“WASH in Nut” Strategy
Sahel Nutritional and Food Crisis 2012
Regional WASH Working Group 2012

Context : A chronic situation worsened by a new drought in the Sahel

In 2011, the Sahel region was marked by an irregular rainy season with localized and prolonged droughts. Significant decreases in agricultural and food for livestock yields were announced.

As a result, in 2012 elevated severe acute malnutrition (SAM) rates were already foreseen in Burkina Faso, Northern Cameroon, Mali, Mauritania, Niger, Northern Nigeria, Northern Senegal and Chad (Sahel strip). Predicted cases for SAM in these countries stands at a minimum of 1 million children. A strong humanitarian response has been mobilised in the West & Central Africa Region to reduce the impact of this nutritional crisis.

Based on this perspective and on the lessons learned from previous droughts, the Regional WASH Group is proposing to reinforce the sectoral response to better fit with the priorities and activities of the nutrition sector – the 3rd objective of the Group in the last Regional CAP process. In practice this means we intend to systematically integrate a WASH ‘minimum package’ (Annex 2) in nutrition humanitarian programmes ('WASH in Nut').

Breaking the vicious circle of ‘diarrhoea-malnutrition’

Malnutrition is the root cause of about 35% of all Under-5 child deaths globally. It is estimated that 50% of these cases are associated with diarrhoea or with repeated intestinal worm infections caused by unsafe drinking water and/or poor sanitation and hygiene (WHO, 2008; Cochrane, 2008).

Diarrhoea is an aggravating factor in malnutrition, as it reduces the body’s capacity to absorb nutrients. Malnourished children are also more likely to contract diarrhoea, as their systems are already weak, and the effect is cumulative. The likelihood of mortality from diarrhoea when a child is severely underweight is almost 10 times higher than average (Black et al, 2008). The vicious circle created has a strong negative impact on child growth and development (see figure Annex 1).

The provision of safe water and sanitation coupled with improvements in hygiene (WASH) can hence contribute significantly to this nutritional challenge and to health improvements. Assuring access to safe water and sanitation and to good hygiene practices (e.g. handwashing) should thus be a key integrated element in all humanitarian responses to a nutritional crisis.

In this strategy, WASH provision is made not only in nutritional centres but also in the households of the caregivers of malnourished children. Interventions such as household water treatment and safe storage monitoring for malnourished children provide an opportunity to target and assist the most vulnerable families proactively.
The ‘WASH in Nut’ Strategy: A Cross-Sectoral Approach

1 Core Strategy

Faced with the challenge of systematically integrating the WASH minimum package into traditionally ‘vertical’ sectoral humanitarian programmes, it is proposed that we shift the functionality to different groups or clusters in countries using the following strategies:

- Establish cross-sectoral ‘WASH in Nut’ focal points within partner organisations and key groups in the nutrition and food security sector for evaluation, planning, monitoring, reporting and a focus on compliance with the standards of the ‘WASH in Nut’ strategy.
- Adopt a proactive approach with all WASH, health, nutrition and food security sector partners to disseminate the strategy, and ensure the integration of health and nutrition goals in all WASH projects from the outset.

2 Strategic Objectives

Understanding that there are different experiences and constraints in each country, the following broad common regional objectives are proposed:

- Target malnourished mothers/carers and children at the household level as a priority, with a community-based proactive approach that complements the ‘hardware’ activities in health/nutrition centres and the community at large.
- Reinforce the principle of the WASH minimum package with a choice of responses dependent on the in-country situation, with optional phasing (e.g. for household water treatment using sachets of ‘Pur’ in the first stage, phasing to the more sustainable use of the Sodis technique).
- Aim for behavior change at the household level, as experience shows us that provision of hardware alone does little to improve health status.
- Target priority regions or zones in conjunction with nutrition specialists, on the basis of nutritional status data (in general prioritise areas with acute malnutrition rates higher than 15%). If necessary, prioritisation of zones with the poorest food security can be made from agricultural information such as rainfall data, soil moisture, satellite images etc

3 Phasing of Priorities

WASH sector actors should work to target priorities in close collaboration with all concerned sector partners, particularly in nutrition and food security. Exact phasing and timings remain flexible, and can be summarized as follows:

1. Short-term/Immediate priorities: deliver a functioning WASH minimum package targeting:
   A. Nutrition centres:
      a) In-patient Facilities (IPF) for malnutrition with medical complications
      b) Outpatient Therapeutic Programmes (OTP), and
      c) Supplementary Feeding Centres (SFC)
   B. Malnourished mothers/carers and children at home:
      a) Breastfeeding mothers and children under 2 years (via mobile nutrition teams)
      b) Mother/carer with children under 5 years
• Secondary/medium term priorities: Continue and improve WASH access, depending on context and budget, with respect to:
  a) High risk zones
  b) Vulnerable communities
  c) Collaborative management of agricultural water resources where vital.

4 Global and Proxy Indicators

The key 'WASH in Nut' global indicators for regional and national monitoring of results are:

- The percentage of nutritional centres delivering the WASH minimum package
- The percentage of malnourished mothers/carers and children benefitting from the WASH minimum package in the home.

Proxy indicators are also needed at community level to evaluate the practices of malnourished mothers and children in the household. For example:

- What quantity of water is consumed at household level?
- How long does the journey to collect water for the household take?
- What is the level of residual chlorine in water stored in the home?
- % of households with permanent access to an improved water source.
- % of households that practice water treatment in the home
- Quantity of water used per person/day.
- % of households where the stored drinking water meets the WHO standards
- % of households where the time taken to collect water is less than 30 minutes
- % of households having soap available in the home
- % of mothers washing hands with soap at critical times
- % of households practicing adequate disposal of children’s faeces
- % of households using improved and well maintained toilets
References/Bibliography


ACF Water, sanitation and hygiene for populations at risk: http://www.actioncontrelafaim.org/en/content/water-sanitation-and-hygiene


Essential Water & Sanitation Requirements for Health Structures, MSF, 2005

Assessing Hygiene Improvement, Aug.2004, Environmental Health Project, USAID

Water and sanitation indicators measurement guide, FANTA, June 1999.
Annex 1: Figures

1. Figure showing the Vicious Cycle of Malnutrition and Diarrhoea

2. Causal Chain between a lack of hygiene, illness and malnutrition
## Annex 2: The WASH Minimum Package with Indicators and Options by Target Group

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Type</th>
<th>WASH Package</th>
<th>Function</th>
<th>Indicators</th>
<th>Examples of activities</th>
</tr>
</thead>
</table>
| **Nutrition Centre** | In-patient Facility for intensive treatment (IPF) in Hospital or Health Centre (**in the case of geographic isolation**) with accommodation and medical care | Access to safe drinking water | Safe drinking water use, transport and storage | • 45 to 90 litres/patient/day (including water for the accompanying person)  
• Drinking water has 0.3-1mg/litre residual chlorine  
• No toilets within at least 30 m of the water points | • Chlorination of clear water (NTU<20) by solution with HTH, Aquatab or bleach  
• Treatment of turbid water (NTU>20) with sachets of PUR, chlorination after filtering (candle filters, sand or charcoal) or after flocculation treatment with aluminium sulphate.  
• Installation of water systems with wells or boreholes equipped with handpumps, or connection to a supply system, exceptionally water trucking (always considering the exit strategy)  
• Installation of protected water storage. |
| | For Severe Acute Malnutrition (SAM) Or Moderate Acute Malnutrition (MAM) With medical complications | Hygiene | Hygienic hand washing with running water at critical times (esp. before food preparation); Body washing; washing of food and utensils. | • Soap in all installations  
• Handwashing with chlorinated water at 0.05%  
• 50 people maximum /shower /day  
• Private showers with separation by gender  
• Showers lit by night  
• Washing lines and drying areas in use  
• Visible posters and daily hygiene promotion sessions | • Maintenance of handwashing stations with fresh chlorinated water/soap  
• Construction of showers with separation by gender and drainage to soakaway pits  
• Washing lines and dish-drying areas constructed  
• Hygiene promotion of key practices:  
  o Handwashing with soap and running water after using the toilet, before preparing food, after changing a baby's nappy and before eating or feeding a child;  
  o Maintenance and cleaning of latrines, ensuring an absence of faeces in all installations and around houses with no latrines;  
  o Demonstration of technique for treatment and protection of household drinking water.  
• Distribution of household hygiene kits to mothers leaving the nutrition centre or by mobile teams (500g soap for handwashing; 1 jerrycan for water carrying; household water treatment products for at least 2 months). |
| Sanitation | Defecation with safety and dignity, hygienic for both user and environment | 25 people max / latrine / day
- Latrine waiting time < 5 mn
- Latrines clean with no faeces, flies or odours
- Private latrines with separation by gender
- Latrines lit by night
- Toilet area with potties for small children |
|---|---|---|
| | | Construction of ventilated pit latrines (VIP) with separation by gender and handwashing stations
- Latrines lit by night and cleaned daily with a chlorine solution (0.2%)
- Construction of a toilet area with potties for small children
- Distribution of potties for small children and/or trowel/spade for faeces collection & disposal in latrine
- Waste pits, dustbins, medical waste bins, incinerators, drainage channels: weekly cleaning and maintenance |

| Access to safe drinking water | Safe drinking water use, transport and storage | Drinking water available and has 0.3-1mg/litre residual chlorine
- No toilets within at least 30 m of the water points |
|---|---|---|
| | | Chlorination of clear water (NTU<20) by solution with HTH, Aquatab or bleach
- Treatment of turbid water (NTU>20) with sachets of PUR, chlorination after filtering (candle filters, sand or charcoal) or after flocculation treatment with aluminium sulphate.
- Installation of water systems with wells or boreholes equipped with handpumps, or connection to a supply system, exceptionally water trucking (always considering the exit strategy)
- Installation of protected water storage. |

| Hygiene | Hygienic hand washing with running water at critical times (esp. before food preparation); washing of food and utensils. | Soap or ash in all installations
- Washing lines and drying areas in use with protective areas for the cooking utensils
- Visible posters and daily hygiene promotion sessions |
|---|---|---|
| | | Maintenance of handwashing stations with water and soap or ash
- Washing lines and dish-drying areas constructed
- Hygiene promotion of key practices :
  - Handwashing with soap and running water after using the toilet, before preparing food, after changing a baby’s nappy and before eating or feeding a child;
  - Maintenance and cleaning of latrines, ensuring an absence of faeces in all installations and around houses with no latrines;
  - Demonstration of technique for treatment and protection of household drinking water.
- Distribution of household hygiene kits to mothers leaving the nutrition centre or by mobile teams (500g) |
**Sanitation**
- Defecation with safety and dignity, hygienic for both user and environment
- 25 people max / latrine / day
  - Latrine waiting time < 5 mn
  - Latrines clean with no faeces, flies or odours
  - Private latrines with separation by gender
  - Latrines lit by night
  - Toilet area with potties for small children
- Construction of ventilated pit latrines (VIP) with separation by gender and handwashing stations, and cleaned daily with a chlorine solution (0.2%)
- Construction of a toilet area with potties for small children
- Distribution of potties for small children and/or trowel/spade for faeces collection & disposal in latrine
- Waste pits, dustbins, medical waste bins, incinerators, drainage channels: weekly cleaning and maintenance

**Access to safe drinking water**
- Safe drinking water use, transport and storage
- Drinking water available and has 0.3-1mg/litre residual chlorine
- No toilets within at least 30 m of the water points
- Chlorination of clear water (NTU<20) by solution with HTH, Aquatab or bleach
- Treatment of turbid water (NTU>20) with sachets of PUR, chlorination after filtering (candle filters, sand or charcoal) or after flocculation treatment with aluminium sulphate.
- Installation of protected water storage

**Mobile Team (advanced strategy) in Village etc.**
- For Severe Acute Malnutrition (SAM)
- Or Moderate Acute Malnutrition (MAM)
- Soap in all installations
  - Visible posters and daily hygiene promotion sessions
- Maintenance of handwashing stations with chlorinated water and soap or ash
- Hygiene promotion of key practices:
  - Handwashing with soap and running water after using the toilet, before preparing food, after changing a baby’s nappy and before eating or feeding a child;
  - Maintenance and cleaning of latrines, ensuring

**For Severe Acute Malnutrition (SAM)**
- Or Moderate Acute Malnutrition (MAM)**

(few hours visit but often after a long journey)

soap for handwashing; 1 jerrycan for water carrying; household water treatment products for at least 2 months).
<table>
<thead>
<tr>
<th>Household of Malnourished mothers and children</th>
<th>Access to safe drinking water</th>
<th>Hygiene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation</td>
<td>Defecation with safety and dignity, hygienic for both user and environment</td>
<td>Hygienic hand washing</td>
</tr>
<tr>
<td>Food preparation; washing of food and utensils</td>
<td>Toilet area with potties for small children</td>
<td>% of mothers knowing the critical times for handwashing</td>
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<tr>
<td></td>
<td>Distribution of household hygiene kits to mothers leaving the nutrition centre or by mobile teams (500g soap for handwashing; 1 jerrycan for water carrying; household water treatment products for at least 2 months).</td>
<td>% of mothers using soap or ash for</td>
</tr>
<tr>
<td></td>
<td>Construction of a toilet area with potties for small children</td>
<td>Distribution of handwashing kits like tippy-taps (e.g. pierced can or bottle with soap in a net [450g/pers./month])</td>
</tr>
</tbody>
</table>

- an absence of faeces in all installations and around houses with no latrines;
  - Demonstration of technique for treatment and protection of household drinking water.
  - Distribution of household hygiene kits to mothers leaving the nutrition centre or by mobile teams (500g soap for handwashing; 1 jerrycan for water carrying; household water treatment products for at least 2 months).
- % of malnourished mothers & children who have and use HWTS products or system
- Drinking water chlorinated with 0.3-1mg/litre residual chlorine, or 0 faecal coliforms per 100 ml
- Drinking water containers for children are covered and used without risk of contamination
- % of households that practice safe storage of drinking water
- % of households that practice household water treatment
- % of households for which the time to fetch water is <30 minutes
- Training and follow-up on household water treatment (HWTS) at nutrition centres
- Distribution of imported or local HWTS products, (PUR, Aquatab, HTH, bleach, Sodis, candle filters, sand or charcoal; deflocculants eg Alum, Moringa)
- Distribution of containers for children’s drinking water (Jerry Can, feeding bottle etc.)
- At community level, provision of water systems with wells or boreholes equipped with handpumps, or connection to a supply system.
- Distribution of 2 cups with handles (for hanging), 1 each for dipping and drinking
- At community level, installation of water systems with wells or boreholes equipped with handpumps; pastoral water points connected to a supply system.

- % of households that have and use HWTS products or system
- Drinking water chlorinated with 0.3-1mg/litre residual chlorine, or 0 faecal coliforms per 100 ml
- Drinking water containers for children are covered and used without risk of contamination
- % of households that practice safe storage of drinking water
- % of households that practice household water treatment
- % of households for which the time to fetch water is <30 minutes
<table>
<thead>
<tr>
<th>Sanitation</th>
<th>Handwashing at critical times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of mothers who have soap or ash for handwashing in key locations</td>
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<tr>
<td></td>
<td>% of mothers who use safe drinking water for washing fruit and vegetables and for preparing food/drinks for children</td>
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<tr>
<td>Training with visual aids on the key hygiene practices</td>
<td></td>
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<tr>
<td>Integration of messages against malnutrition in hygiene promotion</td>
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<tr>
<td>Defecation with safety and dignity, hygienic for both user and environment</td>
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<tr>
<td>Absence of children's faeces around the homes of children being treated</td>
<td></td>
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<tr>
<td>Latrines clean with no faeces, flies or odours</td>
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<tr>
<td>Presence of a system for handwashing with soap or ash at the latrine</td>
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<tr>
<td>% of households practising safe disposal of children's faeces</td>
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<tr>
<td>% of households using well maintained improved sanitation</td>
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<tr>
<td>Distribution of family latrine maintenance kits (gloves, bucket, brush, shovel, small local pot for ash)</td>
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<tr>
<td>Awareness of the safe distances from water points and homes if no latrines/nomadic population</td>
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<tr>
<td>Rehabilitation or construction of family latrines (no flies, faeces or odours) with handwashing facilities</td>
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