The success story of the seven-state IDD survey in India

IDD constitutes the single largest cause of preventable brain damage worldwide. In India the entire population is prone to IDD due to deficiency of iodine in the soil and consequently the food derived from it. An estimated 350 million people are at higher risk of IDD as they consume salt with inadequate iodine. Every year, nine million pregnant women and eight million newborns are at risk of IDD in India.

On September 13, 2000, the Government of India lifted the ban at the national level on the sale of non-iodized salt (India Gazette 2000). Scientists, civil society, international agencies, and other stakeholders joined ranks to fight against this retrograde step by the government of India. The four-pronged approach to fighting the removal of the ban consisted of writing advocacy documents, meeting with stakeholders, campaigning in the media, and tracking of universal salt iodization (USI) in the states through state iodine status surveys. But effective advocacy and media campaigns were hampered by a lack of scientific data substantiating the magnitude of IDD in India. To address this gap, state level iodine status surveys were planned in seven states of India and were executed over the subsequent five years in collaboration with various national and international stakeholders.

The state level IDD surveys were carried out in seven states (Kerala, Tamil Nadu, Orissa, Rajasthan, Bihar, Goa and Jharkhand) from 2000 to 2006 by ICCIDD in collaboration with state medical colleges, Micronutrient Initiative (MI) and UNICEF. Children in the age group of 6–12 years, women in the household, retail shop keepers, and other community stakeholders constituted the study population. All three indicators, total goiter rate (TGR), urinary iodine concentration (UIC), and iodine content of salt (household and retail), were studied. TGR ranged from 0.9% in Jharkhand to 14.7% in Goa. The median UIC ranged from 76 µg/L in Goa to 173.2 µg/L in Jharkhand. The household consumption of adequately iodized salt (≥15 ppm) ranged from 18.2% in Tamil Nadu to 91.9% in Goa. These state level IDD surveys are the only sub-national level IDD surveys in India where all three indicators of iodized salt coverage were assessed concurrently.

These surveys provided valuable reliable scientific data to back up the urgent need to reinstate the ban and aided in convincing the wider scientific community and policy makers regarding the need for the same. These surveys also aided in capacity building at state level, which will provide the necessary impetus to sustain USI. The ban on the sale of non-iodized salt was finally reinstated in May 2005.