

Title:	One-Year Transition Funding Request for GAIN's Universal Salt Iodization Program
Locations of the Program:	Bangladesh, Ethiopia, India, Pakistan, Switzerland
Total duration of funding (months):	October 2015- September 2016 (12 Months)
Requested amount	USD\$799,181
Objectives of the request	With GAIN's USI funding ending in 2015, there is a need to ensure GAIN keeps a core universal salt iodization (USI) team in place to provide technical support towards optimal iodine nutrition through building supply, regulatory monitoring and M&E systems for USI in Bangladesh, Ethiopia, India and Pakistan.
Main activities	<p>Fund USI core staff and operations to provide technical assistance in Bangladesh, Ethiopia, India and Pakistan in the following areas:</p> <ol style="list-style-type: none"> 1. Strengthen and reinforce national food control capacity to regulate the iodization of salt and ensure quality; 2. Establish and/or strengthen sustainable systems for procurement and distribution of quality inputs (e.g. potassium iodate, iodization machinery, analytical tools and devices); 3. Leverage and disseminate end of Partnership Project surveys and studies for ongoing advocacy for improved policies and legislation at the national and subnational levels
Date submitted	May 11, 2015

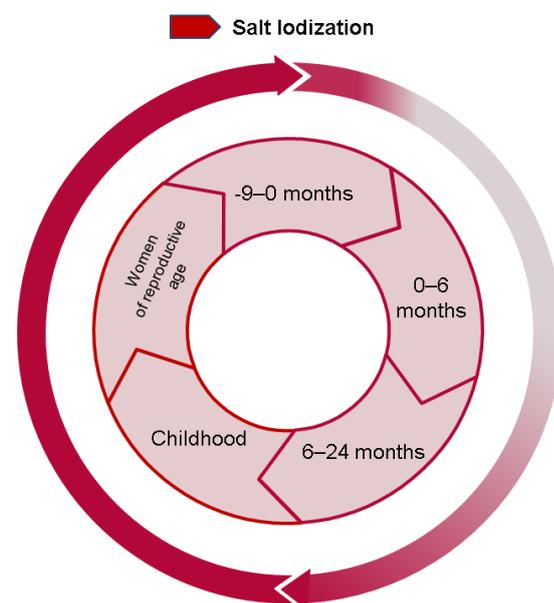
1. Rationale for Request

Iodine deficiency is the single most important preventable cause of brain damage in the worldⁱ. It remains a major threat to the health and development of populations, particularly in pre-school children and pregnant and lactating women in low-income countries. Iodine deficiency at critical stages during pregnancy and early childhood results in impaired development of the brain and consequently in impaired mental function. The collective consequences are known as Iodine Deficiency Disorders (IDD) and have distinct manifestations at different stages of the life cycle.

USI is recognized as the most cost-effective measure to prevent IDD. USI was confirmed by leading economists in the 2012 Copenhagen Consensus as one of the best investment strategies in international developmentⁱⁱ and contributes to at least six of the Millennium Development Goals. Optimal iodine nutrition leads to improvements in intelligence and educability, and decreasing rates of infant mortality, miscarriages and goiter.

Figure 1: Health consequences of iodine deficiency

Physiological groups	Health consequences of iodine deficiency
All Ages	Goiter, hypothyroidism, increased susceptibility to nuclear radiation
Fetus	Spontaneous abortion, stillbirth, congenital anomalies, perinatal mortality
Neonate	Endemic cretinism including mental deficiency with a mixture of mutism, spastic diplegia, squint, hypothyroidism and short stature, infant mortality
Child and adolescent	Impaired mental function, delayed physical development, iodine induced hyperthyroidism (IIH)
Adults	Impaired mental function, iodine induced hyperthyroidism (IIH)



The 2014 Global Scorecard for Iodine shows that the number of iodine deficient countries more than halved in past decade to only 25. Concurrently, GAIN and its partners have supported USI in 14 countries resulting in increases in adequately iodized salt coverage from a baseline of 72.6% (2009) to 80.3% (2014) representing 195 million additional people protected from iodine deficiency. **In December 2014, GAIN received a GiveWell recommendation as a “standout organization, and an organization that we feel offers donors an outstanding opportunity to accomplish good with their donations.”**

In December 2015, GAIN’s \$20m USI Partnership Grant ends. Moving forward, GAIN is targeting 14 of high burden countries to ensure sustainable optimal iodine nutrition is achieved in those countries. For this GAIN has a robust fundraising target (annual budget of \$4m/year over 5 years). In Sept 2015, GAIN is convening in Tanzania with the African Union and Government of Tanzania the largest ever global conference on fortification. Through this event we hope to interest more donors in iodine and USI. Similarly, through our ongoing assessment with GiveWell, we hope to obtain further funding for USI in near future. However, GAIN has started to make key USI posts redundant and other key staff have recently resigned due to the lack of funding commitments.

While GAIN continues to seek a funding base for its USI program, GAIN requests GiveWell and Good Ventures to help us secure immediate funding of USD \$799,181 as bridge funding from October 2015 until September 2016. This amount will fund core staff and activities in a discreet set of countries allowing GAIN to continue to work on USI with a core team providing technical and programmatic support to National USI programs while it continues to fundraise for USI.

2. Background to the Opportunity

Project Goal: The main goal of this funding request is to ensure GAIN keeps a core USI team in place to provide technical support towards optimal iodine nutrition through building supply, regulatory monitoring and M&E systems for USI in Bangladesh, Ethiopia, India and Pakistan.

There is an ongoing **need for a greater business and market orientation**, in which salt producers and salt traders take on a more significant leadership role in salt iodization programs. Thus, the proposed **grant will help support GAIN's program** strengthen national **USI programs** through a balanced effort to increase the overall supply of adequately iodized salt; support government oversight and the regulatory environment; and **further** develop market-based approaches to stimulate long-term demand for iodized salt, including from within the food industry.

Similarly, the application of **innovative delivery models and leveraging multi-stakeholder capabilities through partnership strengthening is required**– GAIN's expertise in innovative delivery models, public-private partnership building and management, and performance monitoring, makes a significant contribution to ensuring that each country-level intervention program achieves maximum impact and sustainability.

It is also important to **embed any national USI effort in global programmatic policy and guidance** to ensure speedy integration of advances in technology and program delivery, and to enable cross-country learning. GAIN serves on the board of the Iodine Global Network (IGN, formerly ICCIDD), works closely with IGN, WHO and UNICEF on global indicators and will continue to support the global programmatic policy and guidance on USI which is adapted to country contexts.

Lastly, in order to achieve sustainable iodine nutrition, there are four complementary components essential for success:

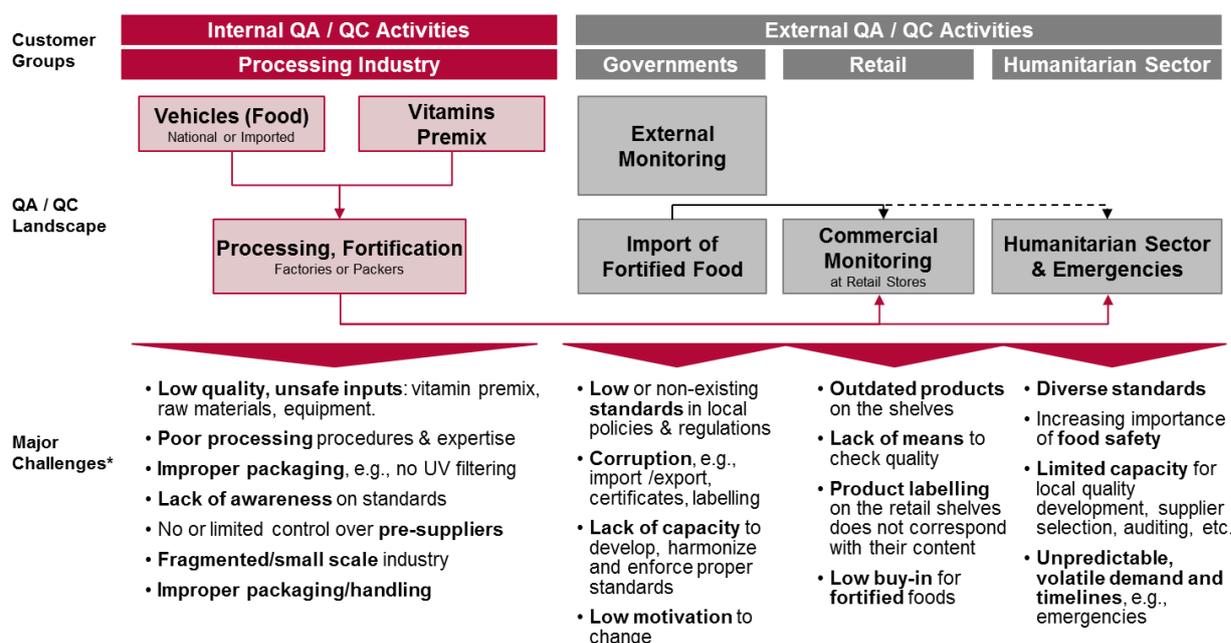
1. **Supply:** This includes both internal QA/QC and production activities by the salt industry and building regulatory monitoring, or external, QA/QC capacity with governments. Sustainable access and availability of adequately iodized edible salt for all segments of populations will be achieved through strengthening the capacity, willingness and motivation of the salt industry, including salt producers and traders, to implement and market only iodized salt to both consumers and the food industry as the business norm. Strengthened government enforcement capacity will support this effort. Activities will assure that the quantity and quality of iodized salt is sufficient, including quality control/quality assurance (QC/QA) at the point of production and importation. This program component will also develop business models to reach the rural poor and other excluded communities in an effective and sustainable way.
2. **Communications and Demand:** Better awareness of the importance of iodized salt along the salt supply chain including the food industry, retailers and individuals will increase and stabilize demand for iodized salt to ensure a consistent market.
3. **Advocacy:** Achieving political and industry support for salt iodization at various levels and throughout the salt supply chain is a key factor in reaching and sustaining salt iodization programs. Most of the affected countries have multiple competing health problems and salt iodization must vie for priority. It is essential to position elimination of iodine deficiency as a health, social and development goal of key importance so that governments commit to providing a policy and program environment that is conducive to positive action along the salt supply chain.
4. **Evidence and Results:** Strengthening the capacity of public health systems to routinely and effectively monitor progress towards USI is essential for program implementation. Periodic evaluation of household and food industry use of iodized salt along with an assessment of population iodine status allows for verification of progress and achievement of the IDD elimination goal. Where feasible, this will be integrated into the routine monitoring of other health and nutrition activities in country.

2.1 Activities

Activity 1: Strengthen and reinforce national capacity to ensure quality and regulate the iodization of salt

Improved internal QA/QC as well as regulatory monitoring is an important component of GAIN's core USI technical assistance provision. All the selected countries have national legislation on salt iodization in place. However, enforcement is suboptimal. Weak enforcement capacity has a double disadvantage since it lets non-compliant producers operate easily and at the same time creates a disincentive for compliant manufacturers who have to contend with a non-level playing field in the market. GAIN has been working on QA/QC for improved salt iodization and food fortification in over 25 countries. Through this experience, we have identified a number of barriers to quality fortification and iodization.

GAIN's quality strategy addresses challenges of key customer groups.



Under this activity, GAIN will continue to build capacity gaps of regulatory bodies. GAIN will use a “systems” or “total quality” approach to regulatory monitoring. For example, regulators will be trained to inspect the records of industries which document critical iodization processes and provide support to salt industries to improve processes to meet requirements where needed – with product sampling and testing relegated to a validation role. This process-based approach is founded on ISO, GMP, HACCP and other technical guidelines. In addition, to ensure the costs of regulatory monitoring and quality control are covered, GAIN will work with regulatory agencies on cost plans detailing how food control can absorb an increasing burden of quality control and inspection costs.

In all four target countries, much more work needs to be accomplished before institutional and financial sustainability is reached. For example, in Ethiopia GAIN's recommendations for improved USI regulatory monitoring include more effective licensing, sampling, documentation, and reporting procedures at production sites and transportation corridors and improved documentation and reporting tools for use during FMHACA inspections.

Activity 2: Establish and/or strengthen sustainable systems for procurement and distribution of quality inputs (e.g. potassium iodate/KIO3, analytical equipment, appropriate iodization machines)

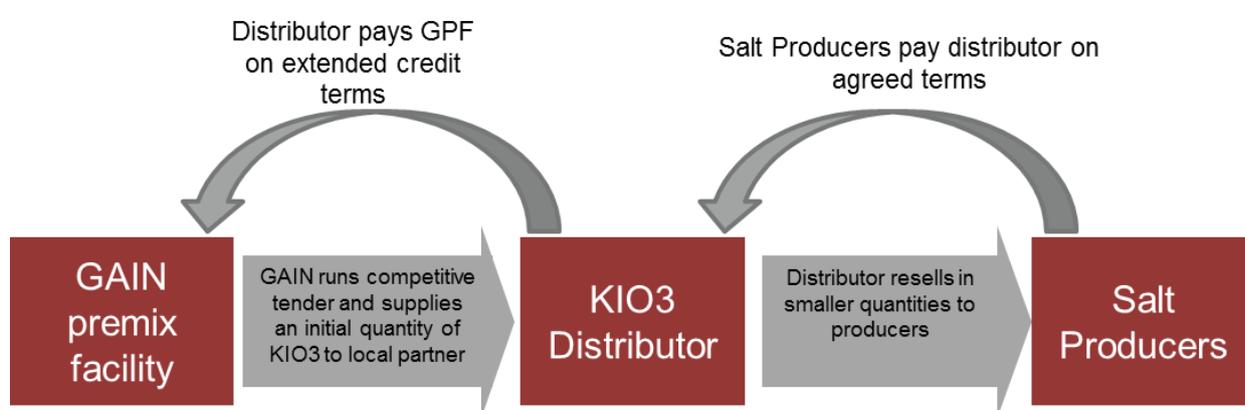
Since July 2009, GAIN has managed the purchase of US\$36 million worth of quality-assured micronutrient premix in 39 countries. Between July 2012 and June 2013 alone, GAIN provided and managed credit to industries with a value of more than US\$ 12 million. Over the last 4 years, only

1% of all transactions have defaulted. This success has been due to intensive default risk monitoring by GAIN and long-term working relationships with both customers and suppliers.

GAIN will help remove barriers typically faced by large, medium and small-scale salt producers in trying to obtain capital needed to purchase quality inputs, which includes continued advocacy for removal of duties and taxation of KIO₃. 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.

GAIN has developed such an innovative model (Figure 6) which has led to a sustainable system in Ghana and Ethiopia. Work in these two countries needs to focus on further removal of taxation and duties and in Bangladesh and Pakistan, the model needs considerable improvements to ensure long-term sustainability. Similarly, other quality inputs (not just KIO₃) is required. This included better iodization equipment procurement, installation and utilization in all four countries to ensure adequately iodized salt coverage is achieved.

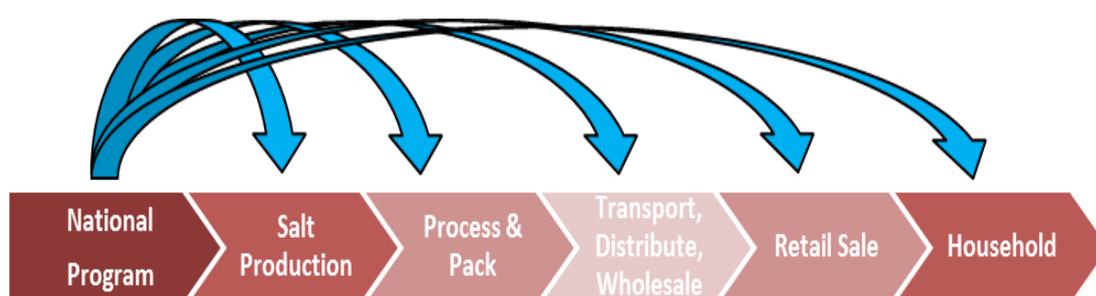
Figure 6: KIO₃ Cost Recovery Model



Activity 3: Leverage and disseminate end of Partnership Project surveys and studies for ongoing advocacy to improve policies and legislation at the national and subnational levels

Traveling the last mile to full USI involves addressing distinct challenges in relation to ensuring all stakeholders across the supply chain and at the national and subnational levels understand effective implementation of USI. Though legislation is in place requiring mandatory iodization of salt in the target countries, the success of the laws is enhanced through effective dissemination of key messages to all key stakeholders.

Communications along the Salt Value Chain



GAIN and partners are currently completing end of project surveys and special USI studies in multiple countries. There are robust plans in place to disseminate this information to all key stakeholders and work with them to ensure more sustainable policies and activities are funded and implemented to improve access to adequately iodized salt and achievement of

optimal iodine nutrition at the sub-national level through identifying specific gaps and likely causes. Below is the current progress with each of the 4 target country end of project assessments:

Country	HH Salt ²	UIC	Urine sodium	MPI ³ /wealth	FFQ ⁴	Status & notes
Bangladesh	√			√ MPI		Data collection completed. Inc. oil sample collection
Ethiopia ¹	√	√		√ Wlth		Scheduled completion Q2 2015. Nat'l nutrition survey.
India	√	√	√	√ MPI	√	Data collection completed. FFQ Various salty snacks. Inc. HH oil use.
Pakistan ¹ Sub-national	√			√ Wlth		Data collection completed. Sindh and Punjab provinces.

¹ Iodine module supported as part of a larger national survey.

² Quantitative assessment of salt iodine to improve interpretation of quality control and factors associated with differences in access.

³ MPI = Multidimensional poverty index, an indicator of household deprivation that includes a wealth component.

⁴ Frequency of consumption of key foods likely to contribute to salt intake.

GAIN is organizing national dissemination workshops with all key stakeholders in late 2015 to:

- Share and discuss the results of these surveys, in particular with a focus on sub-national differences in implementation of USI and in iodine status;
- Discuss the implications for current programs and need for national USI strategy revision; and
- Advocate for ongoing USI support to local donor groups/representatives.

There is a need to follow-up throughout 2016 on these workshops to ensure implementation of revised program strategies and adherence to any commitments made by government, the salt industry, donors, etc. This will include generation of data and policy messages on the the impact of iodine deficiency on social and economic development, which is critical for generating long-term political support for IDD control efforts. We will also improve monitoring and evaluation activities to help the four countries to address the key issues identified from evaluation of the survey results.

Currently, monitoring and evaluation systems tend to focus on the measurement of household iodized salt coverage and urinary iodine levels at the population level as part of periodic cross-sectional surveys. Routine data from regulatory monitoring of salt production, including both internal quality control carried out by producers/importers and external quality assurance implemented by government regulatory agencies, have received less attention. As a result, even where there is routine production of iodized salt, there has, at times, been significant variability in iodine content, potentially exposing the population either to sub-optimal or more than adequate levels of iodine.

To improve monitoring of salt iodization programs, GAIN will develop a standardized performance measurement framework that defines indicators and criteria of success for both household coverage and production monitoring, with additional incorporation of indicators for the use of adequately iodized salt by large scale food industry and the likely complementary contribution to household intake that this may make, based on market information on geographic distribution and socio-economic status of consumers.

This framework will be tailored for specific application in each of the target countries according to the areas of program focus. In addition, tools and methods will be developed to facilitate harmonization and comparability of data across countries. This framework will outline key data collection activities, including recommendations on data collection methodology (e.g. salt iodine assessment methods), and advise on how data should be used to modify and improve program implementation and ensure sustainability. The framework will be disseminated through regional and national-level workshops and trainings with the aim to develop national capacity to design and implement effective program monitoring and evaluation systems.

The focus of the framework will be on the routine collection of data to indicate the quality and quantity of iodized salt supply (related to objectives 1, 2 and 3) to retail as table salt and to the food industry. An additional component will include recommendations for periodic assessment of factors affecting access to adequately iodized salt at the sub-national level (targeted to population groups known to have lower access), in order to determine the most effective program response to improve access and iodine status.

2.2 [REDACTED]

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