IODINE global network 2018 ANNUAL REPORT

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A MESSAGE FROM THE EXECUTIVE DIRECTOR

Three decades ago, the UNICEF Executive Director James Grant proclaimed that adequate nutrition should be a right of every infant and child and inspired the seminal 1990 World Summit for Children. It marked a turning point for global efforts to eliminate the debilitating consequences of hidden hunger, including iodine deficiency disorders.

Adequate iodine nutrition is essential to ensure optimal growth and brain development. Iodine prevents low IQ and improves educability, thus helping children reach their full potential to thrive.

Now in its 34th year, the Iodine Global Network continues to be an authoritative voice on iodine nutrition. Our global leadership in advocacy and research, our technical support for national salt iodization programs, and our network of key partners from Governments, the salt industry, implementation partners, civil society and academic institutions have helped to reduce the burden of iodine deficiency around the world.

As we enter 2019, we remain focused on the goal of global elimination. In fact, most countries are successfully sustaining optimal iodine nutrition, and we commend and support the ongoing efforts in countries still classified with insufficient iodine intake, including **Angola**, **Burundi**, **Lebanon**, **Madagascar**, **North Korea**, and **Sudan**.

In 2018, we continued to work with our **Global Fortification Data Exchange (GFDx)** partners to expand the online tool's content and international reach in an effort to empower governments to improve the efficiency of national salt iodization programs, by linking to other fortification initiatives.

We remained closely engaged with the salt industry at the global, regional and country levels. At the **World Salt Symposium** in July 2018, we led sessions devoted to salt iodization. We **developed guidance for national program managers** on the use of iodized salt in processed foods and condiments — a growing potential source of dietary iodine, replacing table salt. We recruited consultants to support salt industry consolidation efforts in countries like Sudan, Tanzania, Senegal, and Mozambique, where many small salt producers struggle to maintain consistently high quality of iodized salt. We facilitated a global consultation to **review the evidence and feasibility of double-fortified salt (DFS)**, i.e. salt fortified with two nutrients, iodine and iron.

Excess consumption of dietary salt continues to be a global public health issue due to the role that it plays in the development of cardiovascular disease. In 2018, we continued to work closely with global and regional organizations promoting the reduction of salt intake to ensure better alignment and **harmonization between salt reduction and salt iodization**.

As I reflect on our work in 2018, I am reminded of our mission by an eight-year old girl, who made a small donation to the IGN in response to **an article about iodine in the New York Times**. She told me that 'it's terrible that kids might not get what they need to be able to concentrate and learn, when it is so simple.' Indeed, given that we have the tools to address this problem, it is incumbent on us to do everything we can to achieve a world where no child is born with preventable brain damage or the inability to learn due to iodine deficiency.

As always, I offer my deepest thanks to our Board of Directors, our Regional and National Coordinators, our staff, and all our global partners and supporters for making our continued success possible.

Jonathan Gorstein
IGN Executive Director

ABOUT THE IODINE GLOBAL NETWORK

IODINE global network

Established in 1986, the Iodine Global Network is a non-profit, non-government organization for the sustainable elimination of iodine deficiency worldwide.

First established as the International Council for Control of Iodine Deficiency Disorders (ICCIDD), the organization had its inaugural meeting in 1986 in Kathmandu, Nepal. Working closely with stakeholders, we have spurred the global effort to eliminate iodine deficiency for the past 30 years.

The ICCIDD helped establish an understanding of the biological importance of iodine on thyroid physiology and brain development and catalyzed the global effort to scale up Universal Salt Iodization (USI) programs in countries throughout the world.

After joining forces with the Network for the Sustainable Elimination of Iodine Deficiency, ICCIDD was renamed the Iodine Global Network in 2015. IGN is unique in that we leverage the collective inputs and actions of a broad coalition of partners in the design, implementation and monitoring of national USI programs, including the salt industry, national governments, international development agencies and academia.

OUR VISION

Our vision is a world where all people attain optimal iodine nutrition and children can reach their full cognitive potential.

OUR MISSION

Our mission is to be the authoritative voice for iodine nutrition. We support and catalyze global and national iodine programs, working with key public, private, scientific and civic stakeholders. We focus on universal salt iodization as the most cost-effective and sustainable solution for the prevention of iodine deficiency disorders.

OUR GOALS

Goal 1 To support the harmonization of national and global iodine program delivery through alignment of approaches, partnerships and resources

Goal 2 To advocate for political will and increased attention and resources for iodine programs in the context of the broader global nutrition landscape

Goal 3 To identify and help address challenges to iodine programs and thereby accelerate progress towards sustained IDD elimination

Goal 4 To support and strengthen national programs and fortification coalitions through consistent programmatic guidance and enhanced communication to, from and among national programs

Goal 5 To identify and address scientific questions and influence the research agenda in order to increase the effectiveness of iodine programs

At the Iodine Global Network, our role is to support Governments, the salt industry, international development and civic partners **working together towards the elimination of iodine deficiency through Universal Salt Iodization (USI)**.

Our growth and results are the direct consequence of the contribution of partners and collaborators, some of which include:

gain
Global Alliance for Improved Nutrition

NUTRITION INTERNATIONAL
Nourish Life

TATA

unicef

CDC
Centers for Disease Control and Prevention

USAID
FROM THE AMERICAN PEOPLE

Food Fortification Initiative
Enhancing Grains for Healthier Lives

CNSG
中盐集团

BILL & MELINDA GATES foundation

eusalt
EUROPEAN SALT PRODUCERS' ASSOCIATION

Kiwanis

World Health Organization

Micronutrient FORUM

In 2018, IGN continued to enjoy a strong financial position, thanks to the ongoing support from our long-standing members (including **Kiwanis**, **GAIN**, **UNICEF**, **USAID** and the **US Centers for Disease Control**), and our donors (including **GiveWell** and **Good Ventures**, **The Life You Can Save**, **MaxMind**, **Giving What We Can/Effective Altruism**, the **Bill and Melinda Gates Foundation** and many others). Our revenues were close to $US 1.4 million, compared to $US 1.2 million in 2017.

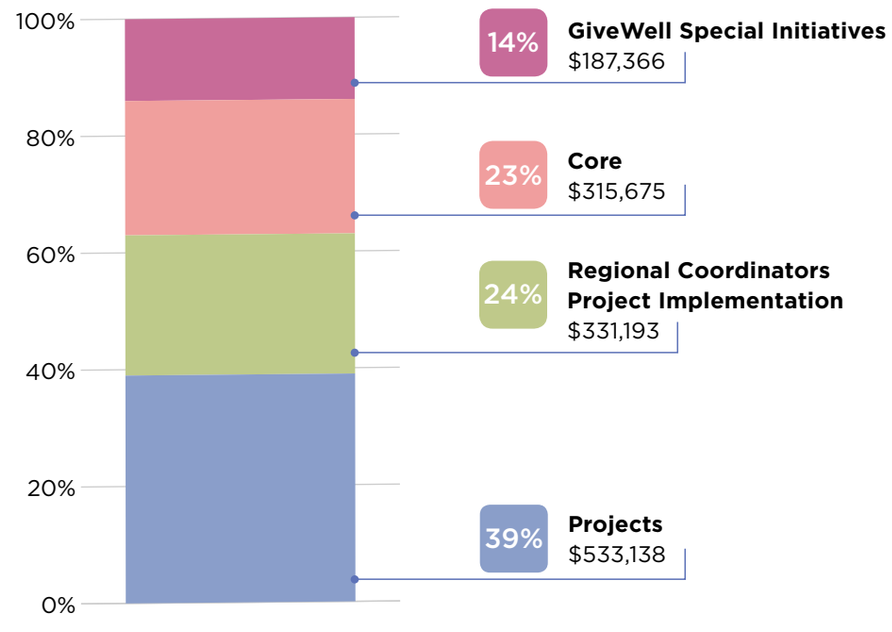
Accordingly, we were able to increase our direct expenditures to support the work of our Regional Coordinators, including advocacy and communication, direct technical support, and other assistance to national IDD elimination programs (see Donut Chart below).

In addition to increasing direct regional support, we were able to implement a number of projects with a cross-regional and global reach, such as our work to develop global guidance on the use of iodized salt in processed foods and condiments, convene a global consultation on the potential viability of double fortified salt, and strengthen our collaboration with both the salt industry and those advocating for salt reduction.

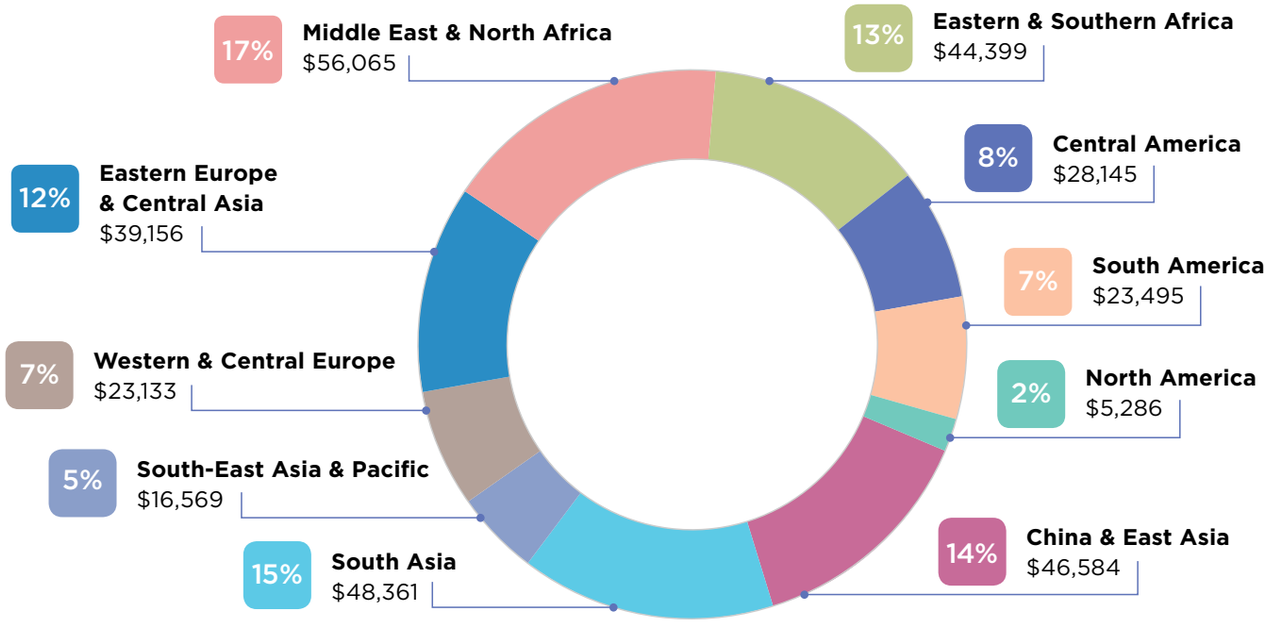
Key special initiatives, including focused strategic work in **Sudan**, **Lebanon**, **Angola**, **Burundi**, **Madagascar** and the **Caribbean** were made possible thanks to the unrestricted grant from GiveWell/ Good Ventures. Without restrictions placed on how the funds can be spent, we were more flexible to respond to arising needs and cover funding gaps across the Regions.

We are extremely grateful to all our partners and donors for their continued support and trust. Our full financial statements can be downloaded from: **http://www.ign.org/about.htm.**

Our total expenses in 2018



How much did we spend in each Region?



IGN IS ONCE AGAIN NAMED A STANDOUT CHARITY

In December 2018, in time for the start of the Giving Season, the California-based charity evaluator GiveWell and Peter Singer's charity The Life You Can Save recommended the Iodine Global Network as a standout charity for our work to support salt iodization programs around the world for the fifth year in a row.

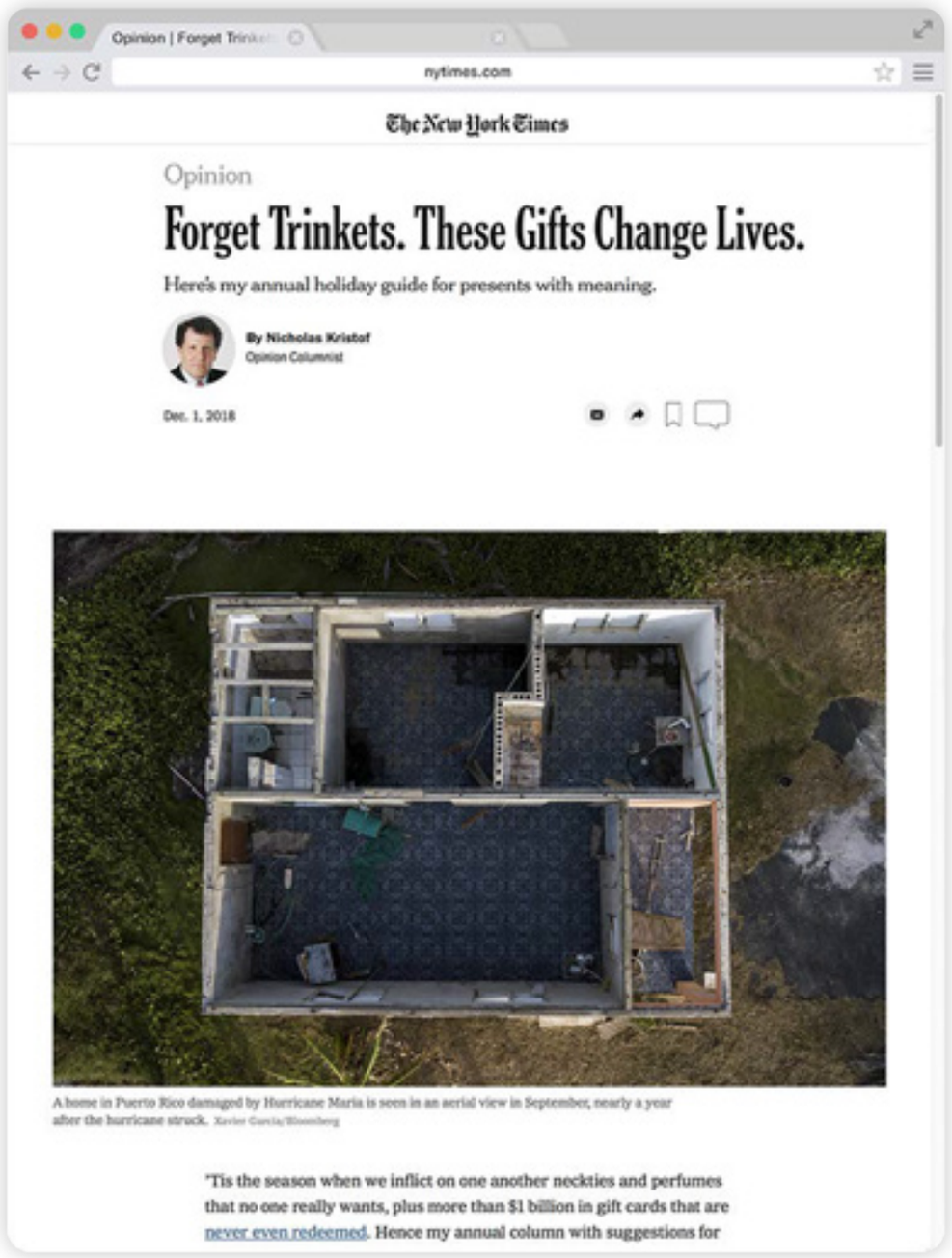
This very highly regarded recognition is awarded to only a few charities each year, which have demonstrated public health impact, efficient program management, and transparency.

This message was echoed by the **New York Times'** Nicholas Kristof, who wrote in December that iodized salt and improvements to iodine nutrition were a 'nerdy' but meaningful gift!

GiveWell promotes effective altruism to inform individuals and donors of the most worthwhile investments that can be made to promote global development.

The Life You Can Save is an advocacy and educational outreach organization founded by Princeton ethicist and author of books on effective altruism, Peter Singer.

To support our work, please visit:
http://www.ign.org/donation


Opinion | Forget Trinkets

nytimes.com

The New York Times

Opinion

Forget Trinkets. These Gifts Change Lives.

Here's my annual holiday guide for presents with meaning.

By Nicholas Kristof
Opinion Columnist

Dec. 1, 2018

A home in Puerto Rico damaged by Hurricane Maria is seen in an aerial view in September, nearly a year after the hurricane struck. Xavier Garcia/Bloomberg

'Tis the season when we inflict on one another neckties and perfumes that no one really wants, plus more than $1 billion in gift cards that are never even redeemed. Hence my annual column with suggestions for

New York Times' Nicholas Kristof (@NickKristof) included the Iodine Global Network in his annual holiday guide for gifts with meaning.

WHAT'S THE IMPACT OF MY DONATION?

Making a difference with iodized salt is easy.

We have worked with 'The Life You Can Save' to provide a tool for our existing and future supporters to calculate the impact of their donation.

Salt iodization costs pennies: only about **US$ 0.02–0.05 per child** covered worldwide. For every $100 invested in IGN, we can help provide iodized salt to 10,000 individuals for 1 year by supporting existing salt iodization programs.

Severe iodine deficiency can reduce a child's IQ by up to 10–15 points. Iodized salt is an evidence-based nutritional intervention which prevents iodine deficiency and helps all children thrive.

Calculate your impact at: **www.ign.org/impact-calculator.htm**.

Your **$100 USD** donation to **Iodine Global Network** can:

OR

OR

Provide **10,000** individuals with a year of support sustaining existing protection against iodine deficiency disorders via salt iodization programs.

Reach **2,000 individuals** through strengthened universal salt iodization programs, reinforcing the work of GAIN and other implementation agencies, to serve those currently not protected against iodine deficiency.

Provide **2 years** of healthy life to the average recipient of iodized salt, as measured by disability-adjusted life years.

THE IDD NEWSLETTER

Our flagship publication

Since 1986, the IDD Newsletter has served to disseminate critical IDD research, program, and policy developments to a growing global readership. In 2018, four issues of the IDD Newsletter were distributed by post and email to an audience of around 10,000 research scientists, policymakers, and nutrition program managers. Its publication and distribution have been possible thanks to the support from the Kiwanis Children's Fund, UNICEF and Swiss Federal Institute of Technology (ETH Zurich).

To subscribe, download the latest issue, or browse our searchable archive, visit:

http://www.ign.org/idd-newsletter-dashboard.htm

Follow us on social media:

newsletter@ign.org @iodineglobal @iodineglobalnetwork

THE IODINE BLOG

In 2017 we launched a blog to keep the general public up to date with our work in the field and progress across the globe to eliminate iodine deficiency. We publish new stories almost every month, offering our partners and supporters a closer look at what's going on behind the scenes of our work and the work of our partners.

Don't miss out! Sign up to receive a regular email digest: **http://www.ign.org/iodineblog.htm**.

GLOBAL PROGRESS IN 2018

After three decades of global efforts, most countries have achieved and are successfully sustaining optimal iodine nutrition. Thanks to their national salt iodization programs, we are ever closer to achieving the goal of eliminating iodine deficiency disorders worldwide.

REPORTING AT THE WORLD HEALTH ASSEMBLY

It has been almost three decades since the seminal 1990 World Summit for Children, where world leaders signed a declaration to safeguard the survival and development of all children. Jointly, the leaders developed a strategy, which included the elimination of iodine deficiency disorders (IDD) as one of its key goals.

Regular, nationally-representative surveys of population iodine status have become the cornerstone of the global effort to eliminate IDD. New data have been essential for estimating the current magnitude of iodine deficiency, tracking national progress and effectiveness of salt iodization programs, and identifying regions or populations that may be vulnerable to sub-optimal iodine intake or excessive intake.

With support from IGN, the World Health Organization monitors countries' progress and has reported on it to the World Health Assembly every three years. The date of the next report will be May 2019.

WHO reports on the global status of iodine nutrition to the World Health Assembly every 3 years, and will do so again in May 2019.

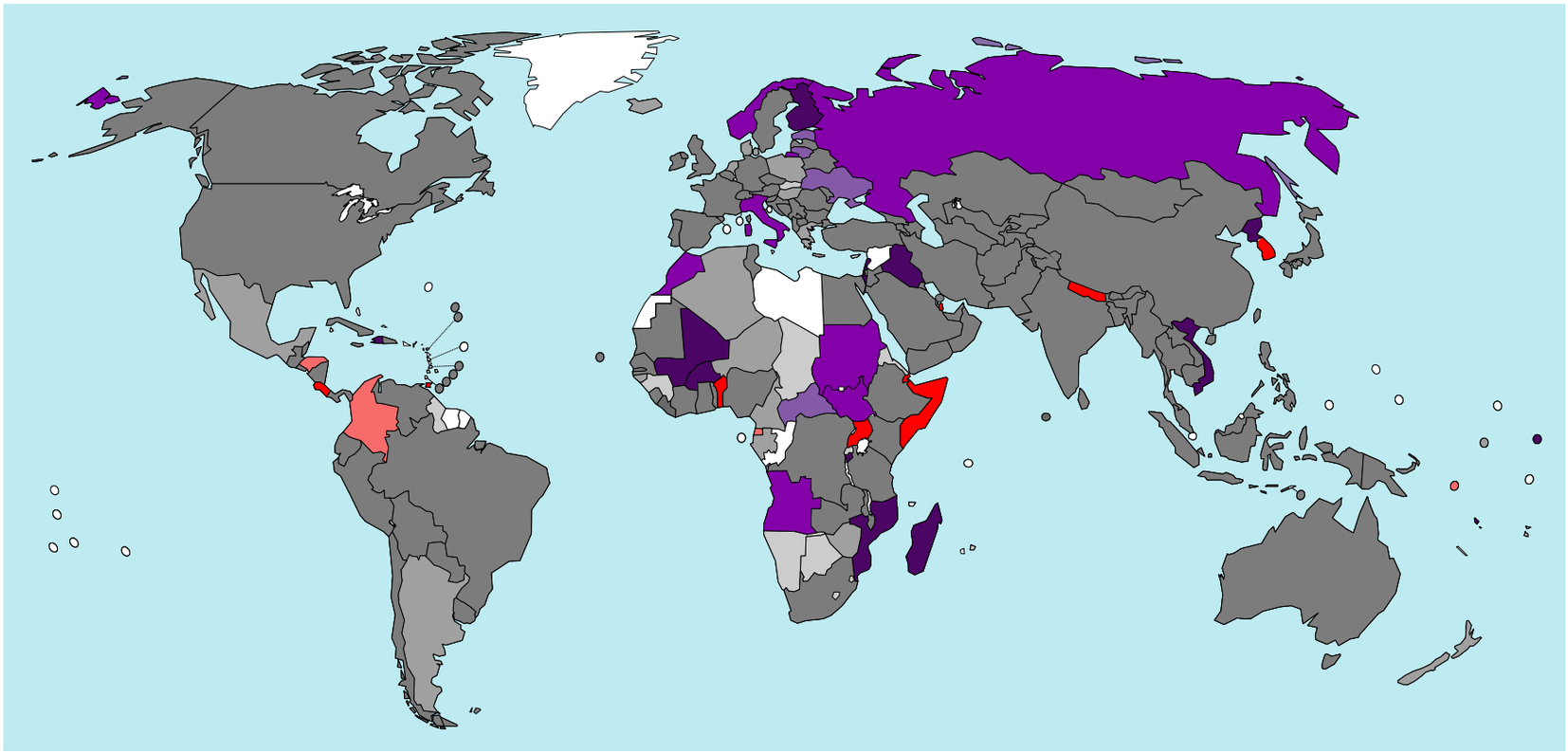
30 YEARS OF IODINE STATUS MONITORING

Many new surveys came to light in the past year, and it is encouraging to see a marked increase in the number of countries classified with optimal iodine intake (increased from 121 to 134).

New national surveys in the **Gambia**, **Jamaica**, and nine **Caribbean Island nations** show that these countries are implementing salt iodization programs which provide sufficient iodine to their populations.

There are also a number of recent sub-national surveys (which may not reflect the national situation accurately) suggesting that iodine intakes may also be adequate in **Algeria**, **Equatorial Guinea**, **Greece**, **Guinea-Bissau**, and **the Netherlands**.

Insufficient iodine intakes are reported from nationally-representative surveys in 14 countries, and in sub-national surveys in an additional 7 countries. The former are **Burkina Faso**, **Burundi**, **Finland**, **Haiti**, **Israel**, **Iraq**, **Democratic People's Republic of Korea (DPRK)**, **Lebanon**, **Mali**, **Madagascar**, **Mozambique**, **Samoa**, **Vanuatu**, and **Vietnam**. The latter include **Angola**, **Italy**, **Morocco**, **Norway**, **Russia**, **South Sudan**, and **Sudan**.



MAP

Current national level iodine status, based on the median urinary iodine concentration (UIC).

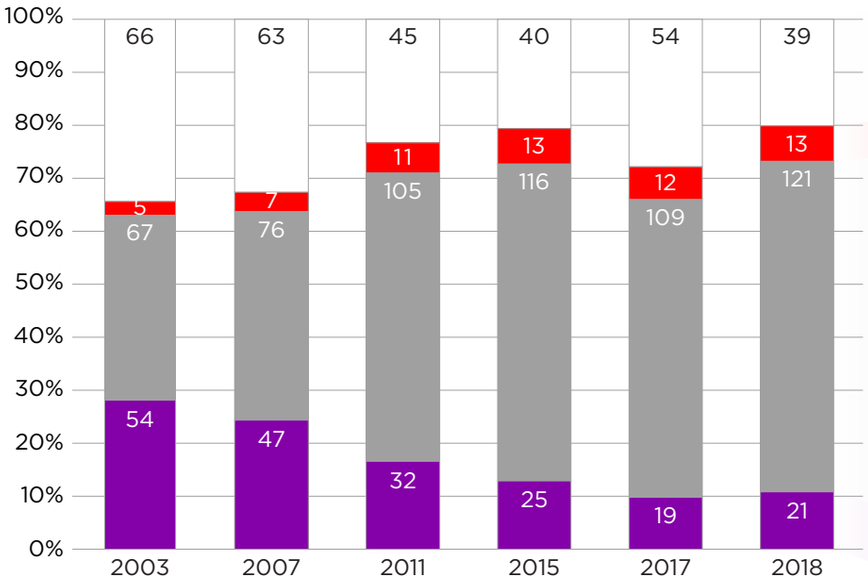
Lighter shading means less representative data. White means no available data. The number of countries in each category is indicated.

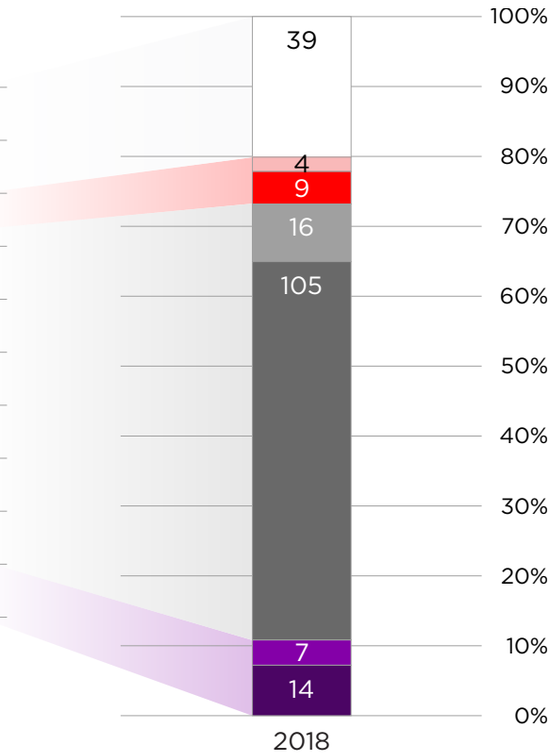
LEGEND	Insufficient iodine intake	Optimal iodine intake	Excess iodine intake
Recent, nationally representative data	14	105	9
Recent, sub-national data, including local surveys	7	16	4
Data from any surveys conducted before 2004	4	13	0

GLOBAL IODINE STATUS IN 2018

As fewer countries are classified with sub-optimal iodine intake, there are unique challenges to strengthen programs which have yet to increase their iodine supply, and to ensure that countries with successful programs sustain optimal iodine intakes.

IGN and our partners pay special attention to national governments and the salt industry in countries where previous actions have not been successful, where past achievements have been lost because of waning political support, or where competing public health challenges or ongoing conflict stand in the way of success. We focus advocacy and technical efforts in several countries which continue to be burdened by iodine deficiency, including **Angola**, **Burundi**, **Madagascar**, **Mozambique**, **Russia**, **Sudan**, and **Vietnam**, and we look forward to continuing to support these countries as they progress towards optimal iodine nutrition.





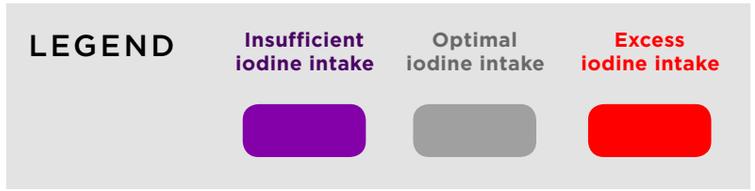


FIGURE 1

The number of WHO countries classified as iodine-deficient has declined steadily in the past 15 years.

Many new surveys came to light in the past year, and it is optimistic to see a marked increase in the number of iodine-sufficient countries.

FIGURE 2

Iodine status of 194 WHO countries in 2018, based on recent (2004–2018) surveys

Darker shade means nationally-representative data. Lighter shade means sub-national or local data.

COUNTRY HIGHLIGHTS

National program support lies at the core of our work. The following pages provide just a few examples from countries across the world where we worked in 2018 to enact legislation, reform industry, and support enabling environments to achieve optimal iodine nutrition.

ANGOLA

What is the situation in Angola?

Iodine deficiency has long been recognized as a serious public health problem in Angola. Yet, this knowledge was based on very limited data—only one survey had ever been conducted.

What are we helping to achieve?

In 2016, IGN together with GroundWork LLC, UNICEF, and the Ministry of Fisheries conducted a situation analysis of Angola's salt iodization program and made programmatic recommendations for a national plan of action. We identified the need for both a national iodine survey and a salt industry mapping to generate critical data, and the design for these surveys was finalized in 2018.

What are the next steps?

Both surveys will be carried out by the University Agostinho Neto in Luanda with support from UNICEF, the Government, and IGN. We are engaging Tanzanian and Mozambican experts to provide technical assistance. Data collection will take place in April 2019, and the results will inform the national salt iodization program.

Facts & Figures

Population: **30,774,205 (2018)**

Iodine Status: **Insufficient iodine intake (2006)**

Iodized Salt Coverage: **82.4% (2016)**

IGN Region: **Eastern & Southern Africa**

Regional Coordinators: **Vincent Assey**
Festo Kavishe

National Coordinator: **—**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

BURUNDI

What is the situation in Burundi?

Burundi is a salt importing country. Because it lacks adequate import controls, it has been difficult to assure that all salt entering the country is adequately iodized.

What are we helping to achieve?

Working with UNICEF Burundi, we supported the Ministry of Health to conduct a national survey to assess population iodine status and identify sources of iodine in the diet. After several years of concerted advocacy efforts and planning in a politically unstable environment, the survey was finally completed in February 2018.

The results identified regions in the country with sub-optimal iodine intake, caused by poorly iodized salt imported from northern Tanzania and sold across Burundi.

What are the next steps?

Using the survey results, we are working with the Governments of Burundi and Tanzania to develop a strategic plan of action to improve the country's iodine status by targeting the iodine deficient regions and ensuring that all imported salt is monitored.

Facts & Figures

Population: **11,216,450 (2018)**

Iodine Status: **Insufficient iodine intake (2018)**

Iodized Salt Coverage: **71.1% (2000)**

IGN Region: **Eastern & Southern Africa**

Regional Coordinators: **Vincent Assey**
Festo Kavishe

National Coordinator: **Evelyn Ngomirakiza**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

CARIBBEAN ISLANDS

What is the situation in the Caribbean region?

Over the past decades, many countries in Latin America have implemented successful salt iodization programs, leading the region towards tremendous progress. The Caribbean sub-region has lagged behind with collecting the data on iodine intake because it is often taken for granted that island populations are iodine sufficient due to their fish-based diets.

What are we helping to achieve?

In 2018, IGN with support from the Pan American Health Organization (PAHO), the ETH Zurich (Swiss Federal Institute of Technology) and UNICEF conducted the first ever survey of iodine nutrition in nine Caribbean countries: **Jamaica**, **Antigua**, **St. Kitts & Nevis**, **St. Lucia**, **Grenada**, **St. Vincent & The Grenadines**, **Trinidad & Tobago**, **Belize**, and **Barbados**. The initial results suggest that school-age children have adequate iodine intakes across the Region.

What are the next steps?

Once all data have been analyzed and published, we will use the survey findings to raise awareness about the importance of sustaining optimal iodine intake, and aligning salt iodization with salt reduction policies in the Region.

Facts & Figures

Population: **5,497,213 (2018)**

Iodine Status: **Optimal iodine intake (2018)**

Iodized Salt Coverage: **—**

IGN Region: **Central America & The Caribbean**

Regional Coordinator: **Ivette Sandino**

National Coordinator: **—**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

CHINA

What is the situation in China?

In January 2018, China reformed its salt industry to allow non-iodized salt to be sold in areas with sufficiently high iodine content in water. This policy was based on the expectation that there were some segments of the population whose iodine needs were met by the natural water supply and did not require iodized salt. However, this change also represents a departure from the vigilant implementation of USI in which all edible salt was under state control and had to meet national iodization standards.

What are we helping to achieve?

We have been working with UNICEF and Chinese research organizations to implement a surveillance system at sentinel sites to track coverage of iodized salt and the iodine status of the population in order to detect any unintended negative effects of the reform on iodine status. The design and rationale for these activities were reviewed during a meeting dedicated to iodine and thyroid disease held in October 2018 in Shenzhen, China.

What are the next steps?

IGN will continue to support the Chinese Ministry of Health and the China National Salt Industry Corporation to ensure that the reform's guidelines are followed correctly. Although iodine intakes are currently adequate, keeping up the prevention efforts is important to ensure that iodine deficiency does not re-emerge in the country, which has had one of the most successful salt iodization programs in the world.

The IDD Prevention Day poster praises the successful elimination of IDD in China.

Facts & Figures

Population: **1,415,045,928 (2018)**

Iodine Status: **Optimal iodine intake (2017)**

Iodized Salt Coverage: **96.3% (2014)**

IGN Region: **China & East Asia**

Regional Coordinator: **Ming Qian**

National Coordinator: **Zupei Chen**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

ISRAEL

What is the situation in Israel?

Historically, Israel was not considered to have a significant iodine problem, and it has no official IDD prevention program. In 2016, IGN and the Israeli Ministry of Health conducted a survey which found the country's iodine status to be low, with an iodine intake amongst the lowest in the world.

What are we helping to achieve?

We have been working with Israel's Ministry of Health and the salt and bread baking industries to determine the feasibility of using iodized salt in commercial bread, which is consumed by 90% of Israel's population.

Next steps

The Israeli MoH is currently exploring the feasibility of legislating that only iodized salt be included in the manufacture of commercial bread. If the legislation passes, IGN will work with the MoH to assess its impact through a rapid survey of iodine status to measure any resulting changes. Because similar legislation has been successful in Australia, Tasmania, the Netherlands, and New Zealand, we expect to see a positive change in iodine status following widespread implementation of the regulation.

Facts & Figures

Population: **8,452,841 (2018)**

Iodine Status: **Insufficient iodine intake (2016)**

Iodized Salt Coverage: **—**

IGN Region: **Western & Central Europe**

Regional Coordinator: **John Lazarus**

National Coordinator: **Aron Troen**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

LEBANON

What is the situation in Lebanon?

A national survey supported by IGN in 2014 revealed that the population had sub-optimal iodine intake. Although iodization of salt is mandatory in Lebanon, the salt producers had not been able to implement this policy consistently, and the availability of adequately iodized salt had been poor.

What are we helping to achieve?

After the survey results were published, we supported a key policy review conducted by the American University of Beirut (AUB) and the Lebanese Ministry of Health. The review's recommendations were used to revise the salt iodization law to make it more pragmatic, removing requirements and enabling producers to comply.

Since then, IGN has focused on helping the country's four major salt producers to improve their iodization and quality monitoring practices. Recently, several quality control reports have shown steady improvements in iodine supply.

What are the next steps?

In the last quarter of 2019, the AUB and IGN plan to implement a rapid survey to measure the changes in the supply of adequately iodized salt and the iodine status in the Lebanese population. We expect to see positive results that can be directly attributed to our work in the country.

Facts & Figures

Population: **6,093,509 (2018)**

Iodine Status: **Insufficient iodine intake (2013)**

Iodized Salt Coverage: **95.3% (2004)**

IGN Region: **Middle East & North Africa**

Regional Coordinator: **Izzeldin Hussein**

National Coordinator: **Omar Obeid**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

MADAGASCAR

What is the situation in Madagascar?

Madagascar introduced mandatory salt iodization in 1995, and within two decades iodized salt was available to almost three-quarters of households. Unfortunately the program fell victim to a period of political instability, and the progress was not sustained and led to declines in coverage.

What are we helping to achieve?

Following renewed commitment from the Government, we provided technical assistance to UNICEF and the Ministry of Health in 2016 to conduct a national iodine survey. Its recently published results revealed poor iodine intakes among women. In response, we facilitated the procurement of a large amount of potassium iodate (the iodine compound added to iodized salt) from a Japanese consortium of public and private sector donors (the Foundation for Growth Science, and Japan Iodine Industries Association, Chiba Prefecture). The donation has helped to generate momentum and a comprehensive program review, which identified a number of concrete steps to strengthen the salt industry in the country.

What are the next steps?

In the immediate term, IGN, UNICEF and other technical and financial partners will continue to focus on improving iodization capacity and quality monitoring among salt producers in Madagascar, to improve the sales of iodized salt, improve coverage, and prevent the scourge of iodine deficiency among the most vulnerable populations.

Facts & Figures

Population: **26,262,810 (2018)**

Iodine Status: **Insufficient iodine intake (2015)**

Iodized Salt Coverage: **68.4% (2009)**

IGN Region: **Eastern & Southern Africa**

Regional Coordinators: **Vincent Assey**
Festo Kavishe

National Coordinator: **—**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

NORTH KOREA

What is the situation in North Korea?

Iodine deficiency was first recorded in North Korea in 1995. Soon after, the government began efforts to produce iodized salt with support from UNICEF. But due to implementation constraints, the production of iodized salt was only about 50% of the target between 2011 and 2014. A survey in 2010 found that all except 2 of the 8 provinces assessed were iodine deficient.

What are we helping to achieve?

In 2017, IGN leveraged UNICEF funding and sent a consultant on two successful missions to work with salt producers and propose improvements to the quality of the country's raw salt supply and upgrade its iodization equipment. We have been invited to return to North Korea to explore additional program refinements and recommendations. The engagement in North Korea has been timely as the global political environment has relaxed somewhat, and IGN is uniquely poised to embrace the opportunity to work with the North Korean government.

What are the next steps?

Additional visits have been planned, during which IGN will explore how to implement proposed improvements.

Facts & Figures

Population: **25,610,672 (2018)**

Iodine Status: **Insufficient iodine intake (2010)**

Iodized Salt Coverage: **—**

IGN Region: **China & East Asia**

Regional Coordinator: **Ming Qian**

National Coordinator: **—**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

SUDAN

What is the situation in Sudan?

Iodine deficiency is widespread in Sudan, and until recently less than 20% of the edible salt being produced was iodized. One of the key problems has been a lack of modern processing technologies, and a fragmented salt industry comprising many small, local producers.

What are we helping to achieve?

In 2018, IGN worked together with a consortium of partners to help the Sudanese government purchase three salt processing units—two from Spain and one from China. These units, which became fully operational in May 2018, are now iodizing 40% of the nation's salt and were launched by the highest level of government.

Since then, we have been working with partners to lay the groundwork for the Sudanese government to purchase three additional machines that will have the capacity to iodize the remaining 60% of Sudan's salt. To assess the population coverage with iodized salt, we implemented a rapid survey and noted dramatic increases in the coverage of iodized salt in several regions of the country, and we plan to assess the iodine status in early 2019.

What are the next steps?

We expect that Sudan will achieve optimal iodine nutrition very rapidly thanks to increased availability of iodized salt provided by the new equipment and enhanced industry infrastructure. We have also planned for Sudan's Minister of Industry to visit Azerbaijan to learn about the management and quality control of its iodization program. We hope that this visit will lead to a bilateral agreement between the governments of Sudan and Azerbaijan, which could provide Sudan with technical training.

Facts & Figures

Population: **41,511,526 (2018)**

Iodine Status: **Insufficient iodine intake (2006)**

Iodized Salt Coverage: **34.4% (2014)**

IGN Region: **Middle East & North Africa**

Regional Coordinator: **Izzeldin Hussein**

National Coordinator: **Salwa Abdul Rahim Sorkati**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

TANZANIA

What is the situation in Tanzania?

Although at the national level, the Tanzanian population is iodine sufficient, Tanzania's salt is supplied by hundreds of small-scale artisanal salt producers, who have not been able to produce high-quality iodized salt. As a result, iodine intakes vary across the country.

What are we helping to achieve?

Following an inter-agency assessment of the salt iodization program in 2016, we made a recommendation to consolidate salt production by the small scale producers. Since then, we have worked with partners and conducted feasibility studies to better understand the salt industry and sought inputs from salt producers who manage large plants in Nigeria, Namibia, and Kenya. We have continued dialogue with the government and partners to identify how best to implement this consolidation of the salt industry.

What are the next steps?

Transformation of the Tanzanian salt industry is already underway.

As a result of this work, we have received funding from GAIN to convene and lead a similar assessment in Mozambique, as well as from UNICEF to explore salt industry consolidation in Senegal. Like Tanzania, these other countries have long struggled to achieve USI due to the fragmented nature of the salt industry.

Facts & Figures

Population: **59,091,392 (2018)**

Iodine Status: **Optimal iodine intake (2016)**

Iodized Salt Coverage: **76.0% (2016)**

IGN Region: **Eastern & Southern Africa**

Regional Coordinators: **Vincent Assey**
Festo Kavishe

National Coordinator: **Fatma Abdallah**

†Percentage of households consuming salt with any iodine. UNICEF 2018.

GLOBAL HIGHLIGHTS

Beyond the work that IGN undertakes to support national program efforts, we are also involved with the refinement of global guidance by making use of recent research and shifting development priorities. In this section, we highlight just some of the global projects we participated in and technical assistance we extended in 2018.

HOW TO MONITOR SALT IODIZATION PROGRAMS AND POPULATION IODINE STATUS?

A recently published UNICEF program guide addresses common monitoring challenges to help managers improve the effectiveness of national salt iodization programs.

Although there has been remarkable progress towards eliminating iodine deficiency disorders (IDD) attributed to the scale-up of national salt iodization programs, measurement of program achievements has been evasive. Part of the problem is that the current metrics used to track IDD programs do not capture the full extent of their success.

To address this and other challenges emerging from applied research and program practice, UNICEF and IGN convened an expert Technical Working Group Meeting on 17–18 December 2015 in New York. Key lessons emerging from this meeting have now been captured in the UNICEF **"Guidance on the Monitoring of Salt Iodization Programmes and Determination of Population Iodine Status"**.

This important document guides program managers on how to address the most common shortcomings in the interpretation of monitoring data and challenges encountered when implementing national IDD control programs.

While the document reinforces many of the key recommendations made in the 2007 WHO/UNICEF/IGN Guide for Program Managers, it also contains new information and updates, which may affect how programs are implemented and are likely to inform future versions of the WHO/UNICEF/IGN Guide.

Download from: **https://www.unicef.org/nutrition/files/Monitoring-of-Salt-Iodization.pdf**, and in Russian from: **https://endojournals.ru/index.php/ket/article/view/9734/7353**.

A rapid test kit (RTK) can turn iodized salt blue. The UNICEF guide clarifies that the test can't detect the exact concentration of iodine in salt, only that it has been iodized. This has important implications for knowing if a salt iodization program has been successful.

GFDX — A NEW HOME FOR FOOD FORTIFICATION DATA

Together with the Food Fortification Initiative (FFI), the Global Alliance for Improved Nutrition (GAIN), and the Micronutrient Forum, in 2017 we launched the Global Fortification Data Exchange (GFDx).

The group of partners works to standardize and harmonize the data collected across large-scale food fortification programs—namely, wheat, maize, rice, oil and salt. A public-facing web site has been developed which provides the most up-to-date information on the status of national fortification programs (**www.fortificationdata.org**).

In 2018, GFDx undertook a series of in-country consultations with stakeholders of each fortification program to understand how countries use (or don't use) data to improve and synergize existing programs. Between June and September 2018, workshops took place in the Kyrgyz Republic, Kenya, the Philippines, Nigeria, and Peru.

Global Fortification
DATA EXCHANGE

A Spanish version of the GFDx was launched in November 2018 (**www.FortificacionDatos.org**), and it was showcased at at the tri-annual conference of the Society for Latin American Nutrition (SLAN), in Guadalajara, Mexico.

This work is being supported by a grant from the Bill & Melinda Gates Foundation (BMGF) through the CDC Foundation.

The Kyrgyz Republic fortification data workshop was held in Bishkek on 20–21 June 2018.

EUTHYROID SCIENTISTS SIGN THE 'KRAKÓW DECLARATION ON IODINE'

On 18th April, the scientists investigating iodine deficiency as part of the Horizon2020 research and innovation action EUthyroid met in Poland to sign the 'Kraków Declaration on Iodine.'

Before salt iodization programs, Europe was an iodine-deficient continent. During pregnancy and breastfeeding, even mild or moderate iodine deficiency of the mother may impair fetal brain development, neurocognitive function, and reduce offspring I.Q.

The goal of the Declaration was to draw attention to the iodine situation in Europe in the hope that governments, health officials, and other policymakers realize that this important public health problem is impacting negatively on the society, but it has an easy solution. It calls on policymakers, scientists, and the public to join forces to ensure that effective strategies to prevent IDD are implemented across Europe.

EUthyroid was a three-year pan-European project designed to investigate iodine status and address barriers to achieving effective, harmonized IDD prevention across the EU and the wider continent. It comprised 31 partners from 27 countries, including the Iodine Global Network. The project came to an end in June 2018, and its findings and recommendations will soon appear in peer-reviewed literature.

The EUthyroid consortium and other signatories of the 'Kraków Declaration on Iodine'.

INCLUDING IODIZED SALT IN PROCESSED FOOD

Consumption of salt from processed foods and condiments is increasing, and processed foods made with iodized salt may become an important source of dietary iodine. We have developed guidance to estimate the contribution of processed foods to salt and iodine intakes among different population groups.

Universal salt iodization (USI) is defined as fortification with iodine of all salt for human and animal consumption. This includes salt used by food manufacturers in processed food products. Yet, for many years, IDD programs focused on household salt, previously the main source of dietary iodine.

We now work with governments to encourage the use of iodized salt in major processed food products, such as bread and condiments, including bouillon. This entails working with each country's policymakers, salt producers, and food manufacturers to:

(1) identify which foods are the main sources of iodine in the country,

(2) determine how important and feasible it would be to iodize salt used in these products, and

(3) help review and, if necessary, revise existing iodization laws to make this happen.

To standardize these efforts in each country, we have developed program guidance with inputs from partner organizations including UNICEF, Nutritional International (NI), the Global Alliance for Improved Nutrition (GAIN), Helen Keller International (HKI), and the World Health Organization (WHO).

Thanks to funding from the Bill and Melinda Gates Foundation, we will field test the guide in five countries across different Regions. We hope to collect feedback on how useful the guide is in assessing the contribution of processed food to iodine intake, and to generate concrete recommendations on how to incorporate processed food salt into national iodization programs.

Many processed foods and condiments (such as bread, bouillon cubes or soy sauce) can be produced using iodized salt.

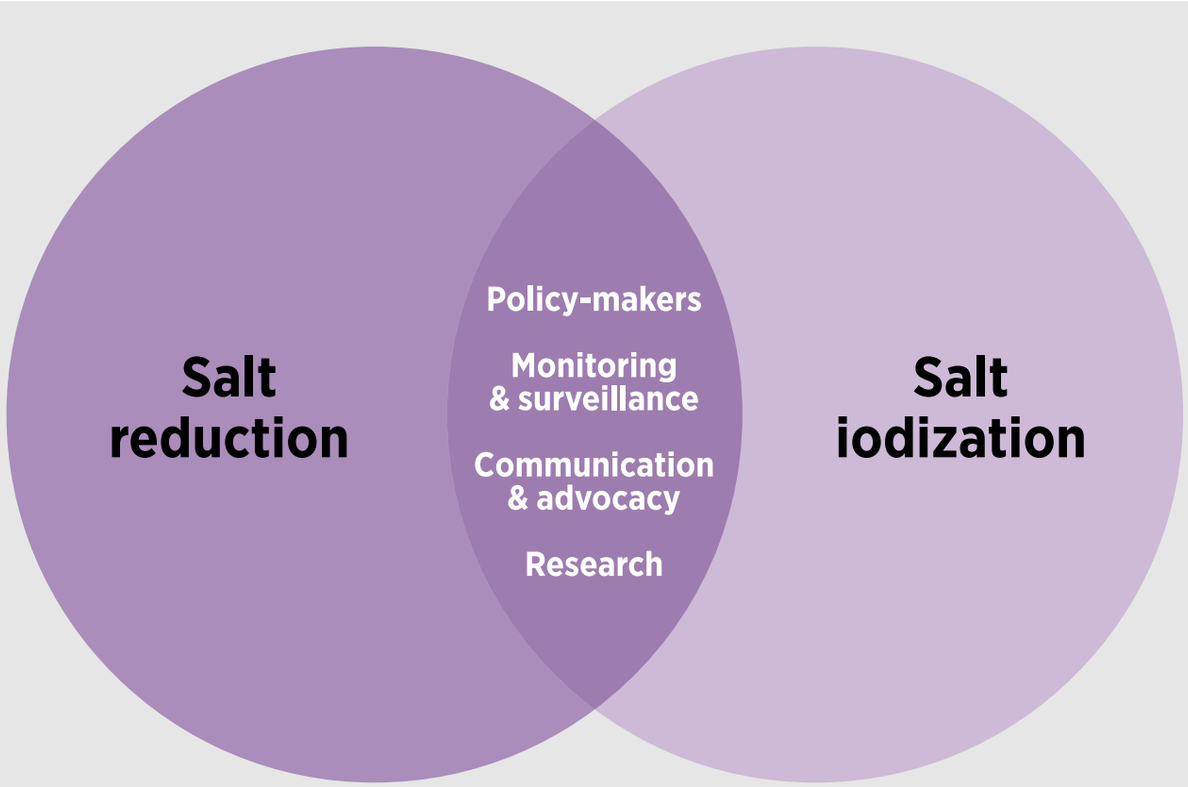
ALIGNING SALT REDUCTION WITH SALT IODIZATION

Excess dietary salt and lack of natural dietary iodine are of concern to public health because they affect billions of people worldwide. Consequently, both are major global public health priorities.

We continue to work closely with organizations promoting the reduction of salt intake due to the role that it plays in the development of cardiovascular diseases. Our goal is to reinforce the complementarity between the two public health strategies, and promote program synergy, including in how the health messages of each program are communicated to the public.

In 2018, we held meetings with the World Health Organization and the salt industry to reinforce the message not to eat more salt, but to make sure that all salt that is consumed is iodized.

Working with partners in Central America, South America, and the Middle East, we are developing monitoring systems which track both salt and iodine intake, and we are collaborating with the George Institute, the Institute of Nutrition of Central America and Panama (INCAP) and the Institute for Health Metrics and Evaluation (IHME) to analyze both salt consumption and the iodine status of populations. Our goal is to develop recommendations on how to modify the content of iodine in salt in countries where the overall salt intake may be declining.



Salt iodization and salt reduction programs are complementary in many ways, and integrating them can bring efficiencies and benefits to public health.

THE CRITICAL ROLE OF THE SALT INDUSTRY IN ACHIEVING OPTIMAL IODINE NUTRITION WORLDWIDE

The 2018 World Salt Symposium, held on 19–21 June, in Park City, Utah, brought together salt producers from more than 30 countries. It was a unique opportunity to discuss the importance of iodine, provide an update on global progress of salt iodization programs, and reflect on the tremendous contribution made by the salt industry. In partnership with Kiwanis International, we hosted two technical sessions on iodine nutrition, with presentations and lively debates focusing on:

- The key role of public-private collaboration in achieving USI
- Examples of successful collaborations from around the world
- Complementarity of sodium reduction and salt iodization efforts
- Importance of joint messaging and media
- The use of iodized salt in processed foods and condiments
- Recent efforts towards salt industry consolidation to support USI
- Using salt as a fortification vehicle for other micronutrients
- Key barriers to USI implementation

The symposium was a reminder of the importance of building and strengthening partnerships with industry to sustain the global success of USI. IGN continues to provide a platform for all partners to participate in the global achievement of eliminating iodine deficiency.

A panel discussion chaired by Robin Houston, Iodine Global Network. Panelists: Sergio Moreno, Mexico; Garcez Narcy, Mozambique; Luiz Caetano, Brazil; Rishi Kansagra, Nigeria.

GLOBAL CONSULTATION ON EMERGING OPPORTUNITIES FOR SALT FORTIFICATION

With support from the Bill and Melinda Gates Foundation, UNICEF, USAID and U.S. CDC, the Iodine Global Network is leading a global review to assess the feasibility of double fortification of salt with both iodine and iron.

Because of the success of salt iodization programs, there have been efforts undertaken to explore the feasibility of adding additional nutrients, beyond iodine, to salt.

IGN has been asked to convene researchers, development partners, program managers, and representatives of the salt industry to review the existing evidence on salt fortified with both iron and iodine – DFS, in order to establish clear guidance regarding the optimal conditions under which DFS may be considered in a country and will not compromise the success of USI.

The initial results of this consultation are expected in the first quarter of 2019. They will be reviewed by stakeholders, who will then develop and disseminate recommendations before the end of the year.

Salt fortified with iron and iodine (double-fortified salt) is being produced in some states in India to help prevent the high burden of anemia and iodine deficiency.

2018 ELECTIONS

The IGN Annual General Meeting (AGM) was held electronically on 25–29 June, 2018. Four Directors were elected to the Board for a three-year term.

New Directors elected to the Board

Sergio Moreno
AMISAC, Mexico

Cria Perrine
CDC, Atlanta, USA

Directors re-elected to the Board

Nora Beninger

Michael Zimmermann

Retired from the Board

Rafael Flores-Ayala

Luiz Caetano

Peter Walker

2018 BOARD OF DIRECTORS

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India

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USA

Mu Li
Australia

Venkatesh Mannar
Canada

Sergio Moreno
Mexico

Stan Soderstrom
USA

Napaphan Viriyautsahakul
Thailand

Lisa Rogers
Switzerland (Observer to the Board, World Health Organization)

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USA

Senior Advisor
Robin Houston
USA

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Izzeldin Hussein
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SOUTHERN & EASTERN AFRICA
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Tanzania

Festo Kavishe
Tanzania

SOUTH ASIA
Chandrakant Pandav
India

CHINA & EAST ASIA
Ming Qian
China

SOUTH EAST ASIA & PACIFIC
Karen Codling
Thailand

Gary Ma
Australia

IGN MANAGEMENT COUNCIL MEETING
21–23 February 2018, Tbilisi, Georgia

At the start of 2018, the Regional Coordinators and the Executive met in Tbilisi, Georgia. The annual meeting was an opportunity to reflect on the progress against IDD across all Regions, and to define the strategic priorities for the coming year.

The IGN Management Council in Tbilisi, Georgia

On February 20, **a sub-regional workshop on iodine monitoring** was hosted in Tbilisi by Georgia's NCDC, with support from UNICEF and IGN. The workshop was attended by representatives from Armenia, Russia, Moldova, Montenegro, Belarus, Macedonia, Albania and Turkmenistan, who shared the results of recent iodine assessments in the Region and discussed innovative approaches to improving the quality of iodine monitoring. After completion of the 2017 national iodine survey in Georgia, the meeting was an opportunity to increase publicity of the country's success story across the region.

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SUPPORT US

We are a GiveWell – and The Life You Can Save – recommended standout charity for our work supporting universal salt iodization, an evidence-based nutritional intervention. To find out how you can join our growing number of supporters, please visit: **www.ign.org/Donation**

IODINE global**network**

The Iodine Global Network is a charitable organization under Canadian law. Registered Charity Number: 893540419RR0001

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