Policy Brief
Nutrition Deprivation in the Arab States
Key Points

- **Nutrition deprivation is a serious issue in the 11 countries studied, contributing significantly to child poverty.** More than a quarter of children in the countries studied suffer acute nutrition deprivation and more than 2 in 5 are moderately deprived. Poor compliance with Infant and Young Child Feeding standards is an issue for a significant number of children in all countries of the region, irrespective of wealth status, geographical location and education of the head of household.

- **When considering moderate nutrition deprivation, stunting affects about a quarter of children in the countries studied and nearly half of the children in Cluster three countries, where overall child poverty is widespread.** Household wealth and geographical location are drivers of inequality in stunting.

- **Obesity affects just under 1 in 10 children in the countries studied, but is more prevalent in the countries where overall levels of poverty are lower (Cluster 1).** While about 1 in 8 children is obese in Cluster 1 countries, this affects only 1 in 40 children in Cluster 3 countries. Children who are otherwise advantaged (those living in households in the top wealth quintile, in urban areas and with household heads that have at least primary education) show higher levels of obesity.

Introduction

This policy brief summarizes key findings and recommendations relating to nutrition from the report ‘Child Poverty in the Arab States’. The report examined multidimensional child poverty in 11 Arab States: Algeria, Comoros, Egypt, Iraq, Jordan, Mauritania, Morocco, Palestine, Sudan, Tunisia and Yemen. The report points strongly towards nutrition deprivation as a key issue in the region and documents the double burden of under-nutrition and obesity. It also shows limited correlation between nutritional status and most background variables. Malnutrition seems to affect all countries and all sub-categories of children within these countries in one form or another.

In all of the 11 countries examined, the under 18 population represents a large share of the total country population, from 27.7 per cent in Tunisia to 47.4 per cent in Iraq. The current nutritional status of this large share of children in the overall population will therefore have a considerable effect not only on these children themselves, but on the future prosperity of the region. This provides a strong justification to pay close attention to the evidence on nutrition deprivation emerging from the analysis.

The report on ‘Child Poverty in the Arab States’ used a cross-country MODA (CC-MODA) methodology, adapted to the Arab States, to analyse and compare the 11 selected countries. The report’s analysis was based on comparable survey data sets across the 11 countries. It looked at five dimensions of child well-being, selected in line with the Convention on the Rights of the Child for each of two age categories (0-4 and 5-17). For children 0-4, the dimensions examined were water, sanitation, housing, health and nutrition. For children 5-17, the dimensions considered were water, sanitation, housing, information and education.
This application of the MODA methodology defines two measures of poverty. The first measure, ‘acute poverty’, defined in the original CC-MODA methodology (see De Neubourg et al, 2012), has been applied mostly to low-income countries. The second measure, ‘moderate poverty’, was established taking into consideration specific characteristics and experiences of Arab States. For purposes of the analysis, a child is considered poor if he or she is deprived in two or more dimensions (for example, if a child has to travel for more than 30 minutes round trip to fetch water and is wasted in nutritional terms, then he or she will be deemed acutely poor).

To facilitate the child poverty analysis, the countries examined were grouped into clusters by considering the distance between each country’s child poverty level and the 11-country average, weighted by population size. This process yielded the following three groups:

- Cluster 1: Countries with low acute poverty and low moderate poverty, including Egypt, Algeria, Jordan, Palestine and Tunisia
- Cluster 2: Countries with low to medium acute poverty and medium to high moderate poverty, which include Iraq and Morocco
- Cluster 3: Countries with high acute poverty and high moderate poverty, including Comoros, Mauritania, Sudan and Yemen.

In addition to providing a deep examination of the seven dimensions mentioned above, the report looks at relative gaps or inequality between traditionally disadvantaged and advantaged groups of children in terms of:

- Area (Rural/Urban)
- Sex (Female/Male)
- Education of the household head (No education/Primary or higher)
- Wealth (Poorest-Bottom quintile / Richest-Top quintile)
### Detailed Definitions of Nutrition Deprivation Indicators

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Acute Deprivation</th>
<th>Moderate Deprivation</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Infant and young child feeding (IYCF): Children 0-5 months: Deprived if no breastfeeding; Children 6-8 months and breastfed: Less than 2 feedings in the last 24 hours; Children 9-23 months and breastfed: Less than 3 feedings in the last 24 hours; Children 6-23 months not breastfed: Less than 4 feedings of which one should be a milk product.</td>
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<td>Children 0-4</td>
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<tr>
<td></td>
<td>N.A.</td>
<td>Stunting (&gt;24 months): Height for age is less than -2sd from WHO reference median</td>
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</tr>
<tr>
<td></td>
<td>N.A.</td>
<td>Obesity (&gt;24 months): weight for height more than 2sd from WHO reference median</td>
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Nutrition deprivation is prevalent in all countries studied

Findings show that nutrition deprivation is a serious issue in the countries studied, contributing significantly to child poverty. Figure 1 below shows that on average in the 11 countries studied, 26.7 per cent of children suffers acute deprivation in nutrition. This means that either Infant and Young Child Feeding (IYCF) standards are not met for these children, or children have a low weight for height and are thus wasted. There is not a lot of variation between the three country clusters, with Cluster 3 showing only a slightly higher acute deprivation rate of 31.7 per cent. Moderate deprivation in the nutrition dimension looks additionally at stunting and obesity. In the 11 countries, 42.7 per cent of children are moderately deprived in the nutrition dimension. Again, differences between the clusters are not very pronounced, with the incidence of moderate deprivation in the nutrition dimension ranging from 38.8 per cent in Cluster 1 to 54.1 per cent in Cluster 3. What is also remarkable is that the analysis shows very little inequality within countries. Relative gaps by geographical location of the household, household wealth and education of the head of household are very small in the 11-country average and in Clusters 1 and 2. Only in Cluster 3, which contains the countries with higher overall levels of child poverty, some profiling can be seen. In Cluster 3 countries, children from households with lower wealth status and rural children show higher levels of nutrition deprivation, but even here the differences are relatively small, with relative gaps not exceeding 1.5.

The explanation for the significant levels of nutrition deprivation observed in the eleven countries and their limited profiling by background variables lies in poor compliance with IYCF standards. These standards prescribe exclusive breastfeeding for the first six months and continued breastfeeding beyond six months with appropriate complementary feeding. It appears from the evidence presented that compliance with these standards is problematic for a significant number of children in the region, with little variation between and within countries.

Figure 1: Nutrition Deprivation and Inequality by Cluster
Figure 2 unpacks the findings by examining moderate deprivation in the nutrition dimension in greater detail. It does this by looking separately at the prevalence of stunting and obesity as well as relative gaps between advantaged and disadvantaged groups by cluster. A child is considered stunted, a result of long-term nutritional deprivation, if he or she has a height or length-for-age of more than two standard deviations below the median of the National Center for Health Statistics (NCHS) growth reference. Because research indicates that stunting is one of the major threats affecting child development and has implications for cognitive development that may be considered largely irreversible beyond early childhood, this indicator is commonly used to measure nutrition deprivation as contributor to overall multidimensional child poverty. It is crucial to underscore the importance of the first 1,000 days, from pregnancy up to the 23rd month of the child’s life. Although some catch up growth might happen later on, not all damage can be reverted.

As shown in Figure 2, stunting is a key issue across the countries examined, as it is experienced by more than 1 out of every 4 children (26.6 per cent) on average across the 11 countries. In Cluster 3 alone, almost half of all children (48.5 per cent) are affected by it. While not as severe, prevalence in Clusters 1 and 2 reaches nearly 20 per cent, that is, almost 1 out of every 5 children is affected. Although sex does not show a significant correlation with stunting, area and wealth are both drivers of inequality. In terms of wealth, children in the poorest quintile from Cluster 2 and 3 countries are approximately twice as likely to experience this deprivation than those in the top quintile. The education of the household head is not a significant driver of stunting, and area only has a slight impact on Cluster 2 and 3 countries, where for children living in rural areas, the likelihood of experiencing this deprivation is, respectively, 1.4 and 1.6 times higher than for children in urban areas. It is noteworthy that the relative gaps by background variables are more pronounced in Clusters 2 and 3 than in Cluster 1.

Obesity is a less prevalent aspect of nutrition deprivation for children in the 11 countries studied. The regional average suggests that 9.3 per cent of all children aged 0-4 experience it. For obesity, we do see significant differences between the clusters. Obesity is clearly more prevalent in countries that experience lower overall levels of child poverty than in those where child poverty is widespread. The prevalence of obesity ranges from 13.1 per cent in Cluster 1 countries to 2.5 per cent in Cluster 3 countries. Unlike stunting, obesity also shows significant inequality within countries. Here, children who are otherwise advantaged (those living in households in the top wealth quintile, in urban areas and with household heads that have at least primary education) tend to show slightly higher levels of obesity. Boys also show a slightly higher prevalence than girls. Again, these inequalities are more pronounced in Cluster 3 than in Cluster 1 and 2.
Policy Recommendations

Compliance with Infant and Young Child Feeding Practices remains an issue of concern for most countries in the region and does not seem particularly strongly correlated with household wealth or any other background variables. This points to the need for a concerted communication for development engagement to enforce good infant and young child feeding practices, including exclusive breastfeeding in the initial six months and timely complementary feeding with continued breastfeeding beyond six months. In the absence of this, nutrition deprivation that sets in in early childhood can have a long-term impact on children, as well as on the societies and economies of the countries studied.

The analysis presented here documents the double malnutrition the region faces, which sees a simultaneous prevalence of stunting and obesity. While stunting is more prevalent in countries with higher overall levels of child poverty and amongst children who are otherwise disadvantaged, obesity is associated with the countries with lower levels of child poverty and with children who are otherwise advantaged. This calls for tailored, country-specific nutrition strategies to address both forms of malnutrition.
To address stunting, countries require integrated, multisectoral approaches to nutrition, tailored to the specificity of each country context, which means a combination of social protection, WASH, C4D, micronutrient supplementation, and targeted nutrition support for pregnant and lactating mothers.

Obesity in childhood also requires a comprehensive response, that should include protection and promotion of exclusive breastfeeding; actions to optimize early nutrition such as counselling on IYCF; maternal nutrition and antenatal care programmes; school food policies and programmes; and marketing regulations on foods high in sugars and fat as well marketing for children\textsuperscript{i}.


\textsuperscript{ii} It must be noted that the literature shows that the education of the mother is crucial regardless of whether or not she is the head of household. However, data limitations mean that this analysis could only disaggregate by the educational attainment of the head of household.

\textsuperscript{iii} For more in-depth recommendations about child obesity please see UNICEF’s Nutrition Strategy and Report of the Commission on Ending Childhood Obesity.