

## A conversation with Greg S. Garrett, September 30, 2016

### Participants

- Greg S. Garrett – Director, Large-Scale Food Fortification, The Global Alliance for Improved Nutrition (GAIN)
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**Note:** These notes were compiled by GiveWell and give an overview of the major points made by Greg S. Garrett.

### Summary

GiveWell spoke with Mr. Garrett of GAIN to learn about the progress and future plans of GAIN, a GiveWell standout charity. Conversation topics included GAIN's work on salt iodization since the end of the GAIN-UNICEF Universal Salt Iodization Partnership Project (Partnership Project), future plans for managing iodine deficiency in target countries, and GAIN's other programs and focus areas.

### GAIN's iodization work since the end of the Partnership Project

The Partnership Project was funded by the Bill & Melinda Gates Foundation. It ended in December 2015. Since then, GAIN has continued working on salt iodization programs in six countries, including some that were part of the Partnership Project and some new countries.

### Partnership Project countries

- **Ethiopia and Bangladesh** – GAIN's work in these countries halted for 10 months after the Partnership Project ended, but it recently received funding from the Dutch government to continue these programs until June 2017.
- **Afghanistan** – GAIN has continued to allocate a small amount of funds to working with the local salt producers association.
- **Nigeria** – GAIN started work here in the last year of the Partnership Project.

### New programs started since the end of the Partnership Project

- **Tanzania** – GAIN received a small grant from an organization in the United Kingdom to start a new iodization program in this country.
- **Mozambique** – GAIN is starting the first salt iodization program here and has received funding for it covering the period from October 2016 to September 2017.

### Key benefits of GAIN's involvement in these countries

GAIN adds value in two main areas in countries where it operates:

- **Industry level** – assessing the operations of salt producers to maintain good quality assurance and quality control systems (QA/QC). This includes ensuring that producers are: a) procuring high quality potassium iodate at a good price, b) testing iodine levels during the iodization process, and c)

keeping good records of the amount of potassium iodate acquired, used in salt-making, and sold to consumers. GAIN also helps salt producers design efficient iodized salt distribution models.

- **Government level** – helping local governments establish monitoring plans to regulate salt iodization. This includes establishing best practices for inspecting a) iodine levels of salt on the market and b) the quality of salt during the production process, because moisture levels in salt and other factors can impact the bioavailability of iodine in the final product.

### Country-specific issues

In addition to the work above, GAIN focuses on addressing the specific needs of each country:

- **Afghanistan** – GAIN has successfully established a revolving fund for potassium iodate in the country. The next step is to ensure that the salt association hosts the fund locally, and that the cost is fully recovered from salt producers.
- **Ethiopia** – GAIN and other organizations like the Micronutrient Initiative (MI) have worked extensively on iodization programs here. GAIN is now focusing on specific areas such as improving regulatory monitoring with the national food control agency, as well as working to achieve better iodization capacity to replace the use of spraying.
- **Mozambique** – GAIN is the only organization working with salt producers in this country. The salt sector is made up of small- to medium-scale producers that are not centrally organized, and potassium iodate that is brought into major cities is not reaching the smaller producers in rural areas. To address this, GAIN will attempt to establish a more efficient supply chain, including advocating for the creation of new points for importing potassium iodate into the country. GAIN hopes to establish and hand off the distribution model to the government and industry in about a year. GAIN will also work to set up a local salt association, so producers can share best practices in manufacturing and iodization.
- **Tanzania** – Salt iodization has been an established practice in this country for two decades. However, the local government has limited resources for monitoring and taking multiple monthly samples at the market and industry level is costly. GAIN's program will focus on helping the government implement a more cost-effective “total systems” regulatory approach to salt and other food fortification vehicles – i.e., ensuring that salt producers are keeping records of how much iodine has been procured and used, then sampling as a means of final validation.
- **Bangladesh** – Significant progress on iodization has not yet been made in this country. The Iodine Global Network (IGN), MI, UNICEF, and GAIN recently reviewed the state of the salt program. There are likely to be a number of recommendations related to policy and supply in the final report that may result in the program being redesigned. There will also be a shift in focus from the national level to specific regions of the country where data

shows iodine deficiencies or low iodine coverage. At the national level, GAIN will focus on ensuring that iodization policy is up to date. It will review salt laws and enforcement efforts, because there was some non-compliance during the Partnership Project.

## **Funding**

### *Restricted and unrestricted funding*

GAIN does not receive any unrestricted funds that go toward salt iodization. The funds that GAIN receives from GiveWell donors are used for its salt iodization programs. The grants it receives for salt iodization are tied to specific programs and outcomes. Continued operation of these programs beyond September 2017 relies on achieving specific outcomes.

### *Bill & Melinda Gates Foundation funding*

The Bill & Melinda Gates Foundation is no longer providing funding specifically for GAIN's salt iodization programs. However, it plans on providing a grant to GAIN for a global-level food fortification grant, which GAIN hopes to agree by the end of 2016. This grant will fund efforts to improve the coordination of global QA/QC and support GAIN in its capacity as an alliance organization that provides oversight for various food fortification programs. Deliverables for the grant will include:

- Establishing a standardized global framework for regulatory monitoring that can be used by GAIN, IGN, and UNICEF. This will be beneficial for salt iodization program evaluation.
- Establishing guidelines for regulators on how to link iodine monitoring with monitoring of other mandated food fortification. Towards the end of this year or early next year, GAIN will meet with its partners to decide on the key elements of a national-level regulatory monitoring program for food fortification, and iodine monitoring will be included as part of that discussion.

This grant will not include specific funds for salt iodization programs. In terms of overall good practice in QA/QC and regulatory monitoring, it is intended that staple food fortification, condiment fortification, and salt iodization will benefit.

## **Longer term efforts to manage iodine deficiency**

An estimated three and a half years at minimum are needed to create a program that brings sustainable impact to levels of iodine deficiency in a target country. This is based on the amount of time it took to set up and see results from programs that were started during the Partnership Project. These programs' continued operation after the end of that project is an indication of their long-term benefit and sustainability.

## **Target countries and selection criteria**

Beyond September 2017, GAIN is interested in supporting iodization programs in at least the following countries: Mozambique, Ethiopia, Afghanistan, Nigeria, Tanzania, Bangladesh, and India. It would be open to working on salt iodization programs in other countries if it saw an opportunity to do so.

### *Selection criteria*

GAIN is interested in focusing on specific countries where significant progress can be made in managing iodine deficiency at the national level by 2020. GAIN selected the six target countries by looking for:

- **Data on iodine deficiency** – In all of the target countries except Nigeria, peer-reviewed studies show substandard levels of iodine coverage and urinary iodine concentration (UIC) at the national or sub-national level. In Nigeria, peer-reviewed studies are only available from several years ago, and at that time, the level of coverage was determined to be sufficiently high. However, more recent non-peer-reviewed evidence suggests that coverage has been declining since then.
- **Willing partners** – This includes government, industry, and partnerships with organizations like IGN and UNICEF. Because of this, GAIN now recognizes that it will not be able to support programs in every country where there is a need for iodization – e.g., Russia is no longer a target country, because GAIN was not able to garner support from the national government and salt industry for an iodization program there, despite the prevalence of iodine deficiency in the country.

### **Funding needed**

Based on the cost of running programs in the past, GAIN estimates a need for approximately \$1.5-1.6 million annually to fund the programs in these six target countries. These funds will go towards:

- **Hiring a dedicated global manager** – GAIN does not currently have staff focused solely on salt iodization programs at the national or global level. In the countries where it runs iodization programs, it has been incorporating salt iodization into the work of food fortification officers, who are focused on various other fortified food vehicles.
- **Funding activities in countries** – e.g., working on industry-level QA/QC, working with governments on policy.
- **National staff** – In some countries, GAIN would look at hiring a dedicated staff member managing salt iodization projects. Where appropriate, staff members could split their focus between salt and any other nationally mandated fortified food vehicles – e.g., iodine in salt and vitamin A in oil in Bangladesh.

### *Room for more funding*

With an annual budget of \$2-2.5 million, GAIN could increase the scope of its operations to as many as 10 countries. It would be challenging to grow significantly

beyond that because this would require a) changing the operating structure of GAIN – e.g., establishing more offices around the world, and b) branching out into countries where making significant progress on iodization would be challenging – e.g., Russia or Niger, where GAIN was not able to have an impact in the past, partially due to not having local offices. GAIN would not be interested in making these changes solely to pursue salt iodization programs.

## **Anticipated results**

### *Country-specific targets*

GAIN has different objectives for the different countries it operates in, based on the starting point of each of those countries. For example, in Ethiopia, iodized salt coverage among households has risen to 80%, but the quality of the iodized salt is variable and often poor, so the goal is to increase the percentage of salt that is adequately iodized according to the national standard. In Mozambique, coverage is so low that the primary goal is to start getting any iodized salt to consumers, with improved quality a secondary goal.

### *High-level long-term goals*

Given a four-year grant of \$1.5 million per annum, GAIN would hope to see the following results in each of the six target countries:

- **Improve iodized salt coverage** – bring national levels up to 85% or more.
- **Sustainably control iodine deficiency** – as measured by the median national UIC level of school-age children and women of reproductive age. For example, GAIN uses World Health Organization levels of 150–249 µg/L for pregnant women as adequate. (There is a discussion about revising the recommended UIC level for pregnant and lactating women which is being led by the Swiss Federal Institute of Technology in Zurich.) There is a strong association, but not always a direct correlation, between access to iodized salt and urinary iodine (largely because access to iodized salt is measured by household coverage of table salt and doesn't look at other sources of iodine in the diet), so GAIN is interested in supporting more frequent testing of UIC in addition to measuring coverage.

## **Differences between work during and after the Partnership Project**

- **Overall level of funding** – During the Partnership Project, GAIN expensed approximately \$2.6-2.7 million per annum for its iodization programs. Based on the current state of fundraising for micronutrients, GAIN does not anticipate being able to secure the same level of funding for salt iodization going forward.
- **Spending within programs** – GAIN's spending strategy will continue to evolve to reflect new data coming from each country. For example, an upcoming peer-reviewed study of GAIN's progress in India shows that there are still pockets of iodine deficiency in some states. This indicates that while there is still national-level policy work to be done there, the majority of the

supply-side spending should be region-specific. The data on Bangladesh from the Partnership Project will also be used to create a more nuanced, region-focused spending strategy there.

- **More targeted focus** – By the end of the Partnership Project, GAIN had run projects in 16 countries. It saw more success in some countries than others, and going forward, it will focus on countries that show promise for further impact. Where data indicates regional iodine deficiency, GAIN will also shift from a national to a regional strategy – e.g., specific parts of India.
- **Linking monitoring of salt to other food fortification vehicles** – e.g., it is more cost-effective for government inspectors in Bangladesh to pull and analyze samples of fortified oil at the same time as salt samples.
- **Improved coordination with other food fortification programs** – e.g., in Mozambique, two different government agencies are involved in fortification: one runs salt fortification and the other runs staple food fortification, which is arguably suboptimal. GAIN will be looking to create a more unified national fortification program there.

GAIN is not planning to change its overall approach for activities at the industry and government level, other than ensuring better coordination between salt and other programs.

### **Other GAIN focus areas with room for funding**

Overall quality and safety focus for staple food fortification: GAIN is currently focused more on improving existing programs – especially wheat and maize flour fortification – than starting new ones.

#### **Wheat and maize flour fortification**

86 countries have currently mandated that a grain be fortified, but most of these countries need help to ensure that the legislation is enforced and followed. GAIN can assist by:

- Helping local governments set up a better plan for regulatory monitoring.
- Working with the industry to ensure compliance, provide guidelines for how to fortify, and spread awareness about the purpose of fortification.

#### *Key nutrients*

Iron and folic acid are the main nutrients involved in wheat and maize flour fortification, with other varying needs and standards depending on the country. GAIN is supporting a harmonized standard in Central Asia and close to seeing that finalized for wheat flour in Central Asia. (There is still some debate about fortifying grains in that region with vitamin B12.)

#### **Improving global and national alliance strategy**

In addition to running programs, GAIN is interested in focusing more on its capacity as an alliance. This includes providing oversight for a variety of food fortification

programs at the global level, strengthening national food fortification alliances, and providing guidance to partner organizations on the ground where GAIN is not present– e.g., UNICEF in Niger.

GAIN is also interested in working more closely with partner organizations. For example, it is partnering with Project Healthy Children to build a system that helps local governments track data on fortification programs, including salt iodization. GAIN will use this new system for its programs in Bangladesh, Tanzania, and several other countries.

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