

technical areas. Subsequently, they identified priority activities, targets, and developed road maps on how the activities would be implemented to achieve the set targets.

Among the targets of the Inspection and Enforcement Technical Working Group was to review the Regulatory Monitoring Frameworks used by countries in the ECSA-HC Region. Members of the technical working group spearheaded review of the existing inspection guidelines (that countries are using) for gaps and weaknesses and use recommendations from this review to develop a harmonized and practical guideline that all countries can adopt and apply in inspection of fortified foods. The key recommendation was to come up with 2 guidelines: i) a guideline for Inspection of Fortified Foods at the Points of Entry and Market Surveillance, and ii) a guideline for Internal and External Monitoring of fortified Edible Oil, Salt, Sugar, wheat flour and maize flour and revise the laboratory guidelines.

Photo: Participants at the ECSA-HC regional laboratory working group consultative meeting held in September 2019, in Dar es Salaam, Tanzania



The regional laboratory technical working group spearheaded the revision of the laboratory manual and came up with three guidelines on the laboratory methods for fortified foods: (i) Determination of Iodine in salt by iodometric titrimetric method; (ii) Determination of Vitamin A as retinol in

Sugar, Sugar premix and Edible Oils & Fats using Semi-quantitative and Quantitative Spectrophotometric method; and (iii) Quantitative and Spot-test Determinations of Iron in Fortified Flours. The revised inspection guidelines were peer reviewed by regional and global experts.

In August 2020, ECSA-HC facilitated virtual workshops for the 13 project countries (Kenya, Lesotho, Malawi, Swaziland, United Republic of Tanzania, Uganda, Ethiopia, Zambia, Zimbabwe, Rwanda, Burundi, Mozambique and South Africa) to validate the reviewed guidelines and disseminate the revised version for adoption/adaption by countries. The food inspection and laboratory guidelines are expected to directly contribute to ensuring compliance to set food fortification standards and/or regulations in the region.

Review of potassium iodate (KIO₃) supply chain management system in Tanzania

Dr. Fatma Abdallah, National IDD Coordinator; Rose V. Msaki, Research Officer; and Dr. Germana Leyna, Managing Director - Tanzania Food and Nutrition Centre, Dar es Salaam, Tanzania

Tanzania adopted Universal Salt Iodation (USI) in 1987¹⁰ as a long-term strategy to eliminate disorders caused by iodine deficiency. Despite the comprehensive efforts which have been made to support USI for more than two decades the country is still far from achieving the World Health Organization (WHO) target of 90 percent or more of households consuming adequately iodated salt. In 2018 the country recorded 61.2 percent of households consumed adequately iodated salt (TNNS, 2018).

¹⁰ Kavishe F.P (1987): A proposal for a national programme for the prevention and control of iodine deficiency disorders in Tanzania. An ICCIDD/WHO consultancy report, TFNC report no. 1095.

system for potassium iodate. In partnership with the Salt Associations and the Ministry of Trade and Commerce, the GAIN Premix Facility has provided potassium iodate seed stock of KIO₃ and supported the establishment of a revolving fund and distribution model. Support has included capacity building in business and supply chain management skills for those charged with the management of the fund and distribution system. Thirty-eight (38) salt producers will have access to the stock of Potassium Iodate, which will enable salt producers to iodize 25,000 metric tons. The potassium iodate seed stock for the revolving fund will also help to address a long-standing bottleneck of the iodization program in Mozambique – local availability of potassium iodate. The national supply system will build resilience against external supply shocks by ensuring local availability of buffer stocks. It will also enable local producers to procure fortificant in local currency. These measures will contribute substantially to a more-sustainable USI programme in Mozambique.

Tanzania

For Tanzania, a key focus has been strengthening the existing KIO₃ supply system by providing seed stock of potassium iodate to the Tanzania Salt Producers Association (TASPA).

260 salt producers will have access to the stock of potassium iodate, increasing the capacity of the TASPA revolving fund by an additional 10,000 metric tons of salt. This will help to extend coverage to additional salt producers who were not covered previously, helping to address the regional variations in market availability of iodized salt that were identified by the 2018 Tanzania National Nutrition Survey (TNNS). The strengthened capacity for TASPA will also help to mitigate the effects of international supply chain shocks.

Conclusion

Clearly, the ESA region has made significant strides to make salt iodization universal. More is needed to achieve this goal, while aligning universal coverage with fortification quality, to ensure that we do not miss any opportunities to address the preventable growth and developmental impairments that can be attributed to iodine deficiency.

ECSA-HC: Regional guidelines to enhance monitoring and inspection of fortification programs

By Rosemary Mwaisaka, Manager, Food Security and Nutrition, ECSA-HC, Arusha, Tanzania

The East, Central and Southern Africa - Health Community (ECSA-HC) has been working with partners in direct response to resolutions of the Conference of Health Ministers to scale up Food Fortification programs as a critical strategy in reducing micronutrient malnutrition among populations of the member states. Part of the outcome of the intensified collaborative initiatives was the development of ECSA food control manuals in early 2000's to enhance monitoring and inspection of the fortified food vehicles and smooth implementation of the national food fortification programs.

Following implementation of a regional capacity building initiative co-implemented by ECSA-HC and GAIN and supported by USAID, four technical working groups were formed: i) Production, Food Safety and Quality Assurance/Quality Control; ii) Inspection and Enforcement; iii) Consumption Monitoring and Program Impact; and (iv) Laboratory Strengthening. Between 2015 – 2019 the technical working groups held consultative sessions to identify capacity and resource gaps and propose ways of filling these gaps in each of the

In May 2019 a salt sector mapping survey was conducted in Tanzania with the main objective to characterize the salt industry to understand the challenges and opportunities of unveiling practical consolidation models. This model is recommended as a potential approach which may improve salt production, quality and accessibility of iodated salt at household level. Results showed that Tanzania produces an estimated 330,712.2 metric tons of salt, out of these 141,227.6 (42.7%) metric tons was reported to be non-iodated, while 189,484.6 (57.3%) metric tons was iodated. About 50% of the salt produced in the country is done by small- and medium-scale salt producers using poor iodation technologies (knap sack) and poor storage facilities at production and selling points, thus limiting their access to Potassium Iodate (KIO_3).



Findings from the salt mapping survey also revealed that more than half (51%) of the salt producers purchase KIO_3 from the Tanzania Salt Producers Association (TASPA) and around 33% receive it for free from TASPA. The rest of the salt producers reported importing KIO_3 directly from India and a few are purchasing it from individual retailers within their cities. The price of KIO_3 varied from TZS 50,000 (US\$21.74)¹¹ to TZS 100,000 (US\$43.48) per kilogram. The current KIO_3 supply chain system in the country seems to have a number of challenges in attaining the desired need of distributing the required KIO_3 at the right amount, time and at reasonable prices to a modest proportion of salt producers to achieve the overall goal of reaching more

than 90% of households consuming adequately iodated salt.

With the support of Nutrition International (NI), Tanzania is thus planning to further assess the effectiveness and sustainability of the current KIO_3 supply chain management mechanism and its revolving fund process for achieving USI in Tanzania. It is anticipated that, this assessment will generate important information that will identify bottlenecks and/or challenges existing between supply and demand of KIO_3 in Tanzania and provide practical and implementable recommendations to improve KIO_3 supply chain in Tanzania.

Re-Thinking USI Strategies in Tanzania

By Dr. Vincent Assey, Consultant, Salt fortification in Tanzania.

Introduction:

Iodine deficiency is the leading cause of preventable mental retardation. It is estimated that 2 billion people globally are at risk of iodine deficiency disorders (IDD) while 750 million already have goiter, 43 million suffer from brain damage and 11 million people have overt cretinism (WHO/UNICEF/ICCIDD, 2007).

Tanzania like many countries in the world has not been spared from IDD. About 41 percent of its population are at risk as it lives in the iodine deficient areas; and already 25 percent had IDD by 1980s. To address the IDD, the country, among other interventions adopted Universal Salt Iodation (USI) in early 1990s as a long-term strategy to eliminate disorders caused by iodine deficiency. Despite the comprehensive efforts towards supporting USI for more than two decades; the country is still far from achieving the WHO target coverage of 90 percent or more of

¹¹ 1 USD = 2,300 TZS