



# ENHANCING SALT IODIZATION PROGRAMS IN AFRICA THROUGH THE ESTABLISHMENT OF FINANCIALLY VIABLE POTASSIUM IODATE SUPPLY SYSTEMS

#### **GREG S. GARRETT**

Director, Large - Scale Food Fortification, Global Alliance for Improved Nutrition- GAIN, Switzerland

### **ROMAN PRCZEWLOFSKY**

Consultant, Large - Scale Food Fortification, Global Alliance for Improved Nutrition- GAIN, Switzerland

## **ABSTRACT**

A sustainable supply of potassium iodate (KIO3) is critical for the long-term success of universal salt iodization (USI) programs. In some resource-constrained contexts, donors and governments finance the purchase and distribution of KIO3. Technical assistance can assist the transition from donated or subsidized premix supply and distribution mechanisms to more financially viable procurement systems. In Ghana and Ethiopia, GAIN supported the establishment of more financially sustainable mechanisms for KIO3 procurement and distribution following national supply assessments. These reviewed annual demand, capacity to iodize, donations and subsidies, and existing procurement and distribution arrangements. Revolving fund systems were then established with the ability to: better forecast demand; appropriately recover proceeds from sales to replenish stocks from approved KIO3 suppliers; and effectively distribute stock. Since its establishment in 2011, the Ghana supply system has independently purchased and distributed 6.5 MT of KIO3 or 145 kg per month or enough to produce 1,750 MT of salt and supply 5.8 million Ghanaians with iodized salt monthly. The Ethiopia supply system became operational in early 2013 and in August 2013 launched a tender for 14 MT of KIO3 or enough for 55 million nationwide.

# **OBJECTIVES**

The donation and subsidy of potassium iodate (KIO3) for Universal Salt Iodization (USI) programs ensures iodization in resource-constrained contexts. However, more sustainable supply systems are required. To address this in two African countries, GAIN developed a financially viable approach for the establishment of supply models with integrated cost recovery and distribution to ensure a stable and quality supply of KIO3.



## **METHODS**

GAIN completed national supply assessments of KIO3 in Ghana and Ethiopia reviewing annual demand, capacity to iodize, current donations and subsidies, and existing procurement and distribution arrangements. GAIN then tailored revolving fund models with proposed mechanisms to: accurately forecast demand; appropriately recover proceeds from sales to replenish stocks from approved KIO3 suppliers; and effectively distribute stock. Two hosting institutions were identified, i.e. the Environmental Processing & Associates Ltd (EPA) in Ghana and the Pharmaceutical Fund and Supply Agency (PFSA) in Ethiopia.

## **RESULTS**

Since its establishment in 2011, and using GAIN-procured seed stock, the Ghana EPA supply system has independently purchased and distributed 6.5 MT of KIO3 or 145 kg per month. This is enough to produce 1,750 MT of salt and supply 5.8 million Ghanaians with iodized salt monthly. The Ethiopia PFSA supply system, using donated seed stock from GAIN, UNICEF and the Micronutrient Initiative, became operational in January 2013. In August 2013, using recovered costs, it launched a tender for 14 MT of KIO3 or enough for 55 million nationwide.

#### Salt producers pay Re-order of stockfrom Premix Suppliers: distributor on agreed Payment to Suppliers based on actual sales terms Distributor Run a competitive Premix Salt Revolving Resells in smaller tender and supplies Supplier Producers Fund + quantities to KIO3 Distributor **Producers**

# CONCLUSIONS

A well-designed KIO3 supply system which includes mechanisms for appropriate cost recovery, forecasted demand, and distribution can transform a donation-based system into a financially viable system which supports national USI programs in Africa.

**Acknowledgements:** We would like to thank the our collaborators at the Pharmaceuticals Fund and Supply Agency of Ethiopia, the Ministries of Health of Ghana and Ethiopia, and Environmental Processing & Associates of Ghana. This poster was produced as part of GAIN's lessons learned agenda with support from the Bill & Melinda Gates Foundation.