



Indicator	Measurement	Definition	Source	Frequency	Country	Year	Unit	Target	Notes
Prevalent malnutrition - MICS	Prevalence of malnutrition	OPTIONAL INDICATOR: Prevalence of malnutrition in children aged 0-59 months	Prevalent severe by location, SES	Number of prevalent severe malnourished children / Total number of children aged 0-59 months	Population-based surveys, local area-based surveys, facility-based data	Good, assume utilization	UNICEF/MICS/ WB, IND.Os	Emergency & stable	Concentration of Vitamin A in breastmilk is dependent on maternal nutritional status and rates.
		OPTIONAL INDICATOR: Prevalence of malnutrition in children aged 0-59 months	All pregnant & lactating women by location, SES	Number of pregnant women receiving Vitamin A / Total number of pregnant women	Population-based surveys, local area-based surveys, facility-based data	Expanded if measuring all indicators, less for critical age e.g. Night blindness	UNICEF/MICS/ WB, IND.Os	Emergency & stable	Vitamin A breast milk the main determinant of infant vitamin A status
		OPTIONAL INDICATOR: Prevalence of malnutrition in children aged 0-59 months	All pregnant & lactating women by location, SES	Number of pregnant women receiving Vitamin A / Total number of pregnant women	Population-based surveys, local area-based surveys, facility-based data	Expanded if measuring all indicators, less for critical age e.g. Night blindness	UNICEF/MICS/ WB, IND.Os	Emergency & stable	
Infant mortality rate (IMR)	Impact	OPTIONAL INDICATOR: Infant mortality rate (probability of dying between birth and age 1 per 1000 live births)	Infants from birth to 1 years by sex, location and SES	Infant mortality rate is strictly speaking not a rate (i.e. the number of deaths / the number of population at risk during a certain period of time) but a probability of death derived from a rate table and expressed as per 1000 live births	- Civil registration with complete coverage - Population census - Household surveys	Good if good measurement use limitations	UNICEF, WHO, DHS, MICS, HTS	Emergency & stable	Infant mortality represents an important component of under-five mortality. Like under-five mortality, infant mortality rates measure child survival. They also reflect the social, economic and environmental conditions in which children (and adults) live, including their health care. Since data on the incidence and prevalence of disease (especially child mortality) are unreliable, mortality rates are often used to identify vulnerable populations. Infant mortality rate is a MDG indicator
		OPTIONAL INDICATOR: Under-five mortality rate (probability of dying between birth and age 5 per 1000 live births)	Children from birth to 5 years by sex, location and SES	Under-5 mortality rate is strictly speaking, not a rate (i.e. the number of deaths / the number of population at risk during a certain period of time) but a probability of death derived from a rate table and expressed as per 1,000 live births	- Civil registration with complete coverage - Population census - Household surveys	Good if good measurement use limitations	MICS, UNICEF, WHO, DHS, MICS, FHS, NCD, HTS (WHO/WHO)	Emergency & stable	The target of Millennium Development Goal 4 is to "Reduce by two thirds, from 1990 to 2015, the under-five mortality rate"
Measles immunization coverage (MCV)	Impact (proxy for mortality and outcome coverage)	OPTIONAL INDICATOR: Measles immunization coverage (MCV)	Children under 5 years	Total number of children under one year of age who have received at least one dose of measles-containing vaccine in a given year / Total number of children under one year of age	- Household surveys - Facility reporting system	Good	MDG 4.3, GAVI, WHO, UNICEF, DHS	Emergency & stable	Immunization is one of the most powerful and cost-effective forms of primary prevention. A classical prevention strategy which should be maintained to continue effective protection for example, there is strong evidence that introducing children against measles has a direct effect on reducing mortality from measles, however, this effect is only as a proxy for impact on mortality
		OPTIONAL INDICATOR: Measles immunization coverage (MCV)	Children under 5 years	MCV coverage among 1-year-olds (%) The percentage of children under one year of age who have received at least one dose of measles-containing vaccine in a given year / Total number of children under one year of age	- Household surveys - Facility reporting system	Good	MDG 4.3, GAVI, WHO, UNICEF, DHS	Emergency & stable	Immunization is one of the most powerful and cost-effective forms of primary prevention. A classical prevention strategy which should be maintained to continue effective protection for example, there is strong evidence that introducing children against measles has a direct effect on reducing mortality from measles, however, this effect is only as a proxy for impact on mortality
Pneumonia disease treatment	Outcome	OPTIONAL INDICATOR: Pneumonia disease treatment	Children under 5 years	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who received antibiotics	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Difficult to measure accurately	MICS, DHS, WHO, NCDs	Emergency & stable	Most deaths in crisis are same and new also same cases before the crisis. Evidence that pneumonia and diarrhea may follow in crisis.
		OPTIONAL INDICATOR: Pneumonia disease treatment	Children under 5 years	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who were taken to a health provider	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Difficult to measure accurately	MICS, DHS, WHO, NCDs	Emergency & stable	Health seeking behaviour
Diarrhoeal disease treatment & prevention	Outcome	OPTIONAL INDICATOR: Diarrhoeal disease treatment & prevention	Children under 5 years	Number of children under age 5 with diarrhoea in the previous 2 weeks who received ORT / Total number of children under age 5 with diarrhoea in the previous 2 weeks	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Difficult to measure accurately	DFID, MICS, NCDs	Emergency & stable	Diarrhoeal diseases remain one of the major causes of mortality among under-fives, accounting for 1.5 million child deaths worldwide, despite the progress in its management and the undeniable success of the oral rehydration therapy (ORT). Tracking monitoring of the coverage of the very cost-effective intervention is crucial for the monitoring of progress towards the MDG target-related Millennium Development Goals and Objectives.
		OPTIONAL INDICATOR: Diarrhoeal disease treatment & prevention	Children under 5 years	Number of children under age 5 with diarrhoea in the previous 2 weeks who received zinc / Total number of children under age 5 with diarrhoea in the previous 2 weeks	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Good assume tablets consumed	MICS, DHS, WHO, NCDs	Emergency & stable	For many indicators, the prevalence (or probability) of zinc intake below the appropriate minimum average (EAR) should be used, as the prevalence of inadequate intakes of zinc is greater than 25%, the risk of zinc deficiency is considered to be elevated. Recent studies indicate that under-5 children respond to zinc supplementation with increased growth. When the prevalence of the high for age is 25% or more, the prevalence of zinc deficiency can also be reported
Maternal treatment & prevention	Outcome	OPTIONAL INDICATOR: Maternal treatment & prevention	Children under 5 years	Number of children under age 5 reported to have had fever in the previous 2 weeks who were treated with an appropriate antiparasitic / Total number of children under age 5 reported to have had fever in the previous 2 weeks	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Difficult to measure accurately	MDG 4.3, MICS, DHS, WHO	Emergency & stable	
		OPTIONAL INDICATOR: Maternal treatment & prevention	Children under 5 years	Number of children under age 5 who were treated with an appropriate antiparasitic / Total number of children under age 5 who were treated with an appropriate antiparasitic	Household surveys, facility reporting system, IMC projects, health & nutrition assessments, monitoring	Good	MDG 4.3, MICS, DHS, WHO	Emergency & stable	
Reduced maternal deaths - MICS	Impact	OPTIONAL INDICATOR: Reduced maternal deaths - MICS	Maternal mortality	Number of maternal deaths in a given year / Total number of women aged 15-49 years	- Civil registration with complete coverage and medical certification of cause of death - Population census - Household surveys - Special studies - Sample or sentinel registration systems	Difficult to measure accurately	WHO, UNFPA, UNICEF, MICS, WB	Emergency & stable	Used as a priority indicator by WHO?
		OPTIONAL INDICATOR: Reduced maternal deaths - MICS	Maternal mortality	Number of maternal deaths in a given year / Total number of women aged 15-49 years	- Civil registration with complete coverage and medical certification of cause of death - Population census - Household surveys - Special studies - Sample or sentinel registration systems	Difficult to measure accurately	WHO, UNFPA, UNICEF, MICS, WB	Emergency & stable	Used as a priority indicator by WHO?
Direct programme evaluation	Output	OPTIONAL INDICATOR: Direct programme evaluation	Children 6-59 months	Recovery rate > 75% (acceptable), < 50% (alarming); Death rate < 10% (45% preferable/acceptable) > 15% (alarming); Underweight > 20% (alarming); Weight gain > 8 g/kg/day (acceptable) < 8 g/kg/day (alarming); Length of stay < 4 weeks (acceptable) > 4 weeks (alarming); Coverage > 50% in total area > 75% in urban area > 50% in a camp (acceptable), < 40% any situation (alarming)	Monitoring	Good	DFID, HRF, UNICEF, CHAP, MGD, NCD, SFRHS, WHTS	Emergency & stable	
		OPTIONAL INDICATOR: Direct programme evaluation	Children 6-59 months	Recovery rate > 75% (acceptable), < 50% (alarming); Death rate < 10% (45% preferable/acceptable) > 15% (alarming); Underweight > 20% (alarming); Weight gain > 8 g/kg/day (acceptable) < 8 g/kg/day (alarming); Length of stay < 4 weeks (acceptable) > 4 weeks (alarming); Coverage > 50% in total area > 75% in urban area > 50% in a camp (acceptable), < 40% any situation (alarming)	Monitoring	Good	DFID, HRF, UNICEF, CHAP, MGD, NCD, SFRHS, WHTS	Emergency & stable	
Number of people directly assisted by food security programmes	Output	OPTIONAL INDICATOR: Number of people directly assisted by food security programmes	Total population	Number of people directly assisted by food security programmes (Funded by DFID)/Total population x 100	Household surveys, programme monitoring, food security surveys	Good	DFID, FAO, WFP, WB	Emergency & stable	Lack of food is a direct cause of malnutrition.
		OPTIONAL INDICATOR: Number of people directly assisted by food security programmes	Total population	Number of household members in households that have access to social protection programmes (Funded by DFID) / Total population x 100	Household surveys, programme monitoring, child protection networks	Good	DFID, UNICEF	Emergency & stable	Increasing evidence suggesting cash transfers (or 'safety nets') provide an effective way to prevent hunger. Evidence on ongoing terms situations where the resilience of vulnerable communities needed to be built up over time
Poverty	Impact	OPTIONAL INDICATOR: Poverty	Total population by location	When $R_{ij} = \frac{1}{N} \sum_{j=1}^N \frac{Y_{ij}}{Y_i}$ is an indicator function that takes on a value of 1 if the individual expression is true, and 0 otherwise. If the individual consumption or income $Y_{ij}$ is less than the poverty line $(Y_i)$ , then it is equal to 1 and the individual is counted as poor. If $Y_{ij}$ is the total number of the poor, it is a total population	The indicator is produced by the World Bank Development Research Group based on household data from nationally representative household surveys, which are conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Development Research Group	Good	MDG 1, WHO	Stable	Only nationally representative surveys that are of good quality, contain sufficient information to produce a comprehensive consumption or income per capita, and are comparable across countries and over time. Consumption or income per capita is used as the indicator. If the indicator is not available, the indicator is calculated as the ratio of the number of people living on less than the poverty line to the total population. The indicator is calculated as the ratio of the number of people living on less than the poverty line to the total population.
		OPTIONAL INDICATOR: Poverty	Total population by location	When $R_{ij} = \frac{1}{N} \sum_{j=1}^N \frac{Y_{ij}}{Y_i}$ is an indicator function that takes on a value of 1 if the individual expression is true, and 0 otherwise. If the individual consumption or income $Y_{ij}$ is less than the poverty line $(Y_i)$ , then it is equal to 1 and the individual is counted as poor. If $Y_{ij}$ is the total number of the poor, it is a total population	The indicator is produced by the World Bank Development Research Group based on household data from nationally representative household surveys, which are conducted by national statistical offices or by private agencies under the supervision of government or international agencies and obtained from government statistical offices and World Bank Development Research Group	Good	MDG 1, WHO	Stable	Only nationally representative surveys that are of good quality, contain sufficient information to produce a comprehensive consumption or income per capita, and are comparable across countries and over time. Consumption or income per capita is used as the indicator. If the indicator is not available, the indicator is calculated as the ratio of the number of people living on less than the poverty line to the total population. The indicator is calculated as the ratio of the number of people living on less than the poverty line to the total population.
Prevalence of undernourishment in total population	Impact	OPTIONAL INDICATOR: Prevalence of undernourishment in total population	Total population by gender, age, location and SES	FAO estimates of the prevalence of undernourishment are essentially a measure of food deprivation based on the calculation of three key parameters for each country: the average amount of food available for average consumption per person, the level of inequality in access to that food and the average amount of calories required for an average person	FAO statistics division. Country statistics on total food production, trade, stocks and food losses; food consumption data from national household surveys; country anthropometric data by gender and age and UN country population estimates, total and by gender and age	Relies on reliable and accurate data to calculate indicator	MDG 1, FAO, WHO	Stable	Undernourishment refers to the condition of people whose dietary energy consumption is consistently below a minimum dietary energy requirement to maintain a healthy body and carrying out light physical activity with an acceptable minimum level of working hours. FAO
		OPTIONAL INDICATOR: Prevalence of undernourishment in total population	Total population by gender, age, location and SES	FAO estimates of the prevalence of undernourishment are essentially a measure of food deprivation based on the calculation of three key parameters for each country: the average amount of food available for average consumption per person, the level of inequality in access to that food and the average amount of calories required for an average person	FAO statistics division. Country statistics on total food production, trade, stocks and food losses; food consumption data from national household surveys; country anthropometric data by gender and age and UN country population estimates, total and by gender and age	Relies on reliable and accurate data to calculate indicator	MDG 1, FAO, WHO	Stable	Undernourishment refers to the condition of people whose dietary energy consumption is consistently below a minimum dietary energy requirement to maintain a healthy body and carrying out light physical activity with an acceptable minimum level of working hours. FAO
Food Consumption Score (FCS)	Outcome	OPTIONAL INDICATOR: Food Consumption Score (FCS)	Household, by location, SES	Score: 0-21 Poor; 21-35 Borderline; > 35 Acceptable	Household survey, FMS	OK, may be difficult to measure accurately	WFP, CFPSA, IFSA	Emergency & stable	As the household level, scores are mainly used as a proxy of food security. They are combined to the energy adequacy of intake, i.e. the ability of the household to cover basic energy needs of its members. They have been shown to be associated with various other measures of household food security related to access.
		OPTIONAL INDICATOR: Food Consumption Score (FCS)	Household, by location, SES	Score: 0-21 Poor; 21-35 Borderline; > 35 Acceptable	Household survey, FMS	OK, may be difficult to measure accurately	FANTA, WHO	Emergency & stable	Used to identify food access and consumption problems at the population level
Dietary Diversity (DD)	Outcome	OPTIONAL INDICATOR: Dietary Diversity (DD)	Household, by location and age, location and SES	The numbers of foods out of 12 groups	Household survey, FMS	OK, maybe difficult to measure accurately	FANTA, WHO	Emergency & stable	Used to identify food access and consumption problems at the population level
		OPTIONAL INDICATOR: Dietary Diversity (DD)	Household, by location and age, location and SES	The numbers of foods out of 12 groups	Household survey, FMS	OK, maybe difficult to measure accurately	FANTA, WHO	Emergency & stable	Used to identify food access and consumption problems at the population level
Depth of hunger (degree of food deprivation)	Outcome	OPTIONAL INDICATOR: Depth of hunger (degree of food deprivation)	Total population by SES and location	Difference between the minimum dietary energy and the average dietary energy intake of the undernourished population (Food deprived)	FAO statistics division	OK, maybe difficult to measure accurately	FAO	Stable	The intensity of food deprivation is low when it is less than 200 kcal/person per day. The greater the food deficit, the greater the susceptibility for health risks associated with hunger. http://www.fao.org/docstore/food-security-statistics/en/
		OPTIONAL INDICATOR: Depth of hunger (degree of food deprivation)	Total population by SES and location	Difference between the minimum dietary energy and the average dietary energy intake of the undernourished population (Food deprived)	FAO statistics division	OK, maybe difficult to measure accurately	FAO	Stable	The intensity of food deprivation is low when it is less than 200 kcal/person per day. The greater the food deficit, the greater the susceptibility for health risks associated with hunger. http://www.fao.org/docstore/food-security-statistics/en/
Composite indicators to measure hunger									

Global Hunger Index	Impact	<b>COMPOSITE INDICATOR 2:</b> A composite index being the average of child undernourishment, child mortality and the prevalence of undernourishment in total population.	Total population	1. Child undernourishment; 2. Child mortality; 3. Prevalence of undernourishment in total population, each expressed as a percentage and given equal weight. The index value between a minimum of 0 and a maximum of 100.	See above individual indicators	Relies on reliable and accurate data to calculate indicator	WHO, IFPRI	Stable	Good measure of nutrition outcomes	Higher GHI values indicate more hunger		
Hunger	Impact	In its composition <b>Composite hunger score</b>	Total population National and sub-national	1. Child undernourishment; 2. Food deprivation (Prevalence of undernourishment in total population); 3. Critical food deficit (undernourishment)	See above individual indicators	Relies on reliable and accurate data to calculate indicator	FAO	Stable				
Household hunger scale	Outcome	<b>OPTIONAL INDICATOR:</b> Based on 3 questions on household food access (PHAS)- Household Food Insecurity Access Scale	Household, by location, SES	Score 0-1 Little to no household hunger; Score 2-3 Moderate household hunger; Score 4-6 Severe household hunger	Household survey	Relies on reliable and accurate data to calculate indicator	PANFA	Emergency and stable				
<b>Water (sanitation)</b>												
Water availability	Output	<b>OPTIONAL INDICATOR:</b> Number of households with access to water	All population, by SES and location	Number of households with at least 15 lpd	National census, Household survey, local area survey	Good	MCS (WASH), JIP (SNICEF/WHO)	Emergency & Stable	Water availability is a readily measured, widely advocated, and has strong links to health outcomes (Diarrhea). Identifying the burden of disease associated with inadequate provision of water and sanitation in selected sub-Saharan regions camps. (J Water Health 2006)	Access to drinking water and improved sanitation is a fundamental need and a human right vital for the dignity and health of all people. The health and economic benefits of improved water supply to households and individuals (especially children) are well documented. Both indicators are used to monitor progress towards the MDGs.	Information is missing from many developed countries. More needs to be done to address the issues of sustainability and safety in drinking water provision.	Corwin AA, Shwaiba D, Corwin N, Abdala F, Ezzat N, Awambou C A review of water and sanitation provision in refugee camps in association with selected health and nutrition indicators—the need for integrated service provision. J Water Health. 2008 Mar;10(1):1-15.
Drinking water source	Output	<b>OPTIONAL INDICATOR:</b> Number of households provided with their improved drinking water sources in a given year	All population, by SES and location	Total number of households	National census, Household survey, local area survey	Good	MCS (WASH), JIP (SNICEF/WHO), WFP	Emergency & Stable	Yes, WFP associated with WHZ, WAZ, HAZ	Access to drinking water and improved sanitation is a fundamental need and a human right vital for the dignity and health of all people. The health and economic benefits of improved water supply to households and individuals are well documented. Use of an improved drinking water source is a proxy for the use of safe drinking water.	Information is missing from many developed countries. More needs to be done to address the issues of sustainability and safety in drinking water provision.	Corwin AA, Shwaiba D, Corwin N, Abdala F, Ezzat N, Awambou C A review of water and sanitation provision in refugee camps in association with selected health and nutrition indicators—the need for integrated service provision. J Water Health. 2008 Mar;10(1):1-15.
Improved sanitation	Output	<b>OPTIONAL INDICATOR:</b> Access to improved sanitation is the percentage of population with access to improved sanitation in a given year.	All population, by SES and location	Total number of households	National census, Household survey, local area survey	Good, as long as facilities are being utilized	MCS (WASH), JIP (SNICEF/WHO), WFP	Emergency & Stable	Access to drinking water and basic sanitation is a fundamental need and a human right vital for the dignity and health of all people.			
Place for handwashing	Output	<b>OPTIONAL INDICATOR:</b> Number of households with water and soap at specific place for hand washing	All population, by SES and location	Number of households with water and soap at specific place for hand washing/ Total number of households *100	Household survey, local area survey	OK, as long as have indicators on soap availability	MCS (WASH), JIP (SNICEF/WHO)	Emergency & Stable				
Availability of soap	Output	<b>OPTIONAL INDICATOR:</b> Percentage of households with soap anywhere in the household	All population, by SES and location	Percentage of households with soap anywhere in the household/ Total number of households * 100	Household survey, local area survey	OK, as long as soap is utilized	MCS	Stable relations				
Fuel source (solid fuels)	Output	<b>OPTIONAL INDICATOR:</b> Number of household members, in households that use solid fuels, as the primary source of domestic energy to cook	All population, by SES and location	Number of household members in households that use solid fuels as the primary source of domestic energy to cook/ Total number of household members * 100	National census, Household survey, local area survey	Good	MCS, MCS	Emergency & Stable	The use of solid fuels in households is associated with increased mortality from pneumonia and other acute lower respiratory diseases among children as well as increased mortality from chronic obstructive pulmonary disease and lung cancer (where coal is used) among adults. It is also a Millennium Development Goal.	Yes, WFP associated with WHZ, WAZ, HAZ	All countries without survey data and with a GNP per capita above US\$ 10,500 are assumed to have made a complete transition to cooking with non-solid fuels.	