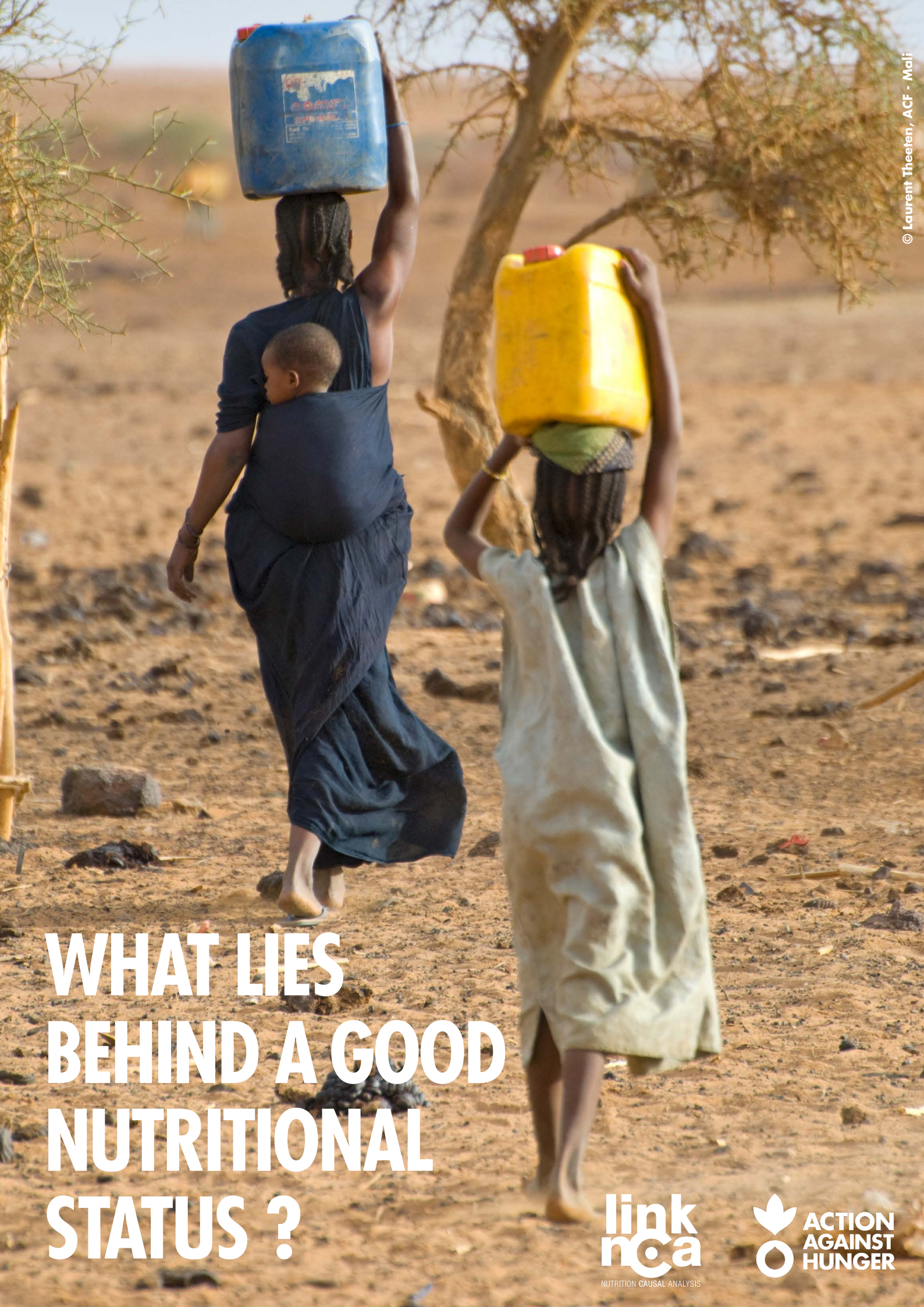


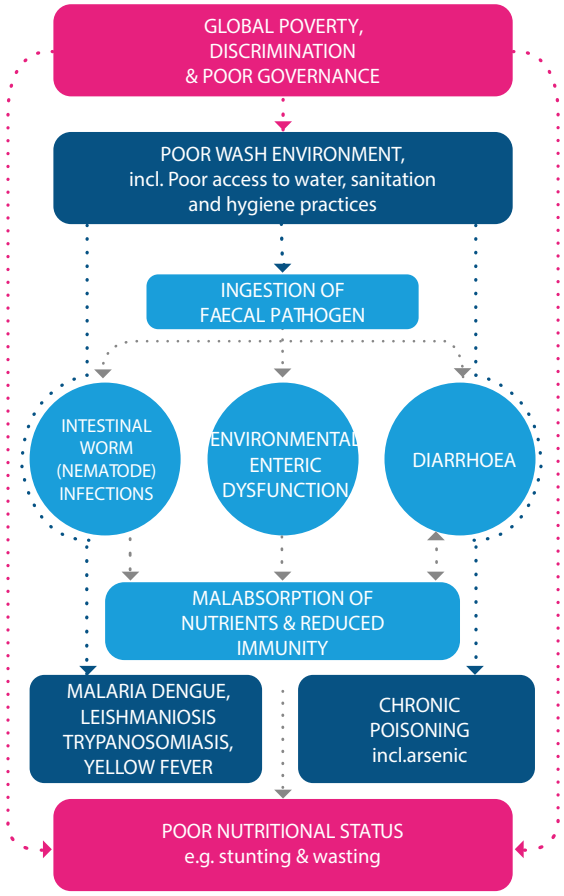
© Laurent Theefen, ACF - Mali

WHAT LIES BEHIND A GOOD NUTRITIONAL STATUS ?

link nca
NUTRITION CAUSAL ANALYSIS

ACTION AGAINST HUNGER

WHY IS WASH A KEY DETERMINANT OF THE NUTRITIONAL STATUS?



Undernutrition and WASH Simplified Pathway (Lapegue, Adapted Dangour et al. 2013)

It is estimated that 50% **of child undernutrition is associated to recurrent diarrhoea and intestinal infections** linked to WASH unsatisfactory conditions.

The underlying determinants of undernutrition include food insecurity, inappropriate care practices, poor access to health care, and an unhealthy environment, **including inadequate access to water, sanitation, and hygiene.**

Poor WASH conditions facilitate ingestion of faecal pathogens, which leads to diarrhoea, intestinal worms, and environmental enteric dysfunction, a 'chronic infection of the small intestine caused by extended exposure to fecal pathogens'. This directly relates to the body's ability to resist and respond to sickness by affecting the absorption of nutrients and decreasing the body's immunity. Indirect links between WASH and nutrition refer primarily to a broader socio-economic environment such as access and affordability of water, sanitation, and hygiene services, distance from the household to a water point, education, and poverty.

THE LINK NCA METHODOLOGY (NUTRITION CAUSAL ANALYSIS)

The Link NCA methodology has been created by Action Against Hunger as a starting point for improving the relevance and the effectiveness of multisectoral nutrition-sensitive programming.

It is a mixed-method combining quantitative and qualitative study with participatory phases leading to the identification of undernutrition risks factors and pathways in a local context.

Results of the Link NCA studies intend to improve multi-sectoral programming to tackle undernutrition problems.

The Link NCA strives to answer the following research questions in a specific context for a precise study population:

1 What is the **prevalence and severity of wasting and/or stunting** in the study population ?

2 What is the **prevalence of known risk factor**s for undernutrition among the population and key "nutrition vulnerable groups" ?

3 What are the **causal pathways of undernutrition** by which certain children in this population have become stunted and/or wasted ?

4 How have the stunting and/or wasting in this population and its causes **changed a) over time** due to historical trends, **b) seasonally** due to cyclical trends, **c)** due to **recent shocks** ?

5 Which causal pathways are likely **to explain** most cases of undernutrition ? Which sets of risk factors and pathways are likely to be the most **modifiable** by stakeholders within a given context and within a given period ?

6 Based on the causal analysis results, what **recommendations** can be made for improving nutrition security programming ? How can the **analysis be linked to a programmatic response** ?

The quantitative phase from secondary data, SMART nutrition survey and Risk Factor Survey assesses undernutrition status and the prevalence of known risk factors (1 - 2).

Qualitative methods incorporated throughout the protocol addresses the questions regarding how and why undernutrition or good nutrition occurs and consider the interactions between causes, common feedback loops and the evolutions of the causes through the time and seasons (3 - 4).

Finally, data generated are triangulated and reviewed through a participatory process to generate consensus on undernutrition causality and to better inform programs (5 - 6).

To know more about the methodology and to download all the link NCA study reports, please consult www.linknca.org

RESULTS FROM 12 LINK NCA STUDIES WORLDWIDE

Method

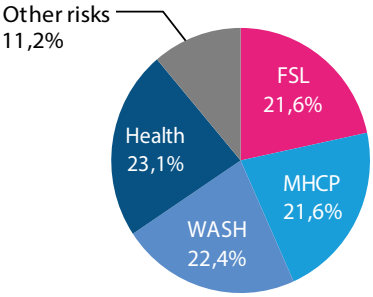
Tha authors carried out a meta-nalysis from the **12 most recent Link NCA studies**, conducted from beginning of 2014 to the end of 2016, in **10 different countries** (Chad, DRC, Ethiopia (3), Kenya, Uganda, Mauritania, Bangladesh, Cambodia, India and Philippines).

Descriptive statistics have been used to summarize the results per Link NCA study.

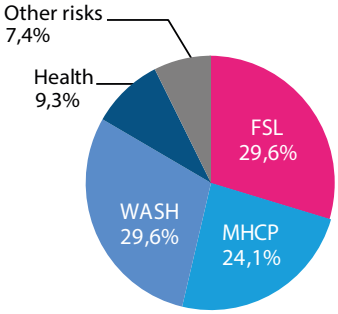
Studies were grouped according to the region where they were conducted (**8 for Africa and 4 in Asia**) and results were compared between the regions as well as by sector/risk factor category and region.

Results

R1 – In African context, the five risk factor sectors are perceived as equally contributing to undernutrition. In Asian context, WASH and FSL sectors are perceived as more critical foactors to undernutrition than the three others.



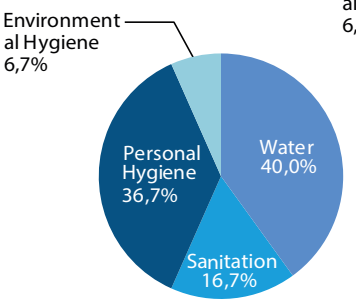
Proportion of the risk factors identified as "major"



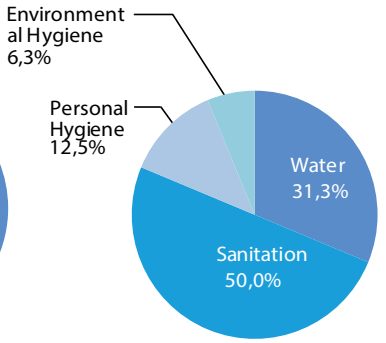
Proportion of the risk factors identified as "major" in the 4 Asian studies

***FSL** : Food Security & Livelihoods **MHCP** : Mental Health and Care Practices.*

R2 – In African context, among WASH factors, Water Access and Personal Hygien factors are perceived as more critical to undernutrition. In Asian context, Sanitation factors are perceived as more contributing to undernutrition.



Proportion of different WASH components appearing as "major" risk factors for undernutrition in the 8 African studies



Proportion of different WASH components appearing as "major" risk factors for undernutrition in the 4 Asian studies

R3 - Poor WASH conditions have been consistenly perceivd as main causes of undernutrition by the communities

Association between poor WASH conditions and poor nutritional status has been widely perceived by the communities. WASH-related risk factors such as presence of open defecation practices in the community, unhygienic environments (including inadequate waste management), inconsistent access to safe water, insufficient domestic water supply, and poor hygiene practices are consistently identified as one of the main causes of undernutrition.

RECOMMENDATIONS FOR BETTER INTEGRATION OF WASH AND NUTRITION INTERVENTIONS

1 **Joint situation analysis and planning**. Conducting joint assessments by WASH and nutrition technical sectors is more likely to foster a comprehensive understanding of the situation and encourage an integrated response. The Link NCA methodology is a suitable tool as it engages multidisciplinary stakeholders in causal analysis and transfers the results into multisectoral programme planning and response.

2 **Co-ownership of the results.** Participatory process is essential for establishing accountability and co-ownership of the results. One way to incentivize sectors to work together is to incorporate specific indicators into the project objectives of another sector and/or to set a common specific objective for both sectors.

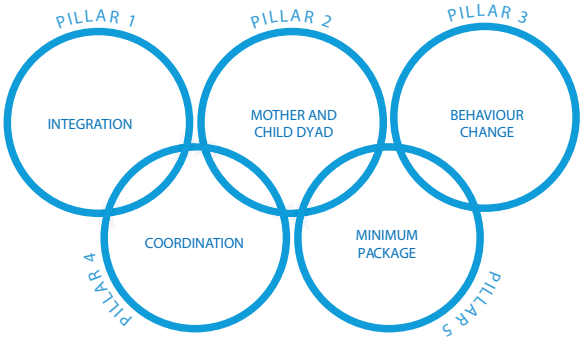
3 **Geographical co-location of WASH interventions in nutritionally vulnerable areas.** Pathway diagrams (visual examples of interaction among different risk factors) demonstrate where key interventions would have the greatest impact on undernutrition. It can help in the selection of geographical area, level, and type of intervention. The use of low-cost and easy-to-apply mapping techniques can improve decision-making.

4 **WASH and nutrition co-messaging.** timing, location, and potential synergies among interventions should be carefully thought out to ensure activities have maximum participation without overburdening women. Delivering key WASH and nutrition messages in an integrated manner can save resources, identify areas of overlap, and reinforce them through joint communication channels.

5 **Communication and coordination between WASH and nutrition stakeholders.** There is a need for ensuring regular communication and information sharing among key stakeholders as well as establishing a well-coordinated management and reporting structure. Even when strong synergies are not possible, there are still options for aligning interventions as long as there is good coordination, communication, and collaboration between actors.

6 **Implement the five pillars of the WASH'Nutrition Strategy**, to prevent effectively undernutrition. Refer to Guidebook online. http://www.actioncontrelafaim.org/fr/content/wash-nutrition-practical-guidebook-increasing-nutritional-impact-through-integration-wash

Refer to the web link on the back cover.



IN JULY 2017, 30 LINK NCA STUDIES HAVE BEEN CONDUCTED OR ARE ONGOING IN 20 DIFFERENT COUNTRIES

For concrete guidance and examples of good practice from the field, we recommend consulting WASH' Nutrition: A Practical Guidebook on Increasing Nutritional Impact through Integration of WASH and Nutrition Programmes (Action Against Hunger/UNICEF/ECHO, 2017).

Any organization planning to conduct a Link NCA study can receive support from the Link NCA Technical Unit
For more information, please consult: http://linknca.org/support.htm

References of the article:

Relationship between water, sanitation, hygiene, and nutrition: what do Link NCA nutrition causal analyses say

Jovana Dodos, MPH, Public Health Consultant; Blanche Mattern, Link NCA Technical Advisor; Dr Jean Lapegue, Senior WASH advisor; Mathias Altmann, Operational Research Advisor; Myriam Ait Aissa, Research and Analyses Department Coordinator, all at Action contre la Faim, France

October 2017 Waterlines Vol. 36 No. 4

ACTION AGAINST HUNGER

link nca
NUTRITION CAUSAL ANALYSIS

European Union Humanitarian Aid & Civil Protection

The link NCA project is funded by EU humanitarian aid (ECHO)

This document covers humanitarian aid activities implemented with the financial assistance of the European Union. The views expressed herein sould not be taken, in any way, rflect, the official opinion of the European Union, and the European Commission is not responsive for any use that may be made of the information it contains.