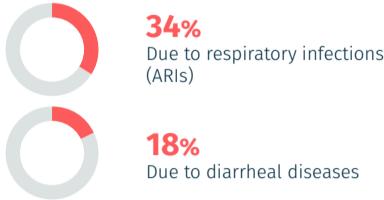


# Linkages among WASH, Nutrition and Health Sectors in Guatemala

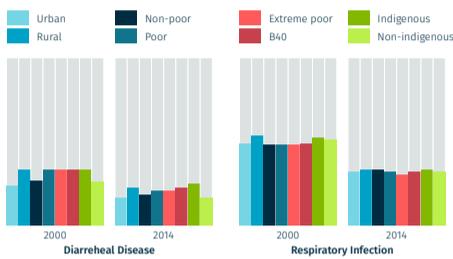
## Health and WASH nexus

### Child mortality

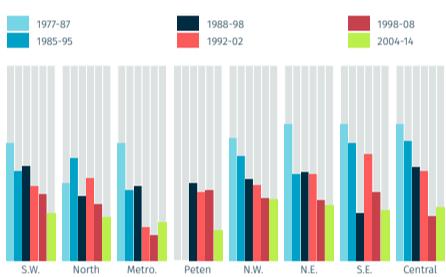
Guatemala evinces the same patterns of childhood mortality seen globally



Incidence of diarrheal disease and respiratory infection by geographic area and socioeconomic group



Infant Mortality Rates by Region, 1977 to 2014



### Child stunting



**47% of all children in Guatemala are stunted**  
This rate of chronic malnutrition is higher most LAC countries: Bolivia and Ecuador are the closest, but their rates are only 27 and 25 percent respectively.



**12.6% of children is underweight**  
Smaller but still considerable share.

Stunting Rates among Children 3-59 months; by Area, Ethnicity and Wealth, 2008 and 2014



Stunting Rates by Department among Children 3-59 Months of Ag. 2008 and 2014



### Chronic malnutrition

**Chronic malnutrition gaps closed**  
Between 2008 and 2014, but often due to a worsening situation for the children of the better off.

**The urban-rural gap closed**  
Due to an increase in malnutrition rates in urban areas, from 17 percentage points to 11.

**Women's empowerment is linked to lower malnutrition rates**  
While children of women with restricted decision-making ability had the highest rates of stunting.

Factors that affect malnutrition levels (as laid out in the UNICEF framework on nutrition)

- WASH (Water Supply, Sanitation and Hygiene)
- Food security, dietary diversity and care
- Health care

Although there is little progress, their impact on malnutrition and the extent to which they have changed over time, **has not translated into better outcomes particularly**

### Special attention to WASH service quality

**Monitoring systems do exist but sometimes do not include rural areas**

One factor that is of utmost importance to secure good-quality water is the development of monitoring capacity for existing distribution systems and sources of drinking water.

**The quality and sustainability of water and sanitation services is a problem in rural areas**

The majority of locations in the country report discontinuity in services that places additional risks on public health and results in an inefficient use of infrastructure.

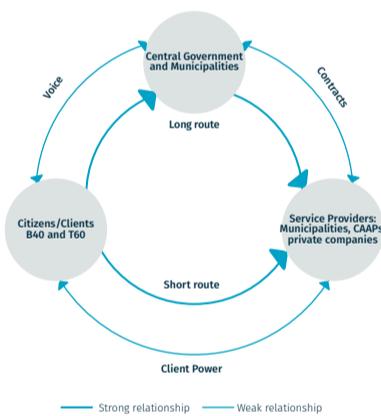
**Deficiencies in the operation and maintenance of installations**

This can mean affecting the quality of water, failures in disinfection, and loss of water in the distribution system.

**The country needs to control the quality of water being provided to the consumer**

This is a critical aspect of service delivery and one of the main factors in assuring appropriate water services, which should be monitored in the process of regulation according to legal norms and their application.

Principal-Agent model of the WASH Sector in Guatemala



**The lack of water and sanitation services in rural areas increases the risk of disease**

It also means less productivity and economic possibilities of the poorest households.

**Productivity is also extremely reduced**

Due to time spent collecting water or from expensive sources such as private water vendors or other informal providers.

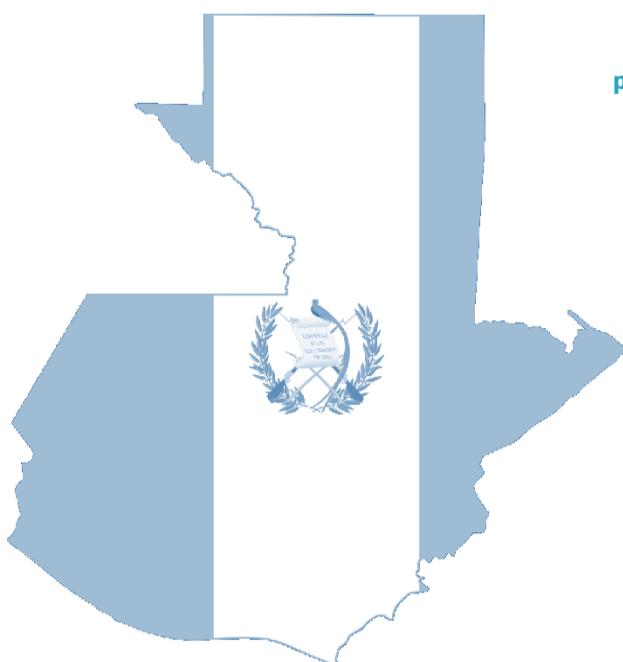
**Lacking access to adequate water and sanitation services**

Also reduces personal opportunities to economic, social and political dimensions of well-being.

**The importance of water quality in rural areas has been neglected**

Due mostly to lack of knowledge and information.

## Lessons & recommendations



**Optimizing water and sanitation investments and financing requires multi-sector approaches where the principal aim is to improve the quality of life of children**

**WASH becomes fundamental for reducing health and malnutrition risks**

Implementing multi-sectoral projects can increase the overall economic impacts of these public investments.

**Multidimensional project designs that combines WASH, health and nutrition interventions become necessary**

Such as the recently-approved Crecer Sano Project that is redefining the way in which these complex issues are addressed:

- Investing in water infrastructure
- Targeting areas with high risks of children's malnutrition
- Incorporating social development principles (inclusiveness) along with distribution of spatial benefits (regional)

**Guatemala needs to achieve an annual two percent in reduction in the rate of chronic malnutrition in children under five years old in order to reach 29 percent by 2021 (the value for 2014 was 45 percent).**

**Inter-sectoral collaboration will be necessary to meet this commitment**

Between Municipalities, Development Councils, Central and Local Governments and focusing on the axes of basic water supply and sanitation, maternal health, and children's health interventions.

**Emphasizing children's health and nutrition represents opportunities for the future**