Protecting children’s brain development: a strategic review on sustained universal salt iodization in Eastern and Southern Africa

UNICEF Nutrition Section Eastern and Southern Africa Regional Office (ESARO)

The full report of this meeting was published in January 2007 by Unicef ESARO.

I. Successful Legislation and Regulatory Procedures

Key Lessons Learned:

- Often enacted following surveys which demonstrated gravity of IDD problem
- Successful program will rely more on consensus and buy-in, than policing.
- Regulations to waive tax / duties appreciated by industry to lower their costs
- Producing and importing countries have different situations – actually easier for importing countries as long as entry points can be controlled
- Used to draft and inform the development of legislation and to guide and monitor action
- Standards are the basis for monitoring/enforcement, while surveillance systems generate critical data for advocacy and planning
- Level expressed in regulations often require adjustment, based on program monitoring and following an accepted process (including Codex review)
- Need for a range of standards rather than a single point, need for cross validation of a sustainable business model(s) that recognize business imperatives of small-scale salt producers (South Africa, Tanzania)
- Encourage countries to use / move rapidly toward internationally agreed-upon levels of 45 ppm +/- 15, take necessary steps towards a common standard within regions (SADC, ECSA) and a common approach to enforcement (Mozambique, Malawi, South Africa, Lesotho, Kenya among others)
- Issue updated guidelines for program managers and producers on use of rapid tests and the interpretation of results and the need for validation / titration

Table 1: Proportion of population, and number of individuals with insufficient iodine intake in school-age children (6-12 years) and the general population by UN region, 2003.

<table>
<thead>
<tr>
<th>Insufficient Iodine Intake (UI&lt;100 μg/L)</th>
<th>School-age children</th>
<th>General population</th>
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</thead>
<tbody>
<tr>
<td>Region</td>
<td>Prevalence (%)</td>
<td>Total number (millions)</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>45.1</td>
<td>19.4</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>31.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Africa</td>
<td>42.7</td>
<td>59.7</td>
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</tbody>
</table>

The way forward:

- Support the review national legislation / regulations in some countries where this is identified as a bottleneck (e.g. Tanzania) to ensure that they are clear and comprehensive
- Broaden approach to cover development of tests reflects need for clear guidelines

Background

The Eastern and Southern Africa Regional Strategic Review Meeting on Sustained Elimination of Iodine Deficiency Disorders was held from April 25 to 26, 2005 in Cape Town, South Africa. It was organized by UNICEF Eastern and Southern Africa Regional Office (ESARO) in collaboration with UNICEF New York, ICCIDD, MI, and Global Network for Sustained Iodine Nutrition, with funding from United States Fund for UNICEF. The meeting involved delegations from both the public and private sectors covering ten countries in the region – Angola, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Rwanda, South Africa, Tanzania, and Zimbabwe, as well as key representatives from ICCIDD, MI and UNICEF.

The aim was to discuss how to sustain the progress made and how to accelerate efforts toward sustainable elimination of IDD in countries of Eastern and Southern Africa. As shown in Table 1, WHO estimates that, in the Eastern Africa Region, 45% of school children have inadequate iodine nutrition, while in Southern Africa, 32% have inadequate intakes.

The agenda was framed into sessions to elicit analysis of national progress in each of the following four categories.
II. Improving Productive Capacity and Marketing Opportunities for Small Producers

Key Lessons Learned:
- There are two approaches to small-scale producers: (1) looking at them from a business perspective; and (2) strengthening their capacity through education on benefits of iodized salt, legislation compliance, and standardized procedures of iodization, subsidized fortificants, and internal quality control.
- It may be necessary to treat producers as commercial entities through an economy of scale approach, that is, support iodization for medium and large scale packers and distributors with small scale producers providing raw, semi-processed salt to these larger local or transnational commercial entities.
- Recognize the poverty-related ramifications of putting thousands of small-scale poor producers out of business. Need to realize the importance of links with poverty reduction schemes such as micro-credit.
- Appropriate technology – need to ensure consistent production of adequately iodized salt, as hand-spraying methods must be accompanied by adequate training.
- Appropriate quality assurance – need to utilize tests kits with fewer cut offs on the scale as they are more reliable and need to validate with titration by labs at zonal level.

The Way Forward:
- Support development of a comprehensive strategy and standardized approach on how to tackle problem of small scale producers
- Issue updated guidelines on quality assurance – to clarify on what tool to use at what level – e.g. test kits at the household level, but at the commercial and production point need to combine with quantitative methods: titration
- Laboratory capacity building strategy – establishment of reference laboratory for ESAR, and requirements for specific indicators are different at each level – e.g. urinary iodine at higher level as opposed to salt at zonal level

III. Sustaining Significant Levels of Market Reached

Key Lessons Learned:
- Political, social, and economic sustainability are important
- Economic viability – the salt industry is a pivotal partner in ensuring IDD elimination through USI. Commercial interests and not only social responsibility however drive the salt industry.
- Maintaining vigilance and sustaining efforts on the different aspects of the USI program is important. Kenya has achieved this through regular awareness campaigns, open and frank dialogue with all stakeholders.
- Ensuring imports of iodized salt through strategic border control is important for salt importing countries – Zimbabwe and Rwanda have achieved high coverage of iodized salt through ensuring salt entering their borders is iodized.

The Way Forward:
- Advocate for maintaining vigilance through regional bodies (ECSA, SADC) –importance of continued promotion of USI as the most effective strategy to eliminate IDD.
- Ensure that social awareness and advocacy campaigns use consistent messages.
- Direct support to the salt industry, this would include improving production efficiency, reducing operational costs and improving the business environment, combined with consumer demand creation initiatives within the country hence leading to iodization forming an integral part of salt production process.
- Support importing countries to ensure that they source their salt from suppliers who adequately ensure iodization, with efficient border control. (e.g. Mozambique, Lesotho, Burundi, Rwanda)

IV. Where Achievement is Stalled

Key Lessons Learned:
- It is important that salt for both human and animal consumption will be iodized.
- Clear specifications on what type of salt can be imported will be necessary to ensure all in-coming salt by traders is iodized.
- There is a need for a national iodization committee or coalition, which has been a key factor of many countries’ success in achieving USI.
- Training and capacity building are essential for sustainability of a program.
- Awareness campaigns are crucial to create consumer demand for iodized salt.
- There is a need for regular program reviews with contributions from all members involved, especially salt producers.

The Way Forward:
- Once the causes of stalling are identified, provide technical and financial support (Ethiopia, Malawi, Mozambique, Angola).
- If there is no salt in the household, provide support so that small packaging (small sachets) can be explored as buying in bulk may be too expensive for low income households.
- Issue of regional mechanisms (involving key partners UNICEF, MI, ICCIDD, and in coordination with key regional bodies – SADC, ECSA, NEPAI) and networks to sustain USI and advocate support
- Support external assessment for advocacy – external reviews if country program is stalling, and where USI goal has been reached, to advocate for sustained elimination (Kenya, Burundi, Rwanda, Eritrea, Uganda, Madagascar, Zimbabwe)