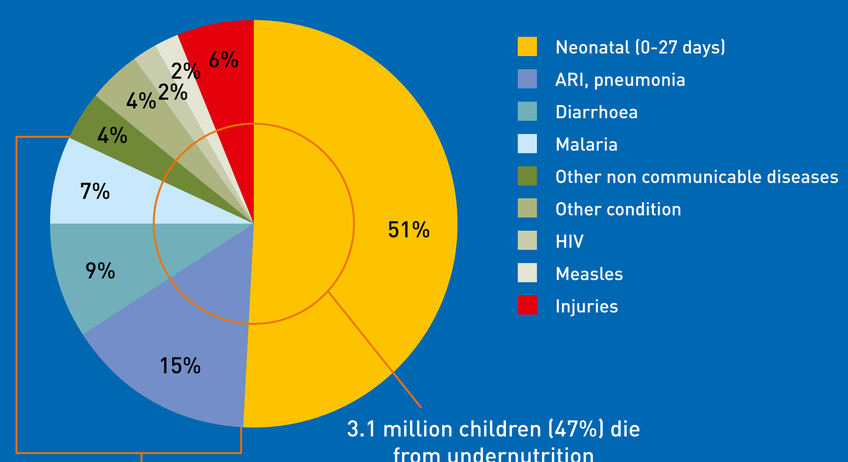
# WASH* in Nut

## Impact of Water, Sanitation & Hygiene Interventions on the Nutritional and Health Status of Children under 5 years old and mothers

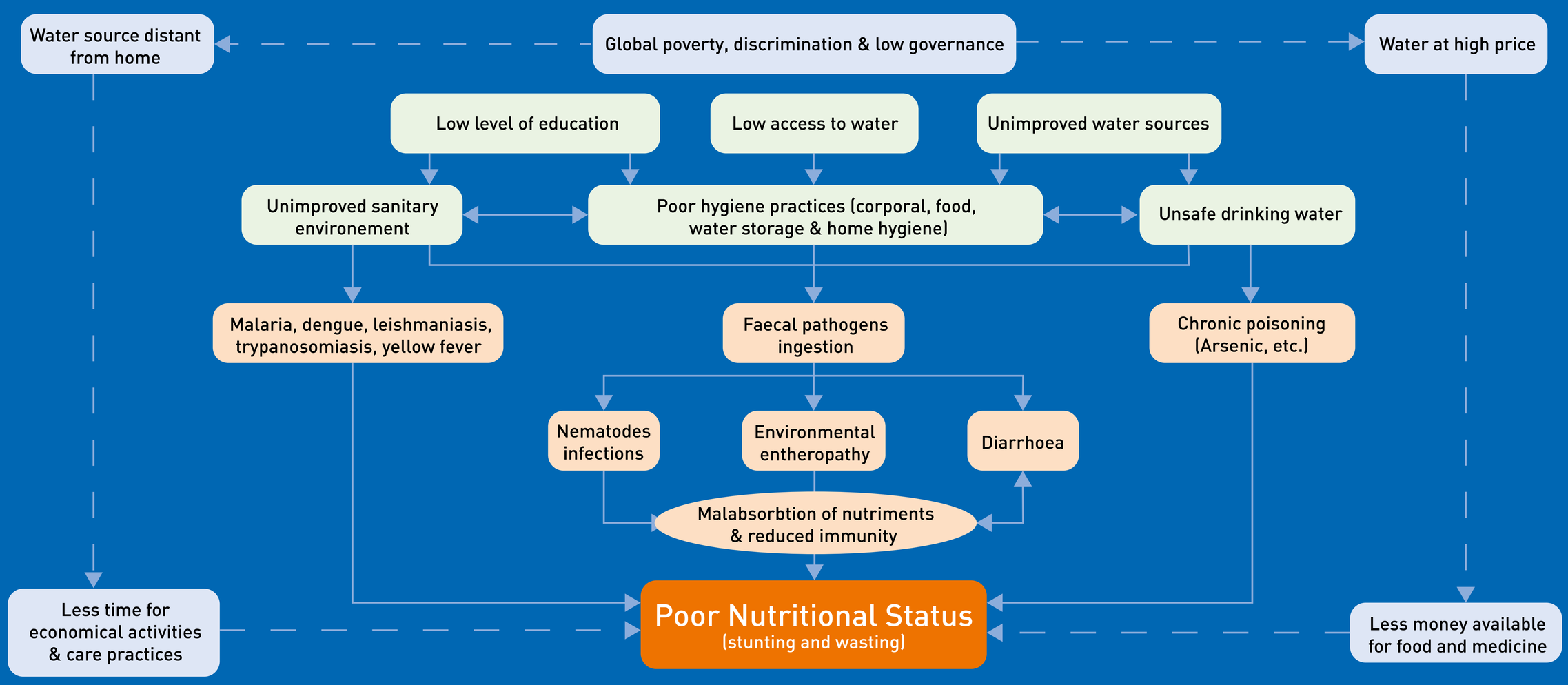
** Water, Sanitation and Hygiene*

**Under 5 years old Mortality - World**
(WHO 09-2014 on data 2012)




### → OVERVIEW ON UNDER 5'S HEALTH STATUS (WHO 2014)

- Globally, there are 1.7 billion cases of diarrhoeal disease yearly, resulting in 628,500 (9.5%) of children deaths
- 60% of deaths from diarrhoea are caused by unsafe water, pathogen-contaminated foods, lack of sanitation, and poor hygiene practices, and are therefore preventable
- Annually, there are 476,192 (7%) children deaths reported due to Malaria
- 996,520 (15%) children are reported to die from Pneumonia and other Acute Respiratory Infections (ARI) annually.
- Undernutrition accounts for 3.1 million (47%) children deaths
- 161 million (24.5%) children are affected by stunting (low height for age)
- 51 million (8%) by wasting (low weight for height)
- 99 million (15%) by underweight (low weight for age)



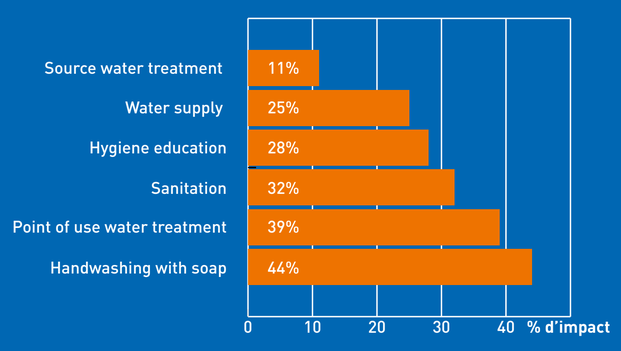

Adapted from Dangour, et al. (2013)

ACF 11-2014 WASH sector - jlapegue@actioncontrelafaim.org

### → HOW DOES WASH ENVIRONMENT IMPACT THE CHILDREN NUTRITIONAL & HEALTH STATUS?

- WASH interventions can impact positively stunting incidence rates *(Cochrane, 2013)*
- WASH intervention effect is an equivalent to a reduction of 15% in global prevalence of stunting *(Cochrane, 2013)*
- There is a significant impact of sanitation on stunting *(Spears & Hammer, 2013)*
- Growth faltering is strongly associated with diarrhoeal disease cases *(Weitz, 2011)*
- There is strong evidence of a positive impact of WASH interventions on child infections *(Fewtrell Review , 2005)*
- Nematode parasites (such as hookworm) symptoms include loss of blood and consequently increased anaemia prevalence leading to chronic fatigue and stunting *(Black, 2013)*
- Improved WASH conditions can reduce parasitic intestinal infections such as worm infestation that impacts nutritional status *(Pruss-Ustun, 2006)*
- High pathogen environments induce recurring infections in the gut that limit proper absorption of nutrients, known as Environmental Enteropathy *(Humphrey, 2009)*
- Children younger than 5 years old in households that received plain soap and handwashing promotion had a 50% lower incidence of pneumonia than in control groups *(Luby, 2005)*

**Impact of WASH activities on under 5 diarrhoeal morbidity (Fewtrell, 2005)**




### → WASH IN NUT STRATEGY: THE FIVE MAIN AXES

1. Ensure geographical integration of WASH and Nutrition projects by focusing WASH projects in high GAM* prevalence areas
2. Prioritize the 'mother & child' dyad
3. Ensure a WASH minimum package (kit, messages & standards) both at health and nutrition centres and home
4. Place emphasis on behavior change
5. Ensure that both coordination bodies (WASH and Nutrition) include representation from the other sector

** Global Acute Malnutrition*

### → SOME OF THE KEY QUESTIONS STILL TO BE EXPLORED

- → Does a safe WASH environment at household- or community-level have an impact upon the prevalence of Global Acute Undernutrition?
- → Can a short-term WASH intervention have an effect upon Global Acute Undernutrition incidence rates?
- → Does a WASH intervention, implemented during the treatment of a Severe Acute Malnourished (SAM) child, improve effectiveness and efficiency of the treatment (time and cost reduction) and reduce risks of post-recovery relapse?
- → What is the impact of the "quantity of water available at household level" indicator on undernutrition?