Interactive Spatial Database for Key Nutrition and Food Security Indicators in Parts of Kenya

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Outline

- Background
- Development of the database
  - Objective
  - preliminary work and process
  - Description of the database
- Key facilitators
- Key challenges/areas requiring improvement
- Conclusion
Arid and semi-arid (ASAL) parts of Kenya vulnerable to elevated levels of food & nutrition insecurity

ASAL closely monitored through regular integrated assessments, to inform timely response

Seasonal assessments
- Food security and Nutrition IPC
- Availability and access to data important to facilitate analysis

Need to disseminate data
- Multiple data requests, ease access
Development of the Survey Database

Objective:

- Government led process supported by UNICEF to enhance access to quality nutrition data on outcomes and contributory factors with the main aim of improving situation analysis processes such as the IPC, facilitate trend analysis and increase access to data and information for decision making.
Development of the survey database

- The national Nutrition Information Technical Working Group (NITWG) identified the need for a database for population based surveys:
  - Data collation and dissemination and need to have an interactive interphase for users
- Tools, indicators & processes standardized to allow data collation
  - Standard integrated SMART and MIYCN tools developed
  - Consultative meetings with food security team: agreed on indicators, harmonized timing, data collection processes
  - Training of partners on food security indicators
  - Data from previous surveys checked, some re-analysed
  - Review and validation of methodologies and results by NITWG
After standardization, MOH with support from UNICEF and partners through NITWG led database development process.

Developed using STAT Planet – interactive data visualization and mapping tool.

Enables non technical users to explore statistics through a user friendly interface.

Available data can be viewed in various forms: maps, tables and graphs.

Hosted in MOH nutrition website to allow easy online access to users.

http://www.nutritionhealth.or.ke/nutrition-reports-on-maps/
Description of the database on STAT planet

- Database collates multi-sectoral data from population level surveys
- Food security indicators included such as Food Consumption Score, Household Dietary Diversity
- Data entered in excel sheet
  - Minimal capacity required
  - User manual
- Data has to meet minimum quality standards
- Complemented by detailed reports on the website
http://www.nutritionhealth.or.ke/nutrition-reports-on-maps/
Global Acute Malnutrition (GAM) is the term used to include all children with moderate wasting, severe wasting or oedema, or any combination of these conditions. Wasting in children is a symptom of acute undernutrition, usually as a consequence of insufficient food intake or a high incidence of diarrhoeal diseases.

[Legend and map with color codes for different categories of GAM]

- Extremely critical (Above 30 %)
- Critical (15.0% - 29.9 %)
- Serious (10.0% - 14.9 %)
- Alert (5.1% - 9.9 %)
- Acceptable
- No data

Source: SMART

Unicef
for every child
Indicator Name: Minimum Dietary Diversity, Women (MDD-W)
Description: proportion of women of reproductive age in a specific geographic area who are consuming a minimum dietary diversity (at least 5 of 10 specific food groups in the previous 24 hours). Food groups include: 1) all starchy staple foods, 2) beans

Legend:
- Very high (Above 30 %)
- High (15.0% - 29.9 %)
- Moderate (10.0% - 14.9 %)
- Low (5.1% - 9.9 %)
- Very low
- No data

Source: Kenya nutrition survey data

Map showing food security indicators in different regions of Kenya, with Wajir South highlighted in red (very high category).
### Child Anthropometric Indicators by gender

**Select a category...**
- Total
- Male
- Female

**Source:** SMART

**Global Acute Malnutrition (GAM)** is the term used to include all children with moderate wasting, severe wasting or oedema, or any combination of these conditions. Wasting in children is a symptom of acute under-nutrition, usually as a consequence of insufficient food intake or a high incidence of infectious diseases.

**Legend:**
- **Extremely critical (Above 30%)**
- **Critical (15.0% - 29.9%)**
- **Serious (10.0% - 14.9%)**
- **Alert (5.1% - 9.9%)**
- **Acceptable**
- **No data**

<table>
<thead>
<tr>
<th>Map area</th>
<th>Total (%) (2017(Jul-Sep))</th>
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<tbody>
<tr>
<td>Moyale</td>
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<tr>
<td>Saku</td>
<td>7.5</td>
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<tr>
<td>Lagdera</td>
<td>16.3</td>
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<tr>
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<td>Wajir North</td>
<td>16.8</td>
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<tr>
<td>Samburu North</td>
<td>18.3</td>
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[unicef logo](https://www.unicef.org)
Key facilitators

- Support to government led processes
  - Enhance sustainability and ownership
  - NITWG – coordination mechanism
  - Common repository for raw data

- Nutrition Information Technical Working Group
  - Guidance, review and validation of data
  - Task forces to help achieve tasks

- Standardized tools and methodologies

- Consultation with other sectors/stakeholders

- Technical support – embedded staff and support from global level as needed
Key challenges/areas requiring improvement

- Some data from surveys conducted in earlier years could not be included:
  - Questions asked differently / different variables—couldn’t be reanalyzed
  - Raw data was not available for some surveys
- Some surveys conducted out of season or different times of the year affecting trends and interpretation of results
- Puzzle around boundaries in maps
  - Official boundaries (GIS codes) vs program/administrative boundaries/Livelihood zones
- Absence of international thresholds for some indicators: will require continuous review and updating based on feedback, learning and emerging global guidance
- Wider dissemination and awareness of database required
Conclusion

- Collaboration of nutrition and food security experts in the design, implementation, analysis and reporting of nutrition and food security assessments is important.
- Validated nutrition and food security indicators are accessible online.
- Easier access of data by stakeholders with interactive interphase.
- Users can download maps, graphs and tables over many years.
- Enhanced analysis processes such as IPC and response analysis.
Acknowledgment

✓ Government of Kenya
✓ Nutrition Information Technical Working Group
✓ Nutrition Programs Working Groups
✓ All sectors for their valuable inputs