Sustainable supplies of potassium iodate for Africa


Establishing sustainable supplies of potassium iodate (KIO3) is critical for the viability of national salt iodization programs. Various approaches can be utilized which are tailored to the national context. Prices of KIO3 have fluctuated greatly over the last few years (Figure 1).

Governments and donors continue to donate or subsidize KIO3 for numerous national programs worldwide. In order to ensure a sustainable supply of KIO3 which can absorb price peaks and which are primarily financed by industry, various approach have been established.

A privately operated fund for KIO3 supply in Ghana
In Ghana, in response to critical shortages in the supply of KIO3 and to end ongoing dependence on donor funds, GAIN established a revolving fund for the procurement and distribution of KIO3. GAIN strengthened Environmental Processing Associates (EPA) to operationalize a fund using a consignment model designed by the GAIN Premix Facility (GPF). EPA now regularly supplies small- and medium-scale producers with KIO3 adequate for their production volumes. The costs of KIO3 are fully recovered via sales to industry, including a small management fee, which is used to pay for storage, distribution and to replenish the fund with fresh stock. Since its establishment in 2011 the fund has distributed 6.5 MT of KIO3 or 145 kg per month, enough to produce 21,000 MT of adequately iodized salt per year. The primary success factors of this supply solution are that KIO3 pack sizes are tailored to small- and medium-scale producers, delivery to the production sites are done by the agent, aggregated demand is forecasted regularly, and long-term customer relations are built due to steady supply.

A government-controlled fund for KIO3 supply in Ethiopia
Since early 2012, in Ethiopia, GAIN has provided technical assistance and KIO3 seed stock to the Ethiopian government to establish a KIO3 cost recovery system. It fully replaced a donation/subsidy based system in January 2013. The annual turnover of the fund which has been hosted by the Ethiopian Pharmaceutical Fund and Supply Agency (PFSA) totals 24 MT, enough to ensure salt is iodized for 84 million Ethiopians. This new scheme is working well evidenced by the fact that the government has submitted an order for the procurement of 14 MT of new KIO3 in mid-2013 using funds collected from salt producers.

Lessons Learned
A well-designed revolving fund for KIO3 transforms donation-based systems into sustainable business-oriented models. Exemptions of tax and duties are important to free fund operators from unnecessary burden. This has been achieved with registering for concessionary tax rates in Ghana and exemptions due to government control of the fund operator in Ethiopia. Most importantly, in order to ensure KIO3 systems are viable in the long-term, effective regulatory monitoring of salt iodization laws is critical.