



## « WASH in Nut » Strategy

Regional WASH Group,  
West and Central Africa

This regional strategy was developed in 2012 during the nutritional and food crisis in the Sahel. It was updated in 2015. Revised during the 2014 consultation process, it remains an intersectoral guidance strategy that can be adapted to the specific national and local features of each country.

# 01. FRAMEWORK

## 1a | A chronic situation in the Sahel

The Sahel region is characterized by irregular rainy seasons with localized and prolonged droughts. Agricultural yields and the production of available biomass for livestock remain uncertain. During the crises of 2005 and 2012, a million children suffering from severe acute malnutrition (SAM) lost their lives in the Sahelian strip of Burkina Faso, Cameroon, Gambia, Mali, Mauritania, Niger, Nigeria, Senegal and Chad, and even in the DRC.

The systematic integration of a “*minimum WASH package*” into malnutrition programs was proposed, through a reinforcement of certain aspects of the sectoral response. This was to be achieved by aligning with the priorities and activities of the nutrition sector and including the problems of the health and food security sectors within this. This strategy was refined on the basis of agreements reached during the 2014 consultation processes, which included an evaluation of and workshop to review the “*WASH in Nut*” strategy.

## 1b | Prevent the “diarrhoea/nematodes - malnutrition” vicious circle and associated diseases

Malnutrition (undernutrition) is responsible for around 35 per cent of all deaths in children under the age of five worldwide. It is estimated that 50 per cent of this malnutrition is related to diarrhoea or repeated infestations of intestinal nematodes caused by unsafe water, inadequate sanitation or poor hygiene conditions. Apart from the direct effects that diarrhoea has on patients, it is also a particularly aggravating factor in malnutrition as it reduces the body’s capacity to absorb nutrients by bringing about changes in the intestinal wall. Repeated bouts result in lasting enteropathy. Those who suffer from malnutrition, frequently exacerbated by associated diseases (malaria, etc.), also have an elevated risk of diarrhoea. This results in a vicious circle that harms a child’s growth and development.

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### **1c | The “mother/caretaker - malnourished child” couple, from the Nutritional Centre to the household:**

The provision of clean drinking water and improved sanitation conducive to the prevention of diseases spread through faecal-oral transmission, along with vector control, can all contribute to preventing malnutrition by also considering nutritional issues and improvements in health status.

The treatment of malnourished children is focused on the “mother/caretaker - malnourished child” couple both at the nutritional centres and back home in their community. Specific interventions, such as household water treatment and ensuring that drinking water stored at home is clean for the malnourished child, offer an opportunity to target the most vulnerable groups by involving them as decision makers in their communities.

## 02. STRATEGY

### 2a | Objectives

- Ensure good geographic integration of WASH projects by targeting them on areas where there is a high prevalence of global acute malnutrition (GAM) and, particularly, where there are high rates of severe acute malnutrition (SAM);
- Prioritize the “mother/caretaker - malnourished child” couple both at the nutritional centre and at home in order to break the “*diarrhoea/nematodes/enteropathy - malnutrition*” vicious circle and associated diseases;
- Reinforce the notion of “*minimum WASH package*” in order to support the “mother/caretaker - malnourished child” couple across all WASH components and ensure they have access to the basic necessities;
- Aim for behaviour change within the households of “*mother/caretaker - malnourished child*” couples; working only on access to drinking water and sanitation technology without changing hygiene behaviour generally has little impact on health little, if at all.

### 2b | Methodology

- Adopt a proactive attitude aimed at encouraging the operationalization of the strategy by establishing “*WASH in Nut*” focal points within the coordination groups, humanitarian organizations and key ministries, supporting the strategy’s anchoring within institutions and partners beyond a strict cluster approach;
- Define precisely who coordinates, who delivers and who reports on activities, how “*WASH in Nut*” indicators are monitored and by whom;
- Work towards a “*decision makers*” approach by the community that will act as a complement to the “*hardware*” service activities in the nutritional centres or to the services that provide global coverage of communities;
- Alongside the “*WASH in Nut*” activities, promote country or multi-country impact studies of the WASH malnutrition programs, in order to prioritize evidence-based activities and advocacy.

## 2c | Targeting

- Target SAM (severe acute malnutrition) and MAM (moderate acute malnutrition) but prioritize the health regions or districts with higher rates of SAM; also on the basis of water, harvest or biomass deficits (to be prioritized with the nutrition and food security sectors);
- Use the health centres to prioritize “WASH in Nut” interventions in villages with a high rate of SAM, incorporating district-level rates of diarrhoea and malaria according to the available data (feedback of records, targeted surveys, etc.);
- Target priorities that can be brought in gradually, in close cooperation with actors from the different sectors involved, particularly nutrition, health and food security.

## 2d | Phasing

- Plan the realistic phasing-in of activities according to the available resources (e.g. first use PUR sachets to treat contaminated water urgently; second add bleach in the borehole providing clean water);
- As a priority in the short term, support the “*minimum WASH package*” in:
  - Nutritional Centres, more generally known in each country as: a) CRENI (Centre for Intensive Nutritional Rehabilitation) for malnutrition with medical complications; or b) CRENAS (Outpatients Centre for Severe Nutritional Rehabilitation);
  - The home of the “*mother/caretaker - malnourished child*” couple: a) breastfeeding mothers and children under the age of two (via mobile nutritional teams, research into hygiene practices while breastfeeding, etc.); b) mothers/caretakers with children under the age of five;

- Secondly, and in parallel, depending on the context and funding possibilities, initiate and strengthen programs to increase access to WASH in zones and communities vulnerable to malnutrition and, when absolutely necessary, programs for the joint management of agricultural and livestock water supplies.

## 2e | Indicators

- At least two global “WASH in Nut” indicators to be reported at the national level (Sitrep, WASH Cluster, etc.):
  - Percentage of nutritional centres (CRENI/CRENAS) providing the minimum WASH package;
  - Percentage of SAM patients admitted who have received a WASH kit once awareness-raising of the “*caretaker/malnourished child*” couple has been conducted;
- At least one qualitative indicator of “WASH in Nut” functionality to be monitored at the national level:
  - Percentage of nutritional centres with residual chlorine measured in the drinking water at appetite test level;
- It is advisable that other proxy indicators are monitored in the nutritional centres and in the communities at the “*caretaker-malnourished child*” couple level.

## 03. MINIMUM “WASH IN NUT” PACKAGE

TARGET	TYPE	COMPONENT	FUNCTION
NUTRITIONAL CENTRE	<p><b>CRENI</b> (Centre for Intensive Nutritional Rehabilitation)</p> <p><i>(or URENI [Unit “I”])</i></p> <p><b>with accommodation and medical care</b></p> <p>in Hospital or Referral Health Centre <i>(in case of geographic isolation)</i></p> <p>for Severe Acute Malnutrition (SAM) or Moderate Acute Malnutrition (MAM)</p> <p>with medical complications</p>	<p><b>Access to drinking water</b></p>	<p>Safe drinking water throughout its supply, transport, storage and drawing</p>
		<p><b>Hygiene</b></p>	<p>Hand washing with disinfectant, under running water in key places and at key moments (including before breastfeeding), bodily hygiene, washing of food and cooking utensils</p>



### 3a | Minimum package and target with examples of indicators and activities

EXAMPLES OF INDICATORS	EXAMPLES OF ACTIVITIES
<ul style="list-style-type: none"> <li>• 45 to 90 litres/patient/day (including water for caretaker)</li> <li>• Drinking water is available and clear (NTU&lt;20) with a measurement of free residual chlorine of between 0.2 and 1 mg/litre</li> <li>• Presence of residual chlorine in the water at appetite test level</li> <li>• No latrines or defecation areas within 30 m of water points</li> </ul> <p><i>“Water” checklist for minimum WASH package:</i></p> <p>1. <i>Is there access to a (chlorinated) drinking water point for patients and staff, and do storage facilities meet requirements?</i></p>	<ul style="list-style-type: none"> <li>• Choice of raw water source bearing in mind the proximity and typology of water points (ease of access, pumping, social acceptance, water quality, sufficient flow, guarantee of functionality, seasonal risk, etc.)</li> <li>• Chlorination of clear water (NTU&lt;20) with HTH stock solution, Aquatabs, bleach</li> <li>• Treatment of turbid water (NTU&gt;20) with PUR sachets, chlorination after filtration (candle, sand or carbon) or after sedimentation, flocculation with aluminium sulphate (specific product or local product of the alum stone type)</li> <li>• Provision of water supply systems via borehole or well equipped with manual pump, connection to a distribution network, exceptionally water trucking (while also envisaging an exit strategy)</li> <li>• Storage of protected water unless connected to a permanent drinking water supply network (excluding specific low-level storage as below)</li> <li>• Low-level storage of protected drinking water with residual chlorine (no more than a few dozen litres) at appetite test level</li> </ul>
<ul style="list-style-type: none"> <li>• Soap in all facilities</li> <li>• Hand wash basins with 0.05 per cent chlorinated water</li> <li>• 50 people maximum/shower/day</li> <li>• Showers separated by gender and with a private space for women with a washing line</li> <li>• Showers lit at night</li> <li>• Washing areas with separate drainage for laundry and dishes and protective tray for kitchen utensils</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and refilling of wash hand basins with chlorinated water and soap</li> <li>• Construction of showers separated by gender and with water draining into a soak pit</li> <li>• Provision of washing areas for laundry and dishes</li> <li>• Designation of a hygiene focal point (responsible for maintaining/cleaning/disinfecting the water and sanitation facilities)</li> <li>• Training of community health workers (CHW) in <i>“WASH in Nut”</i></li> </ul>

TARGET	TYPE	COMPONENT	FUNCTION	
NUTRITIONAL CENTRE	<p><b>CRENI</b> (Centre for Intensive Nutritional Rehabilitation)</p> <p><i>(or URENI [Unit ‘I])</i></p> <p><b>with accommodation and medical care</b></p> <p>in Hospital or Referral Health Centre <i>(in case of geographic isolation)</i></p>			
	<p>for Severe Acute Malnutrition (SAM) or Moderate Acute Malnutrition (MAM)</p> <p>with medical complications</p>	<b>Sanitation</b>	Dignified and hygienic defecation, healthy environment	

## EXAMPLES OF INDICATORS

- Posters displayed and daily hygiene awareness-raising sessions conducted

*“Hygiene” checklist for minimum WASH package:*

2. *Do staff and patients have access to sufficient provision for hand washing with soap (consultation, hospitalization, toilet, kitchen, distribution area)?*
3. *Is there access to regularly maintained showers?*
4. *Is there an adequate medical/non-medical waste management system and an absence of visible medical/non-medical waste in and around the centre?*
5. *Is the centre continuously providing integrated WASH/Nutrition prevention messages (“visual messages” plus regular sessions)?*
6. *Are the CRENI staff trained in what constitutes a healthy environment?*

- 25 persons maximum/latrine door/day
- Latrine wait at peak times <5 minutes
- Latrines without flies, smells or traces of excrement
- Private latrines, separated by gender
- Latrines lit at night near to building
- Area with potties for children

*“Sanitation” checklist for minimum WASH package:*

7. *Is there access to separate improved, hygienic latrines for men/women and staff/centre users (with a hand washing point with soap nearby and no sign of open defecation)?*

## EXAMPLES OF ACTIVITIES

- Education in key hygiene practices:
  - washing hands under running water and with soap after going to the toilet or cleaning a child, before eating, before breastfeeding, before preparing food or feeding a child
  - cleaning of latrines and around the outside of the houses, moving of defecation area if no latrine;
  - technique for treating and protecting water that is stored or drawn at home
- Provision\* of “home” WASH kits to caretakers (500 g soap for hand washing, equipment for treating water at home for at least two months, plus a possible container for drinking water if needed to measure out the water treatment)

\* Provision can take place not only on discharge but also on admission, to facilitate ownership, possibly split into several stages, ensuring non-duplication with hospitalization kits provided on admission to CRENI

- Construction of separate improved, hygienic latrines with for men and women, hand washing facilities and drainage
- Alternative hygienic system for managing human excreta as a temporary urgent solution
- Latrines lit at night and cleaned daily with 0.2 per cent chlorine solution
- Provision of an area with potties available for children
- Refuse pits, labelled bins for sorting medical waste, waste incinerators, drainage channels, daily cleaning and upkeep
- Distribution of potties for children and/or trowel or spade for collecting their excrement and throwing it down the latrine

TARGET	TYPE	COMPONENT	FUNCTION	
NUTRITIONAL CENTRE	<p><b>CRENAS</b> (Outpatient Centre for Intensive Nutritional Rehabilitation)</p> <p><i>(or CRENAM [Moderate], or URENAS URENAM [Unit “])</i></p> <p><b>without accommodation</b> (stay of a few hours, <b>but often having travelled long distances</b>)</p> <p>in Health Centre or Health Post</p> <p>for Severe Acute Malnutrition (SAM) or Moderate Acute Malnutrition (MAM)</p>	<b>Access to drinking water</b>	Safe clean drinking water throughout its supply, transport, storage and drawing	
		<b>Hygiene</b>	Hand washing with disinfectant, under running water in key places and at key moments (including before breastfeeding) bodily hygiene, washing of food and cooking utensils	

EXAMPLES OF INDICATORS	EXAMPLES OF ACTIVITIES
<p>8. <i>Has a CRENI staff member been appointed and assigned to the relevant tasks of maintaining, cleaning and disinfecting “water and sanitation” facilities?</i></p>	
<ul style="list-style-type: none"> <li>• Drinking water is available and clear (NTU&lt;20) with a measurement of free residual chlorine of between 0.2 and 1 mg/litre</li> <li>• Residual chlorine (positive) measured in drinking water at appetite test level</li> <li>• No latrines or defecation areas within 30 m of water points</li> </ul> <p><i>“Water” checklist for minimum WASH package:</i></p> <p>1. <i>Is there access to a (chlorinated) drinking water point for patients and staff, and do storage facilities meet requirements?</i></p>	<ul style="list-style-type: none"> <li>• Choice of raw water source bearing in mind the proximity and typology of water points (ease of access, pumping, social acceptance, water quality, sufficient flow, guarantee of functionality, seasonal risk, etc.)</li> <li>• Chlorination of clear water (NTU&lt;20) with HTH stock solution, Aquatabs, bleach</li> <li>• Treatment of turbid water (NTU&gt;20) with PUR sachets, chlorination after filtration (candle, sand or carbon) or after sedimentation, flocculation with aluminium sulphate (specific product or local product of the alum stone type)</li> <li>• Provision of water supply systems via borehole or well equipped with manual pump, connection to a distribution network, exceptionally water trucking (while also envisaging an exit strategy)</li> <li>• Storage of protected water unless connected to a permanent drinking water supply network (excluding specific low-level storage as below)</li> <li>• Low-level storage of protected drinking water with residual chlorine (no more than a few dozen litres) at appetite test level</li> </ul>
<ul style="list-style-type: none"> <li>• Soap or ash at all facilities</li> <li>• Washing areas with separate drainage for laundry and dishes and protective tray for kitchen utensils</li> <li>• Posters displayed and daily hygiene awareness-raising sessions conducted</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and refilling of hand wash basins with water and soap or ash</li> <li>• Provision of washing areas for laundry and dishes</li> <li>• Designation of a hygiene focal point (responsible for maintaining/ cleaning/disinfecting the water and sanitation facilities)</li> <li>• Training of community health workers (CHW) in <i>“WASH in Nut”</i></li> </ul>

TARGET	TYPE	COMPONENT	FUNCTION	
NUTRITIONAL CENTRE	<p><b>CRENAS</b> (Outpatient Centre for Intensive Nutritional Rehabilitation)</p> <p><i>(or CRENAM [Moderate], or URENAS URENAM [Unit ‘’])</i></p> <p><b>without accommodation</b> (stay of a few hours, <b>but often having travelled long distances</b>)</p> <p>in Health Centre or Health Post</p> <p>for Severe Acute Malnutrition (SAM) or Moderate Acute Malnutrition (MAM)</p>			
		<b>Sanitation</b>	Dignified and hygienic defecation, healthy environment	

EXAMPLES OF INDICATORS	EXAMPLES OF ACTIVITIES
<p><i>“Hygiene” checklist for minimum WASH package:</i></p> <ol style="list-style-type: none"> <li>2. Do staff and patients have access to sufficient provision for hand washing with soap (consultation, hospitalization, toilet, kitchen, distribution area)?</li> <li>3. Is there a waste management system in or near the centre?</li> <li>4. Is the centre continuously providing integrated WASH/Nutrition prevention messages (“visual messages” plus regular sessions)?</li> <li>5. Are the CRENAS staff trained in what constitutes a healthy environment?</li> </ol>	<ul style="list-style-type: none"> <li>• Education in key hygiene practices: <ul style="list-style-type: none"> <li>o washing hands under running water and with soap or ash after going to the toilet or cleaning a child, before eating, before breastfeeding, before preparing food or feeding a child;</li> <li>o cleaning of latrines and around the outside of houses, moving of defecation areas using “cat” technique if no latrine;</li> <li>o technique for treating and protecting water that is stored or drawn at home</li> </ul> </li> <li>• Provision* of “home” WASH kit to caretakers (500 g soap for hand washing; equipment for treating water at home for at least two months, plus a possible container for drinking water if needed to measure out the water treatment)</li> </ul> <p><small>* Provision can take place not only on discharge but also on admission, to facilitate ownership, possibly split into several stages, ensuring non-duplication with hospitalization kids provided on admission to CRENAS</small></p>
<ul style="list-style-type: none"> <li>• 25 persons maximum/latrine door/day</li> <li>• Latrine wait at peak times &lt;5 minutes</li> <li>• Latrines without flies, smells or traces of excrement</li> <li>• Private latrines, separated by gender</li> <li>• Area with potties for children</li> </ul> <p><i>“Sanitation” checklist for min. WASH package:</i></p> <ol style="list-style-type: none"> <li>6. Is there access to an improved, hygienic latrine or to an alternative hygienic system for managing human excreta as a temporary emergency solution?</li> <li>7. Has a CRENAS staff member been appointed and assigned to the relevant tasks of maintaining, cleaning and disinfecting “water and sanitation” facilities? Are areas cleaned and disinfected and is there a maintenance kit available?</li> </ol>	<ul style="list-style-type: none"> <li>• Construction of separate improved, hygienic latrines for men and women, hand washing facilities and drainage</li> <li>• Alternative hygienic system for managing human excreta as a temporary urgent solution</li> <li>• Provision of an area with potties available for children</li> <li>• Refuse pits, labelled bins, waste incinerators, drainage channels, daily cleaning and upkeep</li> <li>• Distribution of potties for children and/or trowel or spade for collecting their excrement and throwing it down the latrine</li> </ul>

TARGET	TYPE	COMPONENT	FUNCTION	
NUTRITIONAL CENTRE	<p><b>Mobile Team</b> (outreach strategy)</p> <p><b>in</b> <b>Village etc.</b></p> <p>for Severe Acute Malnutrition (SAM) or Moderate Acute Malnutrition (MAM)</p>	<b>Access to drinking water</b>	Safe clean drinking water throughout its supply, transport, storage and drawing	
		<b>Hygiene</b>	Hand washing with disinfectant, under running water in key places and at key moments (including before breastfeeding), bodily hygiene, washing of food and cooking utensils	
		<b>Sanitation</b>	Dignified and hygienic defecation, healthy environment	



EXAMPLES OF INDICATORS	EXAMPLES OF ACTIVITIES
<ul style="list-style-type: none"> <li>• Drinking water is available and clear (NTU&lt;20) with a measurement of free residual chlorine of between 0.2 and 1 mg/litre</li> <li>• No latrines or defecation areas within 30 m of water points</li> </ul>	<ul style="list-style-type: none"> <li>• Methodological choices relating to water bearing in mind the proximity to and typology of water points (access, quantity, quality, seasonality, etc.).</li> <li>• Chlorination of clear water (NTU&lt;20) with HTH stock solution, Aquatabs, bleach</li> <li>• Treatment of turbid water (NTU&gt;20) with PUR sachets, chlorination after filtration (candle, sand or carbon) or after sedimentation, flocculation with aluminium sulphate (specific product or local product of the alum stone type)</li> <li>• Provision of protected storage</li> </ul>
<ul style="list-style-type: none"> <li>• Soap in all facilities</li> <li>• Posters displayed and daily hygiene awareness-raising sessions conducted</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and refilling of hand washing basins with chlorinated water</li> <li>• Education in key hygiene practices: <ul style="list-style-type: none"> <li>o washing hands under running water and with soap or ash after going to the toilet or cleaning a child, before eating, before breastfeeding, before preparing food or feeding a child;</li> <li>o cleaning of latrines and around the outside of houses, moving of defecation areas using “cat” technique if no latrine;</li> <li>o technique for treating and protecting water that is stored or drawn at home.</li> </ul> </li> <li>• Provision of “home” WASH kit to caretakers (500 g soap for hand washing, equipment for treating water at home for at least two months, plus a possible container for drinking water if needed to measure out the water treatment)</li> </ul>
<ul style="list-style-type: none"> <li>• Area with potties for children</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of an area with potties available for children</li> <li>• Distribution of potties for children and/or trowel or spade for collecting their excrement and throwing it down the latrine</li> </ul>

TARGET	TYPE	COMPONENT	FUNCTION
HOME OF "CARETAKER/MOTHER - MALNOURISHED CHILD" COUPLE		<b>Access to drinking water</b>	Safe clean drinking water throughout its supply, transport, storage and drawing
		<b>Hygiene</b>	Hand washing with disinfectant, under running water at key moments (including before breastfeeding), bodily hygiene, washing of food and cooking utensils

EXAMPLES OF INDICATORS	EXAMPLES OF ACTIVITIES
<ul style="list-style-type: none"> <li>• Percentage of mothers in mother-child couples who have access to and use a product or system for home water treatment</li> <li>• Drinking water is available and clear (NTU&lt;20) with a measurement of free residual chlorine between 0.2 and 1 mg/litre or 0 faecal coliform per 100 ml</li> <li>• A minimum of 2.5 to 3 litres per person per day for drinking and food</li> <li>• The children's drinking water container is covered and the drawing and drinking methods pose no risk of contamination</li> <li>• Percentage of households that have secure storage practices for drinking water</li> <li>• Percentage of households that undertake home water treatment</li> <li>• Percentage of women or children spending less than 20 minutes collecting water/ queuing</li> </ul>	<ul style="list-style-type: none"> <li>• Follow-up and continuation of home water treatment training conducted by nutritional centres</li> <li>• Distribution/promotion of imported or locally-produced home water treatment products PUR, Aquatabs, HTH, bleach, Sodis, candle, sand or carbon filter, alum stone, Moringa seed powder (purifying) or Moringa leaves (acidifying)</li> <li>• Distribution of one or more containers to facilitate the measuring of home water treatment and/or for the protection of the child's drinking water (pail, jerry can, feeding bottle/tin, etc.)</li> <li>• Distribution of two attachable mugs with handles for separate use when drawing and drinking water</li> <li>• Community-level assessment of context-appropriate responses when choosing which water points to be provided/rehabilitated or used: ease of access, pumping, social acceptance, water quality, sufficient flow, guarantee of functionality, seasonal risk, etc.</li> <li>• Provision of water supply systems via boreholes or wells equipped with manual pumps, livestock watering points which can be linked in to a home water treatment connection and to a distribution network</li> </ul>
<ul style="list-style-type: none"> <li>• Percentage of mothers who know the key moments for hand washing</li> <li>• Percentage of mothers who use soap or ash to wash hands at key moments</li> <li>• Percentage of mothers who have soap or ash with which to wash hands at key places</li> <li>• Percentage of mothers who use drinking water to wash vegetables and prepare baby food</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution of tippy-tap type hand washing devices (e.g. pierced tin or mug with thread for attaching soap [450g/person/month])</li> <li>• Training on key hygiene practices using visual messages</li> <li>• Reciprocal integration of messages on malnutrition into hygiene-promoting activities</li> </ul>

TARGET	TYPE	COMPONENT	FUNCTION	
HOME OF "CARETAKER/MOTHER - MALNOURISHED CHILD" COUPLE		<b>Sanitation</b>	Dignified and hygienic defecation, healthy environment	

## EXAMPLES OF INDICATORS

- No child excrement in the vicinity of huts for malnourished children on treatment
- Latrine without flies, smells or traces of excrement
- Presence of a system for washing hands with soap or an ash pot in the latrine
- Percentage of households with adequate child excreta management practices
- Percentage of households using improved and well-maintained sanitary facilities

## EXAMPLES OF ACTIVITIES

- Vector control against malaria (drainage, awareness-raising with regard to stagnant water points, provision of authorized larvicides, etc.)
- Distribution of kit for maintaining the family latrine and for collecting excrement around the huts (gloves, pail, brush, small shovel, small terracotta pot for holding ash)
- If no latrine, for example among the nomadic population, message regarding moving defecation areas (water points and housing) and covering (“cat” technique)
- Rehabilitation or construction of family latrine (no flies, smell or traces of excrement, with hand washing)

### 3b | Checklist for verifying the minimum “WASH in Nut” package

#### CRENI (Centre for Intensive Nutritional Rehabilitation):

CHECKLIST FOR DECLARING A MINIMUM “WASH IN NUT” PACKAGE IN A CRENI	
1. Is there access to a (chlorinated) drinking water point for patients and staff, and do storage facilities meet requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Do staff and patients have access to sufficient provision for hand washing with soap (consultation, hospitalization, toilet, kitchen, distribution area)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Is there access to regularly maintained showers?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Is there an adequate medical/non-medical waste management system and an absence of visible medical/non-medical waste in and around the centre?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Is the centre continuously providing integrated WASH/Nutrition prevention messages (“visual messages” plus regular sessions)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Are the CRENI staff trained in what constitutes a healthy environment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Is there access to separate improved, hygienic latrines for men/women and staff/centre users (with a hand washing point with soap nearby and no sign of open defecation)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. Has a CRENI staff member been appointed and assigned to the relevant tasks of maintaining, cleaning and disinfecting “water and sanitation” facilities? Are areas cleaned and disinfected and is there a maintenance kit available?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Minimum “WASH in Nut” package in a CRENI:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No

(\*) one No or more means an overall No to the indicator

INDICATOR OF ESSENTIAL FUNCTIONALITY OF CRENI	
Is there residual chlorine (measured positive, at least monthly) in the drinking water at appetite test level?	<input type="checkbox"/> Yes <input type="checkbox"/> No

## CRENAS (Outpatient Centre for Intensive Nutritional Rehabilitation):

### CHECKLIST FOR DECLARING A MINIMUM “WASH IN NUT” PACKAGE IN A CRENAS

1. Is there access to a (chlorinated) drinking water point for patients and staff, and do storage facilities meet requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Do staff and patients have access to sufficient provision for hand washing with soap (consultation, hospitalization, toilet, kitchen, distribution area)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Is there a waste management system in or near the centre?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Is the centre continuously providing integrated WASH/Nutrition prevention messages (“visual messages” plus regular sessions)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Are the CRENAS staff trained in what constitutes a healthy environment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Is there access to an improved, hygienic latrine or to an alternative hygienic system for managing human excreta as a temporary emergency solution?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Has a CRENAS staff member been appointed and assigned to the relevant tasks of maintaining, cleaning and disinfecting “water and sanitation” facilities? Are areas cleaned and disinfected and maintenance kit available?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Minimum “WASH in Nut” package in a CRENAS:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No

(\*) one No or more means an overall No to the indicator

### INDICATOR OF ESSENTIAL FUNCTIONALITY OF CRENAS

Is there residual chlorine (measured positive, at least monthly) in the drinking water at appetite test level?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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## Home of “mother/caretaker - malnourished child” couple:

### GUIDANCE TO HELP VERIFY THE MINIMUM “WASH IN NUT” PACKAGE IN THE COMMUNITY, AT THE HOME OF THE “MOTHER/CARETAKER - MALNOURISHED CHILD” COUPLE

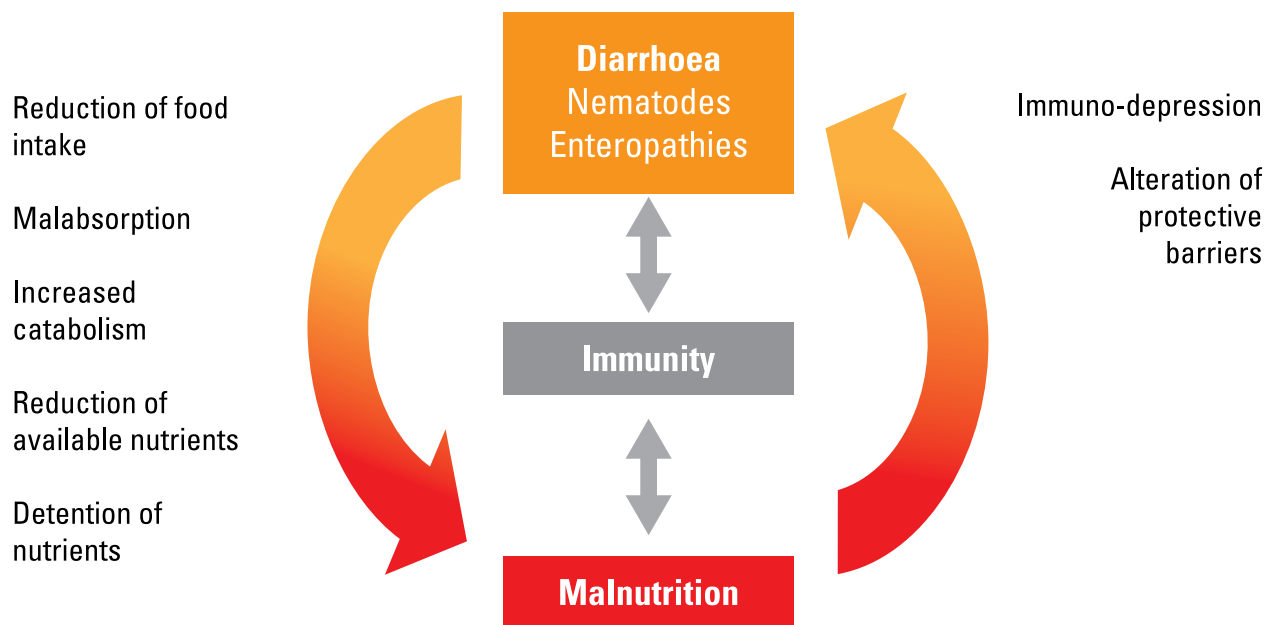
1. Is the children’s drinking water container covered?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Does the drinking water contain between 0.2 and 1 mg/litre of free residual chlorine? Or 0 faecal coliform per 100 ml?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Is there a hand washing system using soap or disinfectant in or near the house?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Does mother/caretaker know the key moments for hand washing (after going to the toilet, before eating or feeding/breastfeeding a child, before preparing food)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Is there an absence of child excrement in the vicinity of huts for malnourished children on treatment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Is the latrine (if there is one) without flies, smells or traces of excrement?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Minimum “WASH in Nut” package at home of “mother/caretaker - malnourished child” couple:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No

(\*) one No or more means an overall No to the indicator

### INDICATOR OF ESSENTIAL FUNCTIONALITY AT THE HOME OF THE “MOTHER/CARETAKER - MALNOURISHED CHILD” COUPLE

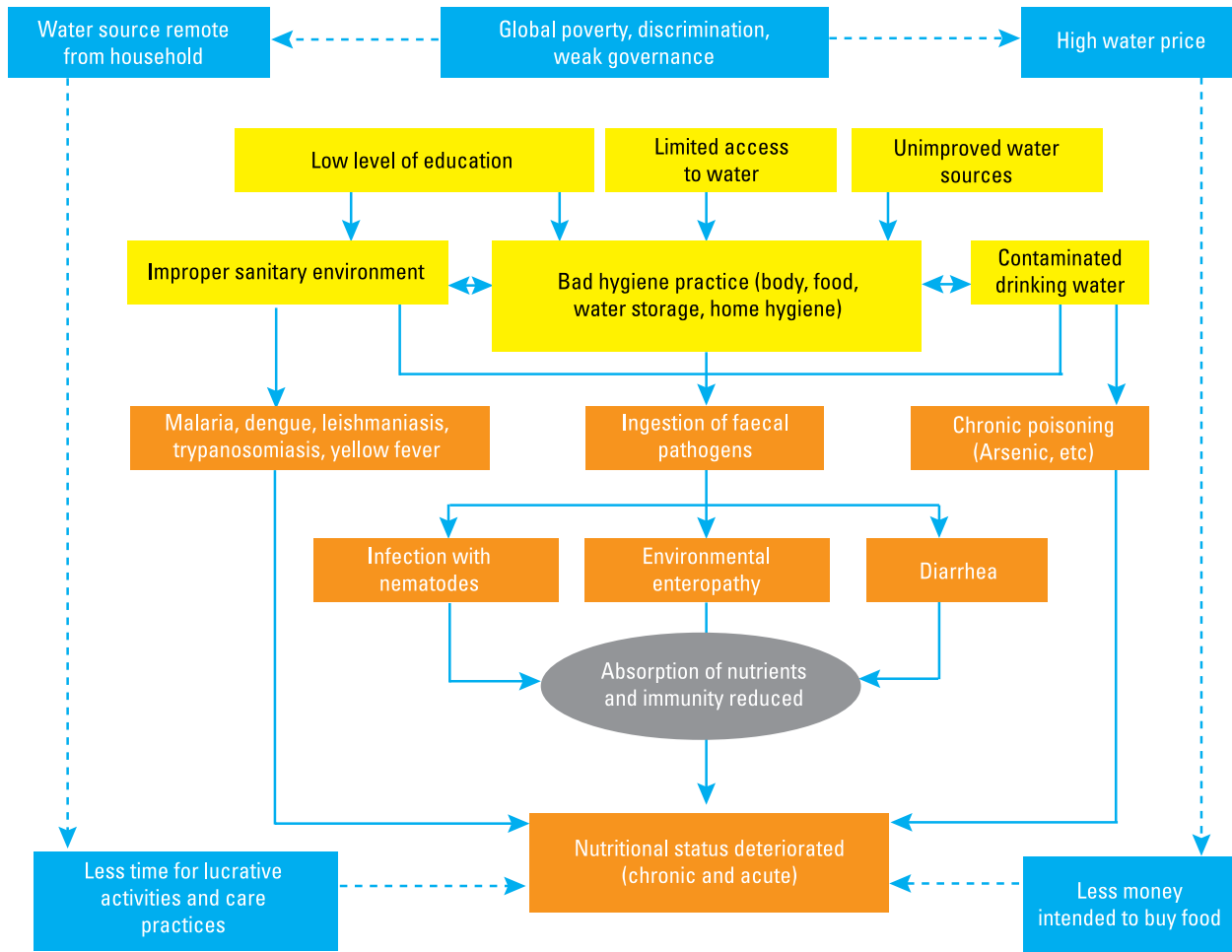
Is there residual chlorine (measured positive, at least monthly) in clear water (NTU<20) at drinking water level?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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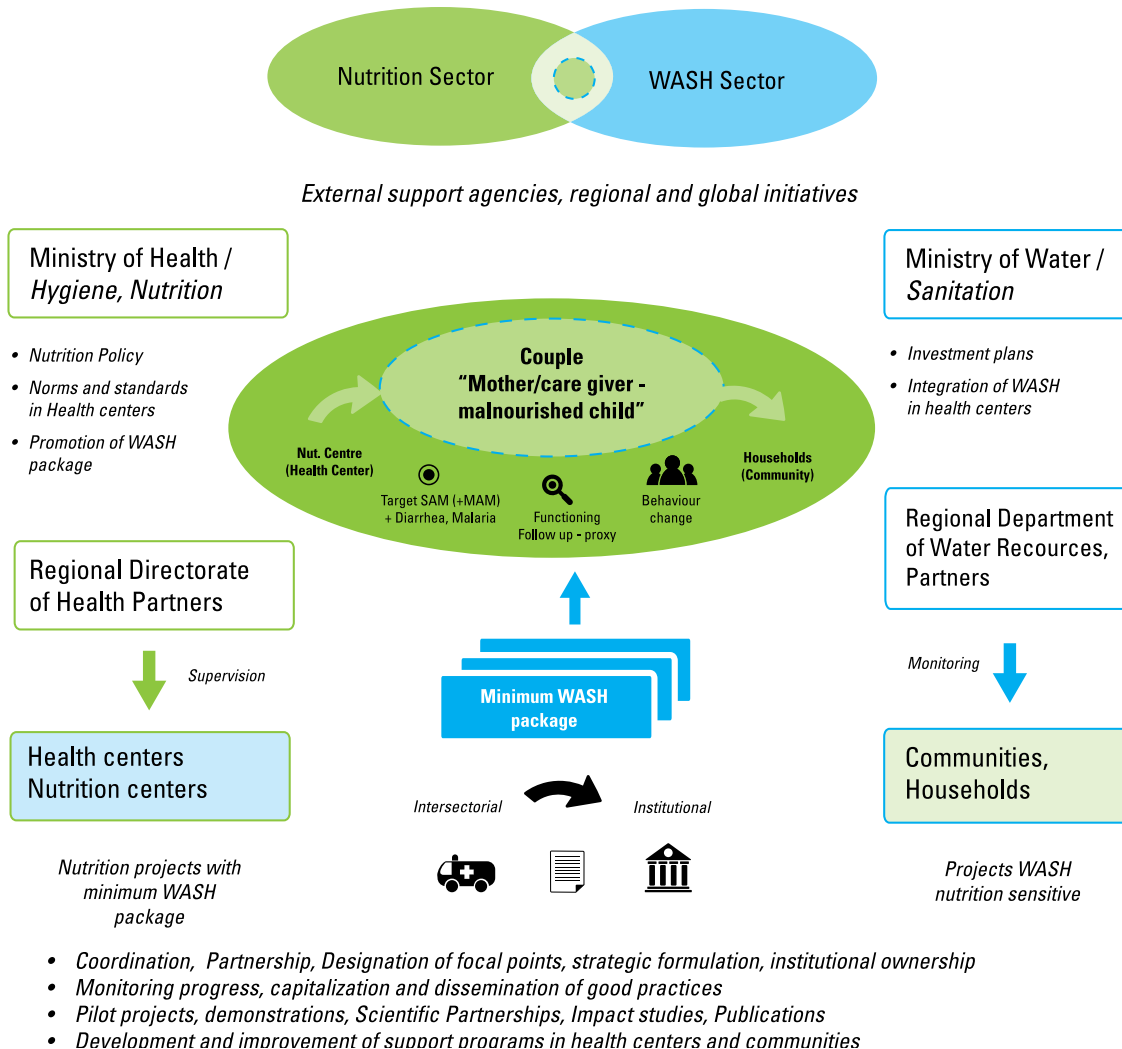
**Figure 1**

Causal chain of the link between inadequate sanitary environment, disease and malnutrition.  
(Adapted from Dangour et al. 2013)



## 2 | Diagram of the strategy « WASH in Nut »

### “WASH in Nut” Strategy



### 3 | List of Feeding Centres in the Sahel region

	MAM	SAM	SAM WITH COMPLICATIONS
HARMONIZED NAMES	CRENAM	CRENAS	CRENI
Benin	CNS	CNA	CNT
Burkina Faso	PCA M	PCA S (CSPS)	CRENI
Cameroon	CNAM	CNAS	CNTI
Ivory Coast	CRENAM	CRENAS	CRENI
Guinea	CRENAM	CRENAS	CRENI
Mali	URENAM	URENAS	URENI
Mauritania	CRENAM	CRENAS	CRENI
Niger	CRENAM	CRENAS	CRENI
CAR	CNS	CNA	CNT
DRC	UNS	UNTA	UNTI
Senegal	UREN-C	UREN	CRENI
Tchad	CNS	CNA	CNT
Togo	CRENAM	CRENAS	CRENI
English speaking countries	SFP	OTP	IPF

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## 5 | List of Acronyms

<b>WASH</b>	Water Supply, Sanitation and Hygiene Promotion
<b>Nut</b>	Nutrition
<b>SAM</b>	Severe Acute Malnutrition
<b>MAM</b>	Moderate Acute Malnutrition
<b>GAM</b>	Global Acute Malnutrition
<b>CRENI</b>	Centre for Intensive Nutritional Rehabilitation
<b>CRENAS</b>	Outpatient Centre for Intensive (SAM) Nutritional Rehabilitation
<b>CRENAM</b>	Outpatient Centre for MAM Rehabilitation
<b>URENI</b>	Unit for Intensive Nutritional Rehabilitation
<b>URENAS</b>	Outpatient Unit Centre for Intensive (SAM) Nutritional Rehabilitation
<b>URENAM</b>	Outpatient Unit for MAM Rehabilitation
<b>CNT</b>	Therapeutic nutrition centre
<b>CNS</b>	Supplementary nutrition Centre
<b>CNA</b>	Out-patient nutrition Centre
<b>UNTI</b>	Unit for Intensive Nutrition Treatment
<b>UNS</b>	Unit for Supplementary nutrition
<b>UNTA</b>	Unit for out-patient nutrition treatment
<b>PCA M</b>	Post for out-patient management of Acute Malnutrition
<b>PCA S</b>	Post for management for Severe Acute Malnutrition
<b>CSPS</b>	Health and Social Promotion Centre
<b>SFP</b>	Supplementary Feeding Programme
<b>OTP</b>	Outpatient Therapeutic Programme
<b>IPF</b>	Inpatient facility

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