

How access to iodized salt changed in a decade: 2000–2010

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Since 1994, universal salt iodization has been recommended by the WHO and UNICEF as a safe and cost-effective strategy to ensure sufficient dietary iodine intake (1). Most countries passed salt iodization legislation and introduced IDD control programs to ensure that more than 90% of households have access to adequately iodized salt. Global household coverage of iodized salt (HHIS) increased dramatically during the 1990s from less than 10% to 66% (2). In 2011, ca. 70% of all households globally had access to adequately iodized salt.

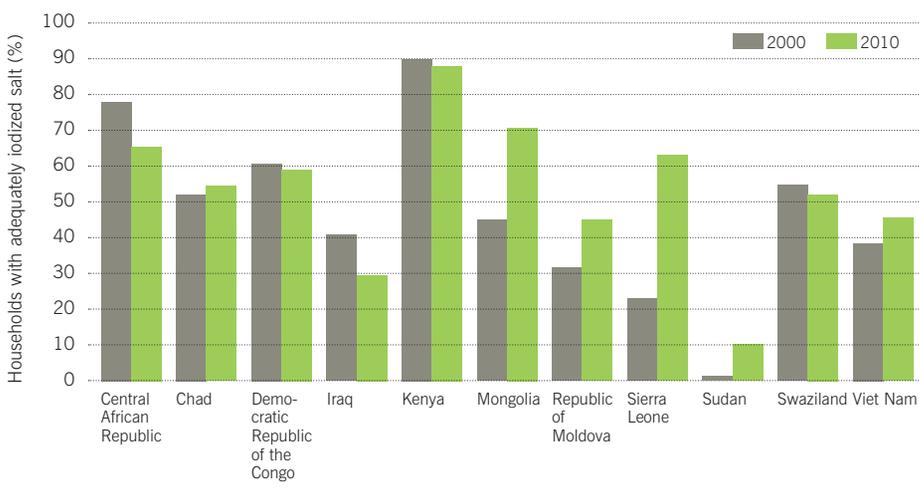
HHIS is a key indicator in Multiple Indicator Cluster Surveys (MICS) – international surveys initiated by UNICEF. Based on MICS conducted in 2000 and 2010 in 11 low and lower-middle income countries (Central African Republic, Chad, Democratic Republic of the Congo, Iraq, Kenya, Mongolia, Republic of Moldova, Sierra Leone, Sudan, Swaziland, Viet Nam), the authors calculated two indices of household salt iodization: (i) the proportion of households with adequately iodized salt (i.e., to at least 15 ppm), and (ii) the proportion of households with adequately iodized salt among households with any iodized salt. They also explored the associations between these indices and socio-economic variables (HDI, GDP) within and between countries.

HHIS has increased but socio-economic disparities remain

Based on data from 105,162 households in 2000 and 144,018 households in 2010, coverage of adequately iodized salt increased by 6.1% on average (from 46.3% to 52.4%), but with regional differences: coverage fell by 13.0% (from 77.5% to 64.5%) in the Central African Republic but improved by 40.4% (from 22.2% to 62.6%) in Sierra Leone (Figure 1).

Disparities in access to adequately iodized salt are apparent, both between rural and urban areas and between the poorest and the richest ones in 2000 and 2010. In 2000, the coverage in urban areas was 20.9%

FIGURE 1 The proportion of households with adequately iodized salt varied widely between the 11 low and lower-middle income countries, in 2000 and 2010



higher than in rural areas, but the gap decreased to 8.7% in 2010. Similarly, the proportion of households in the richest quintile with adequately iodized salt was 25.0% higher than in the poorest quintile in 2000, but this declined to 19.3% in 2010. Even though the inequalities have been reduced in the past decade, the socio-economic and geographical differences remain substantial in many countries.

These findings can inform strategies for achieving the global goal of more than 90% of households with adequately iodized salt. First, the largest improvement in the decade 2000–2010 was in the countries that started at very low levels and had buy-in from national governments and support from international donors and other agencies (Mongolia, the Republic of Moldova, Sierra Leone and Sudan). This group of countries appears to be scaling-up salt iodization programmes effectively. Countries with coverage of 50% or higher, in which salt iodization had been scaled up, appeared to face challenges to make further improvements (Chad, the Democratic Republic of the Congo, Kenya, Swaziland and Viet Nam). Some countries are expe-

riencing significant difficulties, including military conflicts which undermine progress (Central African Republic, Iraq). Second, the substantial socio-economic disparities in access to adequately iodized salt in many countries are suggesting that equity should be addressed explicitly in salt iodization policies. Finally, countries affected by war require explicit additional support from international agencies to achieve universal salt iodization during and following military conflict.

In conclusion, the achievement and maintenance of universal salt iodization appears a remote goal for many resource-constrained countries and requires explicit renewed efforts by governments, bilateral and multilateral agencies and civil society to avoid the burden of iodine deficiency disorders in the population.

References

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2. The state of the World's Children 2004. New York: UNICEF, 2003.