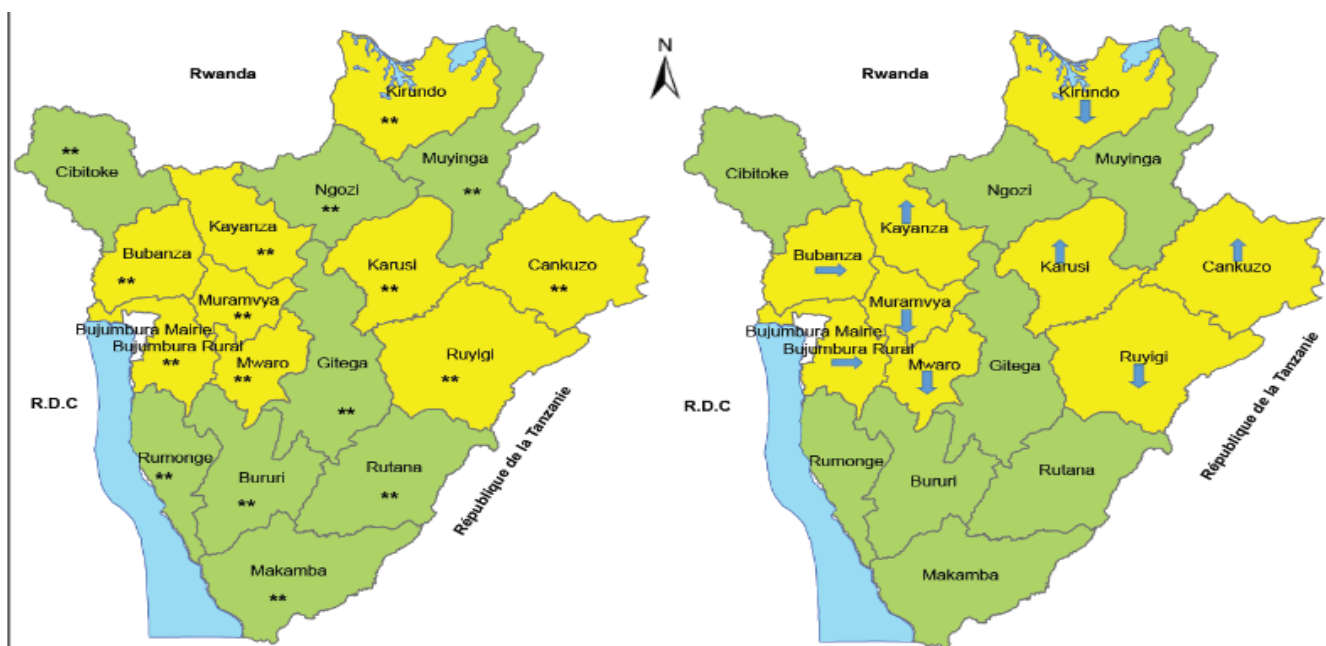
GAM Prevalence and Estimated Caseload for Acute

Province	GA M	Estimated # of GAM	Estimated # of MAM	Estimated # of SAM cases
Bubanza	5.5	9,500	8,464	1,036
Bujumbura	6.0	14,251	11,401	2,850
Cankuzo	6.3	7,368	5,731	1,637
Karusi	8.1	18,065	15,165	2,899
Kayanza	7.4	22,137	17,051	5,085
Kirundo	7.4	23,757	16,694	7,063
Muramvya	5.4	8,074	6,130	1,944
Mwaro	5.8	8,095	6,700	1,396
Ruyigi	6.2	12,690	11,462	1,228
Total	N/A	123,937	98,798	25,138

[GAM: Global Acute Malnutrition; MAM: Moderate Acute Malnutrition; SAM: Severe Acute Malnutrition]

IPC for Acute Malnutrition Map
Current Classification
10/2017 to 12/2017

IPC for Acute Malnutrition Map
Projected Classification
01/2018 to 05/2018



0 15 30 60 Km

Lacs
Limites provinciales

Classification IPC de la malnutrition aiguë

- Phase 1 : Acceptable
- Phase 2 : Alerte
- Phase 3 : Sérieuse
- Phase 4 : Critique
- Phase 5 : Extrêmement critique

Evaluation de la fiabilité des preuves

- ** Score de fiabilité Elevé
- * Score de fiabilité Elevé

Evolution projetée dans la phase

- ↑ Susceptible de s'améliorer
- Susceptible de rester identique
- ↓ Susceptible de se détériorer



SUMMARY OF FINDINGS, METHODS, AND NEXT STEPS

Findings and Key Issues

Based on the IPC Acute Malnutrition (IPC AMN) scale, 9 of the 18 provinces in Burundi are classified as in Phase 2 while the other provinces are categorised as being in Phase 1. According to the IPC AMN scale, Phase 2 indicates 'Alert' situation, which requires strengthening of existing response capacity and resilience and addressing of contributing factors to malnutrition as well as monitoring of the situation.

Of the nine provinces classified as being in "Alert" situation with regards to acute malnutrition, 3 provinces (namely Karusi, Kayanza, and Kirundo) have relatively high levels of acute malnutrition levels which require particular attention. It's worth to recall that at least 3 cases of Noma have been registered this year in Kirundo province.

Approximately about 125,000 children are expected to suffer from acute malnutrition in 9 of the 18 provinces alone in the country. Available data on the coverage of acute malnutrition treatment suggests that the coverage is not optimal.

Major contributing factors to acute malnutrition identified during the analysis are (1) very poor quality of food intake by children, (2) relatively high prevalence of diseases (particularly malaria), and (3) poor sanitation – see annex II for details on major contributing factors to acute malnutrition by province. It is noted that the quality of food intake by children is poor even in provinces where acute food insecurity is low. This suggests that it may be related to behaviour and/or lack of awareness of child feeding among caregivers. Poor quality of food in other provinces may likely be the result of both food insecurity as well as behaviour and lack of awareness. Several structural issues especially human, physical, and financial capital were also identified as major factors contributing to acute malnutrition in these areas. Anaemia is a major public health problem that calls for urgent attention in all provinces.

According to the IPC AMN projection analysis, the situation is likely to remain the same in all 9 provinces that are classified as Phase 2 during the upcoming rainy season (February-May 2018). However, slight deterioration in acute malnutrition levels are likely in some provinces because of seasonality and disease trends.

Methods & Processes

The IPC AMN analysis was carried out by a group of nutrition, health/WASH, and food security experts from Burundi with the support from members of the IPC Global (Rome) and Regional (East Africa) Support Units using the standard IPC methodology. The analysis was conducted from 23 to 26 August 2017 after a 2 days of intensive training on the IPC AMN tools and procedures.

All 18 provinces in the country was classified based on the acute malnutrition outcomes using the IPC AMN tools and procedures. A detailed analysis of contributing factors were carried out on 9 provinces classified as being in Phase 2 (i.e. Alert) in order to determine the possible contributing factors to acute malnutrition in these provinces.

The main data for the IPC AMN analysis came from the 2016-2017 Burundi Demographic and Health Survey (DHS). Localised SMART nutrition survey data from 2016, and health facility as well as vaccination campaign data from 2017 were also used as complementary to the DHS data in the analysis. For food security related information, the results from the recent IPC Acute Food Insecurity analysis were used. However, the limited amount of recent and specific data about nutrition has represented a shortcoming to this first IPC AMN analysis.

Availability of recent data, representative at the provincial level, was a major limitation for some indicators. In these cases, inference was made based on available data.

Seasonality and Monitoring Implications

The acute malnutrition situation is likely to remain in the same IPC AMN phase in all the 9 provinces classified as being in Phase 2 according to the IPC AMN scale in the upcoming season. However, some further deterioration in acute malnutrition situation is expected in some of the provinces based on the seasonal disease patterns and historical acute malnutrition trends.

It is important to monitor the seasonal diseases (particularly diarrhoea, malaria and Acute Respiratory Infections (ARI)) as they are expected to increase in the coming season and ensure treatment is available and accessible.

Recommendations and Next Steps for Analysis and Decision Making

Ensuring treatment for all current as well as future cases of acute malnutrition is high priority. Although data on the coverage of acute malnutrition treatment is not available for all provinces, available data suggests that the treatment coverage is not optimal. Therefore, availability of as well as access to treatment programmes should be ensured. This may involve scaling up of existing treatments as well as opening new treatment programmes for acute malnutrition.

While ensuring universal **treatment** for acute malnutrition is a first priority, attention must also be given to addressing other factors identified as major contributing factors to acute malnutrition as a way to **prevent** acute malnutrition in the future. The prevention efforts should focus on improving of quality of food consumed by children, treatment and prevention of childhood illness, and addressing poor sanitation situation. It is recommended that a response analyses involving all nutrition, health, food security, as well as WASH stakeholders in the country be carried out to identify appropriate interventions to address acute malnutrition. This response analysis may initially focus on the 3 provinces (i.e. Karusi, Kayanza, and Kirundo) with relatively high levels of acute malnutrition.

Although it was not a focus of the IPC AMN analysis, very high levels of anaemia across all provinces calls for immediate attention. A detailed analysis of the causes is needed to design appropriate intervention to tackle anaemia.

The quality of the analysis depends of the quality and variety of data available. It is indispensable to plan timely in advance the collection and analysis of nutrition specific data (i.e. national SMART) to enrich the next IPC AMN analysis.

Contact for Further Information

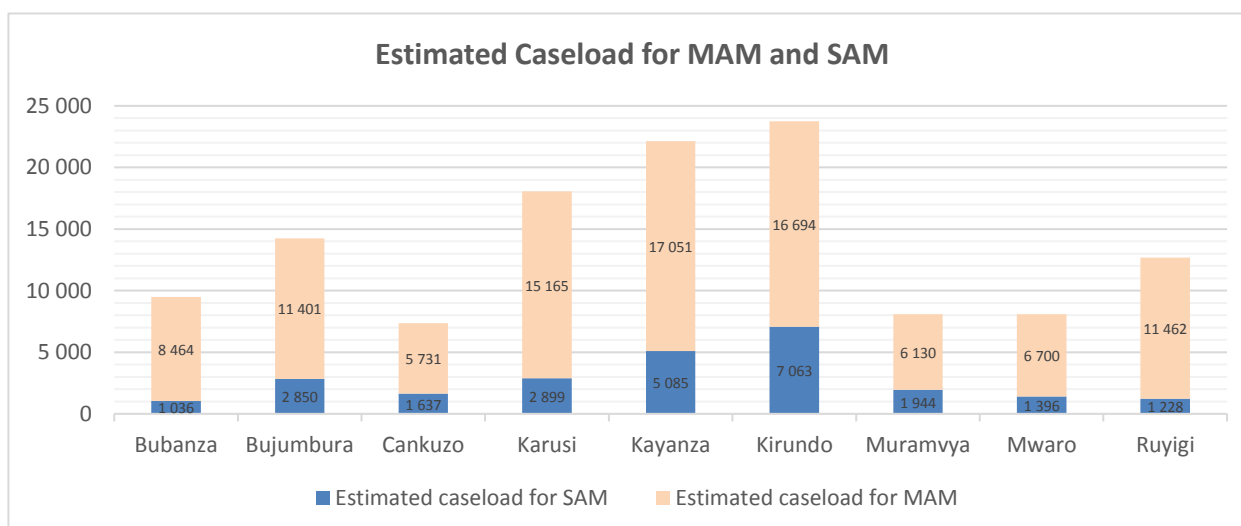
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PAM(www.wfp.org/countries/Burndi), and *UNICEF* (www.unicef.org)

Annex I: Expected number of cases

Expected number of cases of acute malnutrition

[Estimated caseload for 12 months (taking into account an incident rate of 2.0 as per the practice in country and 100% coverage)]

Province	Total population	6-59 Months Children Population	GAM %	Estimated no. of GAM cases	Estimated no. of MAM cases	Estimated no. of SAM cases
Bubanza	482,484	86,365	5.5	9,500	8,464	1,036
Bujumbura rural	663,468	118,761	6.0	14,251	11,401	2,850
Cankuzo	326,687	58,477	6.3	7,368	5,731	1,637
Karusi	622,966	111,511	8.1	18,065	15,165	2,899
Kayanza	835,600	149,572	7.4	22,137	17,051	5,085
Kirundo	896,754	160,519	7.4	23,757	16,694	7,063
Muramvya	417,633	74,756	5.4	8,074	6,130	1,944
Mwaro	389,876	69,788	5.8	8,095	6,700	1,396
Ruyigi	571,705	102,335	6.2	12,690	11,462	1,228
Total	5,207,173	932,084	N/A	123,937	98,798	25,138



Annex II: Major contributing factors to acute malnutrition by province

SUMMARY CONTRIBUTING FACTORS										
		BUBANZA	BUJUMBURA	CANKUZO	KARUSI	KAYANZA	KIRUNDO	MURAMVYA	MWARO	RUYIGI
Inadequate dietary intake	Minimum Dietary Diversity (MDD)	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR
	Minimum Meal Frequency (MMF)	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR
	Minimum Acceptable Diet (MAD)	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR
	Minimum Dietary Diversity – Women (MDD-W)	NO DATA	NO DATA	NO DATA	MINOR CONTRIBUTING FACTOR	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
	Others	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
Diseases	Diarrhoea	MAJOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR
	Dysentery	NO DATA	NO DATA	NO DATA	NO DATA	MAJOR CONTRIBUTING FACTOR	NO DATA	NO DATA	NO DATA	NO DATA
	Malaria	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR
	HIV/AIDS prevalence	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
	Acute Respiratory Infection	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	NO DATA
	Disease outbreak	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
	Others	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA
Inadequate access to food	Outcome of the IPC for Acute Food Insecurity analysis	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	MAJOR CONTRIBUTING FACTOR
Inadequate care for children	Exclusive breastfeeding under 6 months	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NO DATA	MAJOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR
	Continued breastfeeding at 1 year	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NO DATA	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR
	Continued breastfeeding at 2 years	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR
	Introduction of solid, semi-solid or soft foods	MINOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	MINOR CONTRIBUTING FACTOR	NO DATA	NO DATA	MAJOR CONTRIBUTING FACTOR	NOT A CONTRIBUTING FACTOR	NO DATA	NO DATA
	Others	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA	NO DATA

Insufficient health services & unhealthy environment	Measles vaccination	Yellow	White	Yellow	White	Yellow	Light Pink	Light Pink	Light Pink	Light Pink
	Polio vaccination	Yellow	White	Yellow	White	Red	Light Pink	Light Pink	Light Pink	Light Pink
	Vitamin A supplementation	Yellow	Light Pink	Yellow	White	Yellow	Light Pink	Light Pink	Light Pink	Yellow
	Skilled birth attendance	Yellow	Light Pink	Red	White	Yellow	Light Pink	Light Pink	Yellow	Light Pink
	Health seeking behaviour	White	Light Pink	White	White	Red	Yellow	Light Pink	Yellow	Red
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)	Red	Light Pink	White	Yellow	White	Yellow	Light Pink	White	White
	Access to a sufficient quantity of water	White	Light Pink	White	White	Yellow	White	White	Yellow	White
	Access to sanitation facilities	Red	Light Pink	Red	Red	White	Red	Red	White	White
	Access to an improved source of drinking water	White	Light Pink	Red	Light Pink	White	Yellow	White	Light Pink	White
	Others	White	White	White	White	White	White	White	White	White
Basic causes	Human capital	Red	Yellow	Red	Yellow	Yellow	Red	Yellow	Yellow	Red
	Physical capital	Yellow	Light Pink	Red	Light Pink	Yellow	Red	Light Pink	Red	Red
	Financial capital	Yellow	Yellow	Red	Red	Red	Red	Yellow	Red	Red
	Natural capital	Yellow	Light Pink	Yellow	Light Pink	Light Pink	Red	Red	White	White
	Social capital	Yellow	White	Yellow	Light Pink	Light Pink	White	Light Pink	White	Light Pink
	Policies, Institutions and Processes	Yellow	White	Yellow	Red	Red	Light Pink	Light Pink	White	White
	Usual/Normal Shocks	Yellow	White	White	Light Pink	Yellow	White	Yellow	White	White
	Recurrent Crises due to Unusual Shocks	Yellow	White	White	White	Yellow	White	Light Pink	White	White
	Other basic causes	White	White	White	White	White	White	White	White	White
Other nutrition issues	Anaemia among children 6-59 months	Red	White	Red	Red	Red	Red	Red	Red	Red
	Anaemia among pregnant women	White	White	White	White	White	White	White	White	White
	Anaemia among non-pregnant women	White	White	White	White	White	White	Yellow	White	White
	Vitamin A deficiency among children 6-59 months	White	White	White	Yellow	White	White	White	White	Light Pink
	Low birth weight	White	White	Red	White	White	White	Yellow	White	White
	Fertility rate	White	White	Red	Yellow	White	Red	White	Light Pink	Red
	Others	White	White	White	White	White	White	White	White	White

Annex III: Additional analysis of provinces with relatively high levels of acute malnutrition

Karusi province

Although it is classified as being in Phase 2 based on the IPC AMN scale, Karusi province has the highest prevalence of acute malnutrition (8.1%) in Burundi and over 18,000 children are expected to be suffering from acute malnutrition. Although it is expected to see slight improvement in the situation during the upcoming season, the province will still remain in Phase 2.

Analysis of available data on contributing factors to acute malnutrition shows that the following may be the major issues of concern: (a) very poor quality of diet consumed by children, (b) high levels of food insecurity, (c) very poor sanitation, and (d) high incidence of malaria. Additionally, structural issues such as financial capital may also be of concern. Additionally, anaemia is also a major public health problem in the province.

Kayanza province

The acute malnutrition level in Kayanza province is one of the highest (7.4%) in Burundi, although the province is classified as Phase 2 (Alert) according to the IPC AMN scale. The acute malnutrition situation in the province is expected to remain the same in the coming season.

The major contributing factors to acute malnutrition in Kayanza province as identified during the analysis are: (1) poor quality and quantity of food given to children, (2) high incidence of diseases, and (3) structural issues such as financial capital. Relatively better food security situation in the province (based on the IPC Acute Food Insecurity analysis) indicates that the inadequate dietary quality and quantity may be related to behaviour and/or lack of awareness among caregivers on the appropriate feeding for children. Anaemia is also a major public health problem in the province.

Kirundo province

Kirundo province has the second highest level of acute malnutrition in Burundi with 7.4% of global acute malnutrition. It is classified as in Phase 2 according to the IPC AMN scale. The acute malnutrition levels are likely to deteriorate further in the upcoming rainy season, although the overall Phase for the province is expected to remain the same.

Based on the IPC AMN analysis, the following issues have been identified as major issues possible contributing to the high levels of acute malnutrition in the province: (a) poor quality of diet consumed by children, (b) relatively high levels of food insecurity, and (3) poor sanitation. Several structural issues (such as human, physical, and social capitals) are also identified as major contributing factors to acute malnutrition in the province. Additionally, very high prevalence of anaemia is also of a major concern.