



SMART METHODOLOGY

**Standardizing Measurements of
Public Health Indicators**



Session Objectives

- Various assessment tools.
- Importance of good quality assessments.
- Use of data when designing interventions.
- Monitoring trends using SMART.



Goals of an assessment

- Evaluate the scope and severity of a humanitarian crisis.
- Determine the needs of a new program.
- Evaluate already existing programs.
- Advocacy.

Methods for Data Collection

	Rapid assessment	Cross-sectional Surveys	Surveillance
Objective	Rapid appraisal	Medium-term appraisal	Continuous appraisal
Data Type	Qualitative/ Cross sectional snapshot	Quantitative/ Cross sectional snapshot	Quantitative/ Longitudinal trends
Method	Observational / Secondary source	Sample with survey instruments	Periodic, standardized data collection



Limitations of Cross-sectional Surveys

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- Provides a snapshot at a given moment of time (not trends).
- Unable to establish causality.
- Provides insufficient information for cause-effect analysis.

→ Cross sectional survey data should be used in conjunction with other contextual information

What is SMART?

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To measure the two most vital public health indicators:

- Nutritional status
- Mortality rate

The logo for SMART, where the letters 'S', 'A', 'R', and 'T' are in a dark grey font, and the letter 'M' is in a bright orange color with a white arrow pointing upwards and to the right.

Standardized Monitoring & Assessment
of Relief & Transitions

A **standardised** and **simplified** field survey methodology which produces a snapshot of the current situation on the ground.

The SMART logo, identical to the one above, with 'S', 'A', 'R', and 'T' in dark grey and 'M' in orange with an upward-pointing arrow.

Surveys using SMART

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- Produce representative, accurate and precise estimates of:
- ▣ **Global Acute Malnutrition (GAM).**
 - ▣ **Chronic malnutrition (Stunting).**
 - ▣ **Underweight.**
 - ▣ **Retrospective mortality.**

These four indicators gathered through the SMART methodology provide the **best available validated data** that can be used for:

- ▣ **Planning a new intervention**
- ▣ **Monitoring already existing programs.**



Measuring Nutrition

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- ❑ Age.
- ❑ Sex.
- ❑ Height.
- ❑ Weight.
- ❑ Edema.
- ❑ MUAC.





Measuring Mortality

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Main indicators:

1. Crude Death Rate.
2. Under-5 Death Rate.

Other possible analyses:

- Age-specific death rate.
- Sex-specific death rate.
- (Cause-specific death rate).

SMART can also evaluate:

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- Anemia
- Coverage of blanket programs, immunization, vitamin A distribution.
- Infant and young child feeding (IYCF)
- Food security
- Water, sanitation and hygiene (WASH)
- Mosquito net coverage

Number of additional indicators should be kept to a minimum to ensure high quality data.



Key SMART Innovations

1. User-friendly software -**ENA Software**- that follows every step of a SMART survey.
2. **Flexibility in sample size** calculation.
3. Regularly updated, clear **sampling** guidance based on field experiences, research and best practices.
4. Rigorous **standardization test** and analysis.
5. **Plausibility check** to follow data quality and identify where the problems are.
6. **Improved census procedure** for the Mortality component.

Increased data credibility

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- Rigorous standardisation of field procedures.
- Data quality checks.
- Standardised automated data analysis.



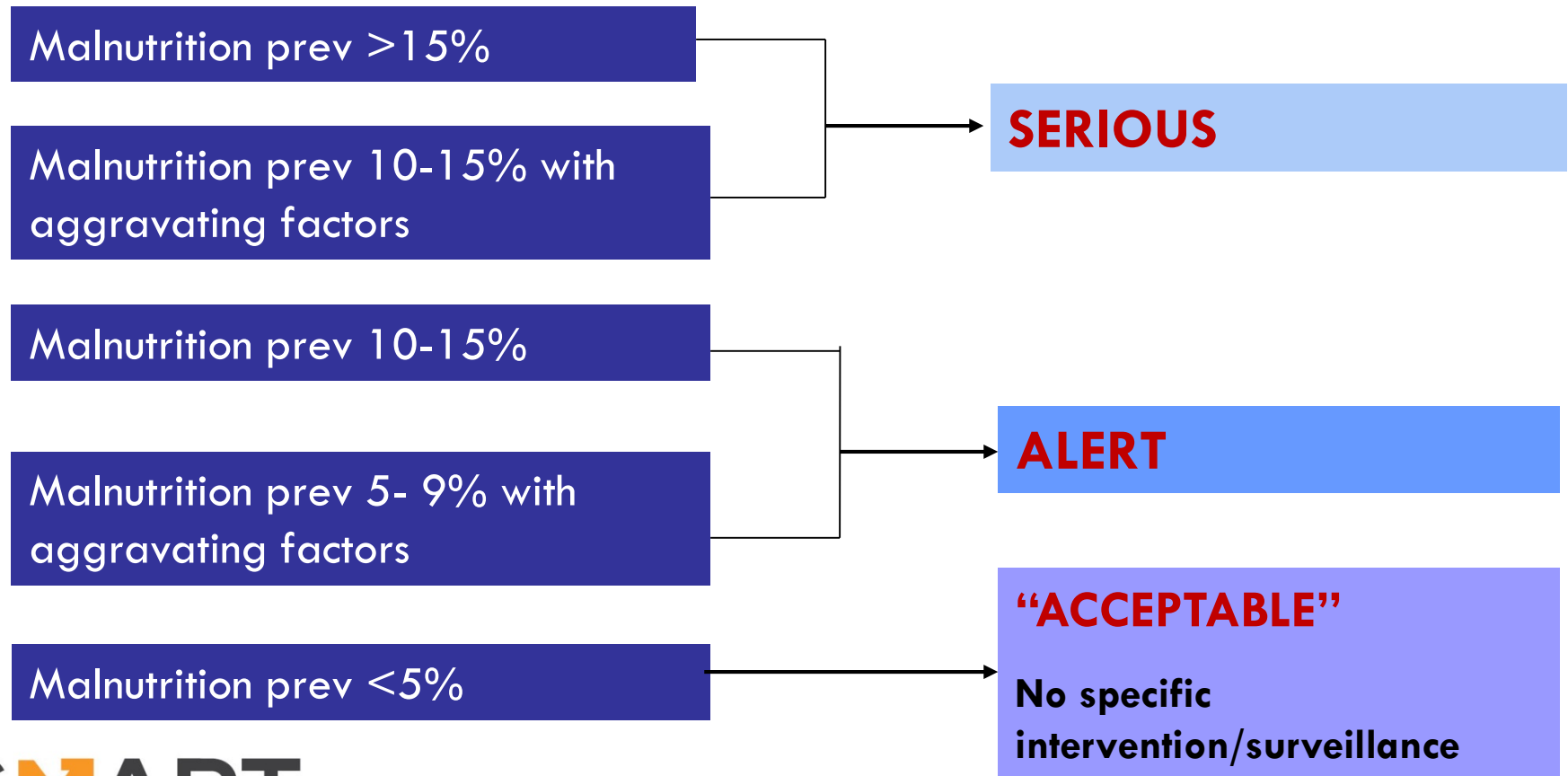
Consistent and reliable survey data is collected and analysed.



Planning Interventions

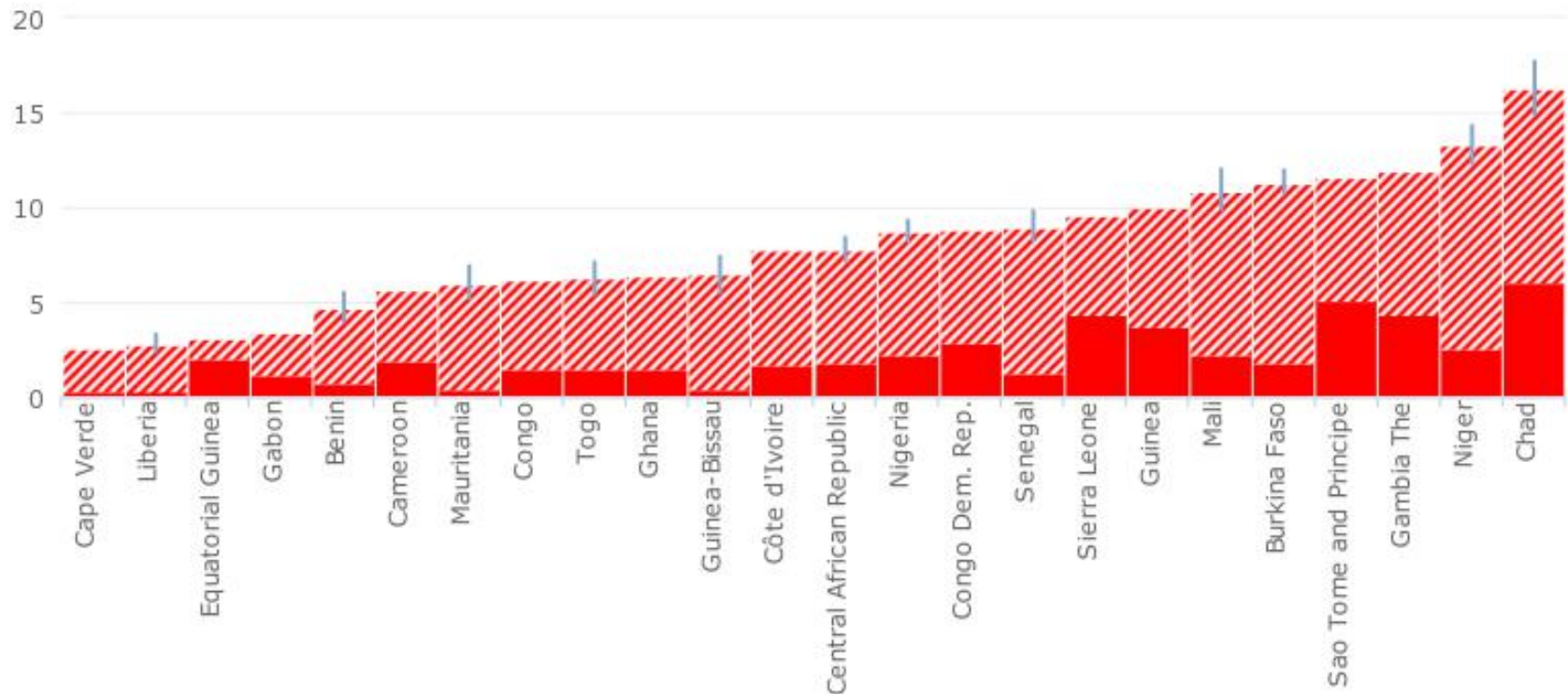
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Bench-marks of GAM Levels for Planning Interventions



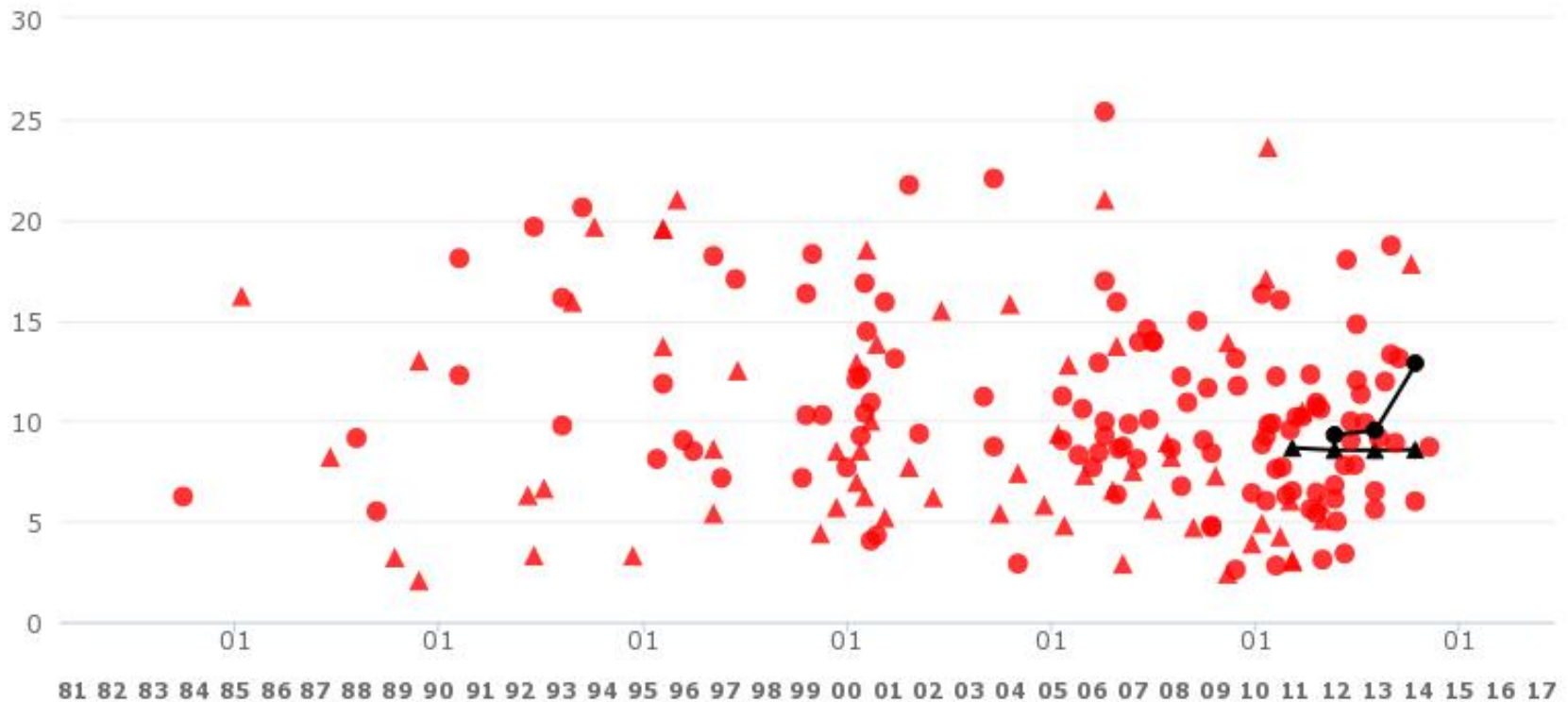
SMART for surveillance

Prevalence of Global Acute Malnutrition (WHZ) in children 6-59 months, West and Central Africa May 2014



Detection of trends over time

Prevalence of Global Acute Malnutrition (WHZ) in children 6–59 months, Sub-Saharan Africa October 1983 – May 2014



ACF-CA: SMART Project Convenor

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Action contre la Faim-Canada, a core member of the GNC, is the **SMART Project Convenor**, and in collaboration with the SMART Technical Advisory Group and Centers for Disease Control and Prevention (CDC Atlanta) establishes and maintains:

- ▣ Standardisation of field tools for survey managers and surveyors
- ▣ **Newly re-vamped** SMART www.smartmethodology.org website.
- ▣ On-line technical forum.
- ▣ Partnerships with other agencies in trainings & survey support.