

## IGN Brief Summaries of Recent Work

5 September 2016

### Angola:

Angola has long been considered to have one of the weakest USI programs in the world with a high prevalence of iodine deficiency. However, due to a paucity of rigorous data documenting the extent of the problem, it has not been possible to advocate for or promote the importance of the problem. A 2006 study of school children in Angola's Bie Province found widespread iodine deficiency, but few other studies have generated information on the magnitude of the problem in the population nor of the coverage of iodized salt. Using GiveWell funds, the IGN has recently worked with the Angolan Government to conduct the first major landscape analysis of the iodized salt industry (trade and market dynamics) and develop concrete recommendations to accelerate the design of a strategic plan to improve the supply of iodized salt and the iodine status of the population. ***No other agencies have been working to support iodine programs in Angola, so the IGN has been able to play a major role and provide a substantial contribution.***

### Georgia/Armenia:

Both Armenia and Georgia achieved optimal iodine nutrition through effective USI programs in the past, but the most recent nationwide surveys were conducted over ten years ago, and actually showed marginally excessive iodine intake in schoolchildren. There is also no reliable information on status of iodine nutrition in Abkhazia (a breakaway region of Georgia with a population of 250,000 that proclaimed its "independence" and has most of its economic and political ties with Russia). In Armenia and Georgia, the prevailing opinion among the lead endocrinologists (and, possibly, other clinical professionals) is that high incidence of goiter and other thyroid disorders persist and may be linked to iodine deficiency. They do not have solid data to support such claims but express doubt whether that USI in their countries is working effectively. The lack of a mutually agreed understanding between the public health and the clinical professions about the outcomes of the USI strategy has led in both countries to a continued promotion and prescription of iodine supplements for pregnant women and school children. **The IGN is leading the design and implementation of small-scale surveys in Armenia (with Columbia University) and Abkhazia (with UNICEF), and supporting the Government of Georgia in the development of a comprehensive Nutrition Micronutrient Monitoring and Surveillance System for tracking status of iodine, iron and folate.** The other major activity in Georgia is to hold meetings and workshops with Endocrinologists and other clinical professionals so that they better understand situation with iodine nutrition in Georgia. Together with the IGN/NC and the President of the Georgia Endocrine Society, the IGN has developed a communication plan to improve the knowledge and awareness of clinical professionals to better understand the causes and management of patients with thyroid problems in Georgia. The IGN has played a leading role in the region for many years and is continuing to implement innovative

actions to ensure that progress is sustained and to link iodine programs to the broader nutrition agenda.

## **Haiti:**

The IGN has been working closely with UNICEF and USAID to review and identify opportunities to strengthen the Haiti national iodine program. The process is being facilitated by Dr. Joseline Marhone, the Director of the Haiti Ministry of Public Health and the IGN National Coordinator (IGN/NC). The country has major challenges to ensure that their local salt is iodized and has one of the lowest estimates of household coverage of adequately iodized salt in the world (< 20% with access to salt with any iodine). Yet, recent data suggests that the iodine intake may be sufficient and the iodine status is in the 'optimal' range. This is because there is widespread use of bouillon (97% daily use by all households) and a consolidated industry (two producers are responsible for 70-80% market share). The estimated per capita consumption of bouillon is 2.25 g/person/day, the bouillon contains 40-50% salt and the main producers are using iodized salt in accordance with the national standard (@ 40 ppm), which means that the bouillon is providing about 65% of the daily requirement for iodine. The balance may be met from the use of iodized salt in bread (again, the fact that there is only a single wheat mill supplying a majority of bakeries facilitates the potential use of iodized salt). The IGN is designing a national survey on IDD and to assess the characteristics of the salt industry which will be undertaken in early 2017, and will use this information to refine the national program. This is an example of how **the IGN is supporting countries to adapt their USI programs with a better understanding of all sources of salt in the diet and focusing on how to adapt program design and strategic focus to best achieve and sustain optimal iodine status.**

## **Lebanon:**

A national IDD program has been in place in Lebanon since the early 1970's when a law requiring fortification of edible salt with iodine was first put in place. However, the implementation of this law was put on hold due to the Lebanese civil war and was partially initiated in 1992, and fully implemented in 1995 by the Ministry of Public Health. Implementation has been challenging over the past twenty years and evidence from a study of schoolchildren in 2013-14 revealed a median urinary iodine concentration of 66 µg/L indicating iodine deficiency and the urgent need for action. In response to this, the **IGN has been working closely with the American University of Beirut and key stakeholders to revive the program.** A policy brief was developed that clarified the problem, its underlying causes and outlined a series of proposed policy options to address the problem. Subsequently, the IGN facilitated a policy dialogue in April, 2016 which brought together a broad set of partners including policy and decision makers, representatives from relevant ministries (Ministry of Public Health (MOPH), Ministry of Industry (MOI), Ministry of Economy and Trade (MOET) and Ministry of Education (MOE)), public institutions' representatives (Lebanese Standards Institutions (LIBNOR)), UN agencies representatives (UNICEF), international and local non-governmental organization representatives (Consumers Lebanon), the salt industry (both involved in production and packaging), medical society representatives (Lebanese Society of Endocrinology, Diabetes and Lipids) as well as researchers and public health scholars. This dialogue summary led to a new Ministerial Decree, which has already been enacted. As immediate follow-up, IGN has worked with UNICEF to support the procurement of a one-year supply of potassium iodate (KIO<sub>3</sub>) which will help with the establishment of a KIO<sub>3</sub> revolving fund. The main salt producers will sign an

MOU with the MOH indicating that they will purchase their own  $KIO_3$  and will not raise the price of salt as long as the cost of  $KIO_3$  remains below US\$50/kg. The IGN will conduct a training of producers to ensure that iodine levels added to salt meet standards (using rapid testing equipment IGN provided), and then will support the initial implementation of regulatory monitoring and report to MOH. The IGN will also implement a sentinel survey in areas previous at risk of IDD to demonstrate the impact of improved supply of adequately iodized salt.

## **Morocco:**

Recent data from a small-scale survey amongst pregnant and lactating women in the Marrakech region showed severe deficiency suggesting pronounced iodine deficiency which is clearly compromising the neurological development of unborn infants. To address this, the **IGN worked closely with the Ambassador to Morocco in Oman to prepare a letter to the Royal Family (see attached Embassy Letter), which was delivered through the Ministry of Foreign Affairs, alerting them to the grave situation and need to prioritize improving the iodine status of the population.** Subsequent to this, the IGN met with officials from UNICEF and the Nutrition Section of the MoH to promote the urgent need for a nationally representative survey to generate robust data and identify opportunities to strengthen the USI program. The IGN is planning a visit to Morocco in September to finalize the details for survey implementation, which is now scheduled to begin in October.

## **Sudan:**

**The IGN has been responsible for the revitalization of the national USI program in Sudan by working closely with all stakeholders, including several line Ministries of the Government, Salt Producers and development partners.** An MoU has been developed which lays out an ambitious five-year plan of action to consolidate salt production in Red Sea Province and includes a major investment from Spain which will go hand in hand with efforts to strengthen legislation across the country. A visit will take place in September, 2016 by several Government representatives to a major manufacturer in Spain to finalize details for the procurement of large-scale salt processing and iodization equipment which will ensure the iodization of all salt required for the Sudanese population and will significantly increase coverage of households with adequately iodized salt. The IGN/RC has played a major role in facilitating these important actions including the development of an updated national plan of action which clearly identifies the roles and responsibilities of all agencies.

## **Vietnam:**

In 2005, more than 90% of Vietnamese households were using adequately iodized salt, and urinary iodine concentration among women of reproductive age was in the optimal range. However, national legislation for mandatory salt iodization was revoked that year on the basis that IDD had been eliminated, and the political importance of the program was downgraded with consequential effects on budget, staff, and authority. Household coverage declined thereafter to 45% in 2011, and urinary iodine concentration levels indicated inadequate iodine intake. The IGN, in collaboration with UNICEF and the WHO, undertook a series of advocacy missions in 2012 and 2013 to advocate for a reinstatement of mandatory salt iodization. UNICEF

Viet Nam followed up on these missions and in 2014 the government started to develop national legislation for salt iodization. On the request of UNICEF, IGN attended a number of meetings of the legislation drafting committee to share experiences from other countries and provide expert advice on a number of questions, such as whether the legislation should be mandatory and whether salt for food processing should be iodized, in addition to salt for household consumption. **Decree 09/2016/ND-CP Regulation on micronutrient fortification of foods was finally passed on the 28th of January 2016. It requires the mandatory fortification of all edible salt, including that consumed directly and that used in production of processed foods with iodine, as well as the fortification of wheat flour and vegetable oil. IGN subsequently supported the implementing ministries in disseminating the new legislation to industry and national stakeholders.** Decree 09 will be implemented through the routine food control system. However, the food control system in Viet Nam is complex; in order to better understand how the Decree would be implemented and to identify any constraints, IGN commissioned a legal review of the new legislation and implementing plans. Most recently, IGN facilitated a joint mission to Viet Nam by UNICEF Headquarters and the US Centers for Disease Control to provide further support to the government in preparing for implementation in March 2017 and re-establishing the salt iodization program, including the design of appropriate surveillance and evaluation mechanisms.