

A conversation with Alem Abay, April 14, 2015

Participants

- Alem Abay – Country Manger, Ethiopia, 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 Mr. Abay.

Summary

GiveWell spoke with Mr. Abay of GAIN as part of the process of reviewing GAIN as a potential top charity. The conversation focused on GAIN's work in Ethiopia.

Salt iodization in Ethiopia

Before the Eritrean-Ethiopian war of 1998-2000, Ethiopia imported iodized salt from Eritrea. After the war ended salt importation, iodization was a low priority because Ethiopia was focused on providing enough salt for its population's needs. Today, there are hundreds of salt producers that are widely geographically distributed from the low lands of Afar to Somali regional states and that operate mostly independently organized into Associations.

In 2012, the government began to enforce a new law that required all salt to be iodized. Almost all salt producers now iodize their salt, though many use knapsack sprayers that make it difficult to iodize adequately. Salt producers supported by GAIN in Somali iodize their salt with an adequate concentration of potassium iodate, as shown by a recent study. Salt producers in Afar, to whom GAIN does not provide direct support, generally do not adequately iodize their salt.

GAIN's work on salt iodization in Ethiopia

When GAIN scaled up its work in Ethiopia in 2012, there was no proper iodization despite the enactment of the salt iodization legislation in 2011. Very few salt producers were iodizing their salt. There was no sustainable system for potassium iodate supply or for working with salt producers. Salt producers had little incentive and little assistance in iodizing their salt.

GAIN has emphasized the importance of using the proper concentration of potassium iodate when iodizing salt. GAIN focused on putting in place a potassium iodate revolving fund, salt iodization machinery, organizations for salt producers, and QA/QC systems. These efforts are discussed in more detail below.

Revolving fund

From about 2000 to 2012, a variety of donors gave potassium iodate to Ethiopia. Often, the potassium iodate wasn't used, or it was repackaged and used in other

regions rather than in Afar, Ethiopia's main source of salt. Soon after it began working in Ethiopia, GAIN found and collected 14 tons of expired potassium iodate that had been donated and never used.

GAIN researched salt iodization in Ethiopia and recommended that the Ministry of Health institutionalize a revolving fund for potassium iodate rather than relying on donations. (The full research report is available here:

<http://files.givewell.org/files/DWDA%202009/GAIN/Design%20and%20Implementation%20of%20a%20Revolving%20Fund%20System%20for%20the%20Supply%20and%20Delivery%20of%20Potassium%20Iodate%20in%20Ethiopia.pdf>)

The Ministry of Health took the recommendation in the study conducted by GAIN to set up the fund. To start the fund, GAIN contributed 14 tons of potassium iodate, UNICEF contributed 8 tons, and MI contributed 2 tons. According to Mr. Abay, the revolving fund has avoided wastage and established a steady supply of potassium iodate. The fund is administered by the Pharmaceutical Fund and Supply Agency (PFSA) of the Ministry of Health, which has procured potassium iodate itself since 2013.

Iodization Machinery

GAIN, salt producers, and the Ministry of Health implemented a joint program to purchase and maintain 6 salt iodization machines and support equipment such as generators. GAIN contributed 80% of the cost of the machines and equipment. Salt producers contributed 20% and are responsible for running and maintaining the machines and equipment. The Ministry of Health is responding for monitoring the machines and equipment. Each machine costs about \$28,000.

GAIN contracted an iodization expert with knowledge of the local language to provide 4 days of training to the salt producers on how to use the new machinery to iodize salt to the Ethiopian standard, 34-66 parts per million. GAIN also provided the salt producers and FMHACA with WYD iodine checkers to monitor the level of iodine in the salt.

Each machine can iodize 10 metric tons of salt per hour, or 80 tons in a typical 8-hour workday. However, because of quotas on salt production, the machines do not operate every day, and the 4 machines in the Afar region also usually shut down during the hot months of May through July. Ethiopia requires about 350,000 tons of iodized salt per year, and the 6 machines supply about 26% of that total. The 26% figure is GAIN's estimate and is not based on the routine monthly reports provided to GAIN by the Ministry of Health. GAIN tracks the usage of the machines using reports that the salt producers send to the Ministry of Health when they procure potassium iodate.

Other salt producers have requested that GAIN and the Ministry of Health enter into a similar partnership with them as well. Such requests need to be seen in light of the bigger picture of Central Iodization Facility establishment. Future efforts should focus on establishing CIF rather than supporting a fragmented production system.

Organizing salt producers

Before the Ethiopian-Eritrean War, Ethiopia's salt was iodized in a central facility in Eritrea that had been built with the support of the government and of donors. Mr. Abay believes that the most feasible and cost-effective way to achieve high levels of adequately iodized salt in Ethiopia is to build 1-2 facilities to refine all of Ethiopia's salt at an industrial scale, including washing, grinding, and iodization. To move towards this goal, GAIN has helped boards of salt producers organize meetings.

QA/QC

QA/QC has been the largest expense in GAIN's USI program in Ethiopia. GAIN built regulatory capacity within the Food, Medicine, and Health Care Administration and Control Authority of Ethiopia (FMHACA), part of the Federal Ministry of Health.

Building FMHACA's regulatory capacity

GAIN works with the Ethiopian government to check the quality of iodization both at production sites and at checkpoints.

- One of GAIN's consultants focuses on salt inspection, taking samples and devising sampling protocols.
- Another consultant distributes WYD iodine checkers to salt producers and regulators and trains them to use the devices. WYDs measure the quantitative iodine concentration in salt. Prior to GAIN donating the WYDs and training government regulators on how to use them, the regulators used rapid test kits, which can only determine whether or not a salt sample contains any iodine.
- GAIN has a field assistant at the main salt producer in Afar who tracks whether the iodization machines are working and how much salt is being produced.
- FMHACA officials use WYDs to check the iodine content of salt moving through road checkpoints.

GAIN gets monthly reports from the government on the quantity of iodized salt produced. The quota system for salt production also helps verify the amount of salt produced, since producers usually sell about as much salt as they are allocated to produce by the quota.

Labs measuring iodine content

Before GAIN started working in Ethiopia, the country already had a central food lab that measured iodine content, but its facilities were limited. The lab had one titration assembly to check the iodine content of salt. GAIN donated another as well as WYD iodine checkers for field testing at various checkpoints.

GAIN has also expended the capacity of five branch labs to measure the iodine content of salt.

Measures taken when salt is found to be inadequately iodized

If salt is found not to be iodized at all, officials may prevent the salt from reaching the market.

Typically, if government inspectors find that salt is not adequately iodized, they will send out a warning letter to the producers of the salt and attempt to use the situation as an opportunity to train and advocate to the producer to adequately iodize their salt. GAIN has advocated to strengthen the inspection and enforcement system.

Certification

GAIN would like to work with the government to establish a certification for adequately iodized salt so that consumers can identify and purchase this salt. The certification system is still a work in progress.

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