

## WaSH & Nutrition – What does nutrition causal analysis say?

This year, World Toilet Day is focusing on the link between sanitation and nutrition – drawing the world’s attention to the importance of toilets in supporting better nutrition and improved health. Lack of access to clean drinking water and sanitation, along with the absence of good hygiene practices, are among the underlying causes of poor nutrition.

The Link NCA Technical Unit has selected findings from two recent nutrition causal analysis studies where WaSH factors were identified as critical for poor nutrition.

The Link-NCA method analyses the complex, dynamic, locally-specific causes of undernutrition. Since 2010, Action Contre la Faim (Action Against Hunger) and a scientific committee led by a small group of researchers (TUFTS University, Institut de Recherche pour le Développement, World Food Program) and technical experts have invested in its development in order to strengthen the analytical foundation on which its programs are built. The Link-NCA method is structured and participatory thanks to the inclusion of a community-level qualitative enquiry. The qualitative enquiry illuminates context-specific and community-defined causes of undernutrition while directly integrating local communities early in the process.

To access to the Link NCA guidelines, the technical tools, and the study reports, **visit our website: [www.linknca.org](http://www.linknca.org)**

## EAST HARARGHE ZONE, ETHIOPIA 2014

A Nutrition Causal Analysis (NCA) study was undertaken in East Hararghe zone of Ethiopia from April to August 2014. The objective of the study was to provide a greater level of understanding of the possible causes of acute malnutrition of children 6 - 59 months in 3 livelihood zones in two districts / woredas (Fedis and Kersa) of East Hararghe Zone (Oromia Region).

From the 14 factors considered as the most important contributors to undernutrition in the study area, WaSH related issues were validated as one of the 6 major causes of acute malnutrition.

Causal Factors	Rating
<b>Hyp 12. Problem related with WASH (Environmental sanitation)</b>	<b>Major</b>
Hyp 1 Care givers work load	Major
Hyp 2. Short birth spacing	Major

Hyp 3. Feeding habits	Major
Hyp 4. Lack of awareness on malnutrition	Important
Hyp 5. Impact of climatic change	Important
Hyp 6. Low productivity	Important
Hyp 7. Low utilization of health services	Major
Hyp 8. Disease	Minor
Hyp 9. Improper identification of target groups (Food aid)	Important
Hyp 10. Lack of knowledge/awareness on malnutrition in all sectors	Important
Hyp 11. Inadequate infrastructure	Important
Hyp 13. Low household income	Important
Hyp 14. Problem in Quality and quantity of food	Major

Access to water and drinking water was often quoted as an important problem in the study but the situation is very variable from one area to another and from one season to another. Poor access to drinking water is a major factor in some areas (especially in Fedis woreda) and access to water is also a determinant for food safety and hygiene practices in households.

The **main source of drinking water in the area of this survey was pond water** which accounts at about 31.1 % and the around 19.5 % of drinking water source is from protected springs.

It is known that pond water is not clean and both animal and human are using the same pond that is not protected and safe for drinking. This indicates that a majority of the children are at high risk of developing intestinal parasite or water-borne disease which could be a risk factor for high prevalence of malnutrition in the area. Only **10.3% of the respondents reported that they boiled water** before drinking and **30.7% of the respondents used bleaching** to clean their drinking water. Only **21% of the respondents reported that they had latrines. Of those who had latrines, only 20.5% used it properly and constantly.**

Around 44.5% of the respondents reported that children were defecating outside of the house, in the open, in their living area. And 25.4% of the interviewed also said they disposed of their children's feces outside their properties. Only 6% of household latrines had a safe outlet. **87.9% of the households had no washing station near the latrine.** 56.7% (N=428) of the respondents reported that they washed their hands after defecation; 66% of them used only water to wash their hands and only 24.9% of the respondents used disinfectants (soap or ash) during hand washing.

**52.2% (N=417) of the respondents had reported that they did not have soap at their home for washing.** And only 11.5% of the respondents reported that they covered their water container during transportations.

Hence based on the above findings, the woreda WaSH status is very poor and **the study identified problems related to WASH as high risk factors of, and significantly associated with, malnutrition.**

Source : ACF International, 2014, *Nutritional Causal Analysis, East Hararghe Zone, Fedis and Kersa Woredas, Ethiopia. August, 2014. Final Report.*

[http://linknca.org/fiche/east\\_hararghe1.html](http://linknca.org/fiche/east_hararghe1.html)

## MASBATE PROVINCE, PHILIPPINES 2015

In September 2014, ACF implemented a link NCA study in Masbate Province, Philippines, in order to: identify main causes of wasting and stunting in order to inform the technical strategy and programs (WASH and Nutrition) for the prevention of the same at a local level; understand the local seasonal and historical pathways to wasting and stunting; support technical advocacy on causes of wasting and stunting so as to plan a technical strategy especially in WASH.

Final stakeholder workshop ranked the factors considered as the most important contributors to undernutrition in the study area, following in depth qualitative and quantitative analysis. 11 factors were rated as major causal pathways to undernutrition, 8 factors as important and 1 was considered as untested due to lack of evidences. Amongst these, **6 factors related to WaSH were rated either major, either important.**

Causal Factors	Rating
<b>I - Inadequate hygiene practices</b>	<b>Major</b>
<b>J - Open defecation</b>	<b>Major</b>
<b>K - Poor or inadequate sanitation</b>	<b>Major</b>
<b>L - Poor liquid/solid wastes management</b>	<b>Major</b>
<b>M - Inadequate/poor access to safe water</b>	<b>Major</b>
<b>S - Inadequate management of animal waste</b>	<b>Important</b>
A – Inappropriate breastfeeding practices	Major
B - Inappropriate complementary feeding practices	Major
C - Poor psychosocial care	Important
D - Early Pregnancies	Important
E - Short birth spacing	Important
F – PLW “vitamins” deficiencies	Important
G - LBW and IUGR	Important
H - Inadequate healthcare behaviour	Important
R – PLW acute malnutrition	Untested
N - Low income due to instability of income sources and/or lack of income generating activities	Major
O - Low personal agricultural production and fishing	Major
P - Limited access to food	Major
Q - Poor diet diversity	Major
T - Inadequate family resource management	Important

The unhealthy environment in which the community lives was evident through observation.

Communities are aware that inadequate sanitation contributes to disease prevalence. Most of them adopt a correct behaviour by trying to go further from their village for open defecation, and use soap to wash their hand. Meanwhile, the **health risks associated to the presence of children faeces in the surrounding is not well understood**, as knowledge on hygienic environment remains weak.

Knowledge on water management and water safety were found to be insufficient with absence of proper water treatment. **Participants are assuming that water is safe for human consumption if it is clear**. At the same time however, communities are able to see the relation between unsafe water consumption and diarrhea and seem to adopt more appropriate behaviour during rainy season, such as boiling water as the water is often mixed with mud.

NCA findings showed that inadequate sanitation should be considered as one of the major contributor of child undernutrition. Indeed open defecation and inadequate waste management are directly related to unhealthy environment.

Finally, lack of hygiene and inadequate animal waste management, in particular poultry, were considered as important causes of child undernutrition level.

*Source : ACF International, 2015, Nutrition Causal Analysis. Municipalities of Aroroy, Cawayan, Milagros and Monreal. Masbate Province, Region V. Philippines. September 2014 – January 2015. Final Report.*

[http://www.linknca.org/fiche/province\\_of\\_masbate.html](http://www.linknca.org/fiche/province_of_masbate.html)