

Road Map for Universal Salt Iodization in Africa¹

Background

Only a few countries across Africa produce salt and these countries supply almost the entire demand for salt in Africa. More importantly the coverage of iodized salt in most of the salt producing countries is very low and should the trend continue the entire continent will be negatively affected. More than ever it is important to focus on the salt production and salt industry in these countries if Universal Salt Iodization goals are to be met and sustained. It therefore makes sense to target salt iodization programs in countries that produce salt in order to achieve USI. The advantages of doing so would be:

- The complexity and reliance on resources would be less when fewer countries are targeted
- If salt is iodized at point of production it would virtually guarantee high coverage of populations having access to iodized salt
- Monitoring and enforcement programs could be streamlined resulting in reduced need for resources to sustain USI programs
- Awareness of IDD would be complemented with availability of iodized salt

With the above in mind, since August 2004, MI initiated a series of comprehensive assessment missions to look into salt production in the producing countries with a special emphasis on production of iodized salt, structure of salt industry and the government environment. The aim was to map the flow of salt across the continent and to identify key bottlenecks which have prevented achievement of USI and to develop strategies to address these challenges. Assessment missions have been completed for:

1. Ghana
2. Senegal
3. Ethiopia
4. Mozambique
5. Angola
6. South Africa
7. Namibia
8. Botswana
9. Tanzania
10. Sudan

Following the completion of the assessment missions, the salt experts who undertook these missions were invited to a round table discussion at MI office in Johannesburg from April 28-30 to discuss their experiences and collectively propose strategies that could be

¹ A Note for Discussion prepared by the Micronutrient Initiative

used to accelerate progress in achievement of USI². The discussion enabled sharing of country experiences and created an opportunity to tap into the vast experience of the experts with the salt industry spanning over many years. The common and specific bottlenecks that were identified are highlighted here and a roadmap which could guide USI programs across Africa are also proposed.

Cross Cutting Considerations

- The challenge in producing countries is a bit more complex and more resources are needed to achieve USI. Key partnerships or government advocacy should also include advocacy to facilitate infrastructure development which should seed industry growth. Development programs supported by the World Bank/ regional Banks and development assistance agencies could address these if USI program is positioned within poverty reduction and infrastructure development programs. Political Commitment to the initiative should be reflected in the program being included within a comprehensive maternal and child health and nutrition program and supported by communications, regulation, monitoring and enforcement. Advocacy messages should be targeted to different audiences. (viz. the salt industry, traders, government officials and political partners, consumers)
- There is need for Governments across sub-regions (at a minimum) to agree on standard Iodine Levels. This would greatly facilitate and harmonize cross border trade in iodized salt.
- In salt-importing countries legislation backed with adequate border control is important. However salt traders in importing countries could be instrumental in achieving USI if they are made to buy salt from producers who iodize. Typically imported salt also has to be transported from distant producing locations. The logistics favours producers who can typically supply in larger quantities on a regular basis and who can tap into formal transportation routes which makes the price of salt more competitive than that produced by subsistence producers. Larger producers typically iodize salt already and that is why the coverage of iodized salt in importing countries is higher and this trend is also seen at locations further from producing sites in salt producing countries as well. Importing countries can apply pressure on salt producing countries to supply iodized salt.
- Where there is local production, competition in the market through abundant supply of lower grade salt results in poor prices of salt for producers which creates pressure to cut costs even by small fractions and iodization is usually the first cost cutting step.
- The cost of transporting salt often overshadows iodization costs and therefore small producers are able to compete only in local markets with non-iodized salt. Weak transportation (road/rail/water transport) infrastructure also strengthens the small producers advantage and favours informal distribution networks. It also creates a

² Eight assessments were completed before the round table discussion. The Tanzania assessment was completed in May 05 and the Sudan assessment in July 05

gap between producers and consumers and creates opportunities for unscrupulous traders to collect salt from small producers and reach markets which are not accessible by producers.

- There are regional barriers to trade which sometime prevent growth in the salt industry. This is especially seen in West Africa where the trade between Anglophone and Francophone countries is restricted through economic policies and therefore limits the marketability of salt being produced in Senegal and Ghana.
- Iodization technology should match the production set-up and be integrated into production process and is not a stand alone step. Iodization units which are donated are ill maintained because they are not suited to the environment, production capacity, existing technical capacity or involve extra handling and cost of running and maintenance which cannot be supported by the producer.
- Producer ownership has to be created through a contribution by the producer for the units or technical services. When its paid for it will be maintained and used with respect.
- Focusing on larger producers first could trigger growth and instigate growth there focusing around efficiency and market for the salt. This gives the producers a competitive advantage in injecting iodized salt which will eventually displace non-iodized salt from the market.
- Small producers can form collectives and make their business more profitable which in turn leads to growth. Cooperatives need a horizontal support model which includes business development services and training as well. Business services include microfinance, branding and marketing of salt, improved resource utilization and reduced wastage.
- An assured and consistent supply of Potassium iodate supply is key to the success of the program. Iodate suppliers can be brought into the program and shown that they can access an untapped market by supplying potassium iodate in smaller sachets which is more affordable and results is less wastage from handling losses.

Core Issues and Strategies To Address To Achieve And Sustain USI

	Issue	Analysis	Strategy
1.	Pay attention to the complete salt production system and not just iodization	Salt iodization support programs have often failed many times because they have focused on salt iodization and ignored the rest of the entire salt production process. Salt iodization forms only a minute component of salt manufacturing. In several instances, inappropriate technology (which cannot be supported without a steady influx of external resources) has been added on to a salt production process.	<ul style="list-style-type: none"> - Address salt production as an integral component of a salt production system and not as an add-on - Match iodization technology with capacity and available resources
2.	Support the salt industry	Cottage scale and small scale subsistence salt producers exist throughout Africa. They are not profitable and not commercially viable. Salt that is produced is of low quality, low price and cannot incorporate an iodization program without continuous resource support. This is not sustainable.	<ul style="list-style-type: none"> - Create an environment that promotes expansion and growth of the salt industry. Granted that many small producers will not be able to compete but this is how USI can be sustainable like any other industry. Due to the low profit margins, salt production is only sustainable (profitable) when high volumes are produced
3.	Include Salt traders and distributors as part of the solution	Small producers typically do not have access to markets because of their output and ability to supply. In most countries salt traders who handle much larger volumes then form an important link in the supply chain and need to be targeted in order to ensure they trade in iodized salt.	<ul style="list-style-type: none"> - Target iodization programs to major salt handlers as well.
4.	Strengthen the marketing of iodized salt	In many countries brand recognition differentiating iodized salt from low quality non-iodized salt is non-existent. Proper packaging and labeling is not very common and packaging materials are commonly reused. Iodized salt therefore attracts the same price as non-iodized salt and there is no incentive to add value through iodization..	<ul style="list-style-type: none"> - Higher quality salt in smaller packaging attracts better prices. - Over the last 2 decades there has been a steady growth in the refined packaged salt market and this trend needs to be accelerated. USI would naturally ride on this.

	Issue	Analysis	Strategy
5.	Increase demand for iodized salt	<p>In many cases it has been observed that awareness of use of iodized salt as a preventive measure against IDD exists but the access to iodized salt is limited. This restriction is sometimes due to affordability but in most cases it is because iodized salt is not available. AWARENESS +AVAILABILITY +AFFORDABILITY= DEMAND</p> <p>* AVAILABILITY is the missing link in most demand creation strategies which are predominantly targeting awareness alone</p> <p>* AFFORDABILITY – see point 3. above – smaller packages makes salt more affordable especially to families living on subsistence wages .</p>	<p>In addition to awareness creation and social mobilization, it is necessary to ensure availability of iodized salt through key partnerships with distributors and marketing companies (e.g. Unilever) , organizations that develop SME and offer business development services. (e.g. CARE, TECHNOSERVE, AFRICARE etc)</p>
6.	Engage food processors and major buyers of salt	<p>Processed foods are increasingly accessing wider markets (rural and urban). Salt is a very common item in processed foods. Iodization of salt used in food processing can therefore be a vital channel to increase coverage of iodized salt</p>	<p>Advocacy to food processing industry Target WFP and other organizations that provide food aid and their assistance includes provision of salt.</p>
7.	Continue and strengthen surveillance	<p>Salt iodization legislation exists in most countries with the exception of Ethiopia. However this has not resulted into compliance because of a very weak enforcement mechanism. Even where monitoring and enforcement exists there is little action or penalty when non-compliance is identified. Salt importing countries in general have achieved higher USI coverage by simply monitoring and enforcing iodization of salt being imported at the point of entry on their borders.</p>	<p>This is an absolutely vital component. Streamline monitoring through reducing number of monitors but increasing responsibility. - Establish laboratories, titration labs do not cost much and don't have to be stand alone.</p>

The USI Road Map

Country	Activities	Resources Required	Key Partnerships
Ethiopia	<ol style="list-style-type: none"> 1. Reinstate legislation 2. Target increase iodized salt production in Afdera 3. Infrastructure development of Afdera region 4. Support government capacity to monitor enforce legislation 5. Increase technical capacity and knowledge of salt production 	<ul style="list-style-type: none"> • Influential people for high level lobbying to reinstate iodization legislation (high level meeting or strategy launch) (ICCIDD, NETWORK) • Targeted advocacy materials • Technical resource person to manage salt production and iodization in Afdera <p>* Target about 50,000-75,000 MT of iodized salt production in Afdera (ASSC has capacity for 50,000MT alone)</p>	<p>Government of Ethiopia</p> <p>Afar Salt production Share company</p> <p>UNICEF</p> <p>WFP</p> <p>DBSA</p> <p>ICCIDD</p> <p>NETWORK</p>
Ghana	<ol style="list-style-type: none"> 1. Target increase iodized salt production in 7 clusters 2. Partnership with Technoserve to implement a pilot program supporting small business development for salt producers 3. Support government capacity to monitor enforce legislation 4. Increase technical capacity and knowledge of salt production 	<p>USI coordinator (proposal received from UNICEF and MI will fund this position)</p> <p>Technical assistance will be provided through MI Africa and Global Unit</p> <p>Business development services</p>	<p>Ghana Government</p> <p>PSI-Salt</p> <p>UNICEF</p> <p>TECHNOSERVE</p> <p>WFP</p> <p>ICCIDD</p> <p>NETWORK</p> <p>WAHO</p> <p>UEMOA</p>

Country	Activities	Resources Required	Key Partnerships
		<p>through Technoserve partnership</p> <p>UNICEF has supported a 5 point Ghana USI strategy which now needs backing up</p> <p>Small scale salt producers Iodization model is needed</p> <p>* Target and injection of at least 50,000MT of iodized salt</p>	ECOWAS
Senegal	<ol style="list-style-type: none"> 1. Target increased iodized salt production in Lac Rose and Fatick 2. Support government capacity to monitor enforce legislation 3. Increase technical capacity and knowledge of salt production 	<p>Ground coordinator with knowledge of salt industry is needed to interface with salt producers and support salt iodization</p> <p>UNICEF has given equipment to Lac rose which needs set-up, ensure operation and maintenance</p> <p>Target medium scale salt producers in Fatick and ensure salt in iodized</p> <p>Kaolack injects 300K MT of</p>	<p>Government of Senegal UNICEF HKI WFP UEMOA WAHO ICCIDD NETWORK Saline Du Sine Saloum Lac Rose Salt Producers Association</p>

Country	Activities	Resources Required	Key Partnerships
		<p>iodized salt into the west African Market, they do very little sales within Senegal. Targeting Lac Rose and Fatick could easily inject about 30,000MT of Iodized salt into the Senegal Market.</p>	
Sudan	<ol style="list-style-type: none"> 1. Assessment recently completed 2. First Phase introduce iodized salt through targeted feeding programs 3. Second phase target about 10,000- 20,000MT of iodized salt production 		<p>Sudan Government WFP UNICEF ICCIDD NETWORK</p>
Tanzania	<ol style="list-style-type: none"> 1. Has made significant progress in salt iodization. Strengthen TFNC capacity, Tanzania Salt Producers Association 2. Address quality control of salt iodization 3. Improve salt production capacity and know-how (model solar salt production field in Dodoma) 4. Strengthen distribution and supply of KIO3 (Cow Bell, TASP) 5. Create good business environment (too many taxes on salt making imports less expensive and discouraging growth and compliance by local industry) 	<ul style="list-style-type: none"> - Solar salt production expert to stay in TZ for 3 months - Technology for improving quality of iodization (Current reliance on hand spray systems too heavy) - Establish iodine titration labs – currently a strong reliance on field test kits at all levels 	<ul style="list-style-type: none"> • Government Tanzania • UNICEF • TASP • Cow Bell • TFNC • ICC IDD • NETWORK -