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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

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

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

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Every year at the IGN we reflect on our core vision: A world where no child is born with preventable brain damage due to iodine deficiency.

As we close 2017, that vision is within reach. Through Universal Salt Iodization (USI), 86% of the population in low and middle income countries now has access to iodized salt. We are on track to achieve the goal we set with our partners: to eliminate iodine deficiency in all countries by 2020.

Last year, millions of newborn infants were born with healthy brains because expectant mothers entered pregnancy with optimal iodine status, thanks to adequately iodized salt in their diets. However, there is still work to be done. Now, as we face the proverbial last mile, there is a need to strengthen programs, and to sustain success. This requires a focus on reaching segments of the population still vulnerable to iodine deficiency, as well as embedding iodine programs within broader nutrition and development agendas.

Our core mandate is to harmonize and leverage collective action. Universal Salt Iodization programs have been successful because of the participation of diverse stakeholders including the salt industry to produce and iodize salt; governments to regulate and monitor programs; civil society to support demand and compliance; and development partners to provide technical assistance on the ground.

As a network of partners, we come together around a common aspiration: a world where all children are born with the opportunity to achieve their full developmental potential and thrive. We recognize that collaboration is critical to achieve that vision.

In 2017 we made significant strides in establishing and strengthening USI programs in a number of countries. At the global level we contributed to several critical initiatives to build coalitions and expand the scope of salt fortification efforts. In this report we’ll share highlights across the four main pillars of our work:

**HARMONIZATION.** The IGN has been an integral partner in the establishment of the Global Fortification Data Exchange (GFDx), a novel tool for decision makers which was launched in 2017 with our partners the Food Fortification Initiative (FFI), Global Alliance for Improved Nutrition (GAIN), and the Micronutrient Forum. We also contributed to the development of a new resource package for program managers, contributed to programmatic guidelines, and formed new alliances that expand our network, notably with the renowned Institute of Nutrition of Central America and Panama (INCAP).

**ADVOCACY.** We reinforced with governments across the world the importance of improving iodine nutrition and aligning USI with other fortification and nutrition programs. In several countries, we helped secure government commitment to place iodine deficiency control at the top of the national agenda as an investment priority towards national prosperity.

**GLOBAL AND NATIONAL TECHNICAL PROGRAM SUPPORT AND RESEARCH.** In 2017 we supported the design and implementation of surveys in a number of countries to assess their population iodine status and the coverage of iodized salt to help guide the design and refinement of national iodine nutrition programs. In this context, read more below about our work in Armenia, Burundi, Djibouti, North Korea, Tanzania, and Vietnam.

**COMMUNICATION & RAISING AWARENESS.** In 2017 we expanded our communications toolkit to disseminate information about the work of the IGN with the launch of The Iodine Blog, a monthly publication which presents stories about our efforts and contributions in countries throughout the world.

Lessons from salt iodization abound, and every country can learn from and provide examples for policy and programs. Our role is to facilitate those conversations and connections. As the landscape for USI programs changes, we continue to refine the roadmap and explore innovative approaches to improve the supply and intake of iodine. Across these pillars, we have conducted a remarkable breadth of work throughout the world in 2017, and the pages of this report are filled with examples of the actions we have taken. It is truly an exciting time as we gain experience from mature USI programs to expand our suite of tools to support and sustain IDD elimination.

As always, I extend my gratitude and acknowledgment to our leadership, including the IGN Executive Board, our Regional Coordinators, our investors, and our partners, especially those who are responsible for the implementation of national USI programs, and all of whom make these achievements possible. This report provides an opportunity to share some of our work from the past year. I am humbled by the contribution IGN has been able to make toward the goal of global IDD elimination.

Jonathan Gorstein
IGN Executive Director
Seattle, Washington
USA
COMMEMORATING 30 YEARS

Leading the global fight to eliminate brain damage due to iodine deficiency.

Catalyzing collective action to eliminate iodine deficiency

At the Iodine Global Network, our role is to leverage collective action of the Governments, the salt industry, international development and civic partners working together towards the elimination of iodine deficiency through Universal Salt Iodization.
Today, more countries than ever are successfully sustaining optimal iodine nutrition. Thanks to their national salt iodization programs, we are on the verge of the global elimination of iodine deficiency.
ON THE VERGE OF A PUBLIC HEALTH TRIUMPH:

**Countdown to eliminate iodine deficiency by 2020**

Thanks to sustainable Universal Salt Iodization programs, we are on the verge of eliminating iodine deficiency. At the end of 2017, only 19 countries were classified as having insufficient iodine intake, down from 54 in 2003, and 113 in 1993.

We are now working to reach those in countries still vulnerable to iodine deficiency, and extend our efforts across the globe to support populations most vulnerable, especially pregnant women.

Figure. Number of countries by iodine nutrition status

- Countries with no recent data
- Excessive iodine intake
- Optimal iodine intake
- Insufficient iodine intake

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“Last year, millions of newborns were born with healthy brains because expectant mothers entered pregnancy with optimal iodine status, thanks to adequately iodized salt in their diets.”

— Jonathan Gorstein
IGN Executive Director
The 2017 global map of iodine status is based on median urinary iodine concentration (UIC) of school-age children (or where not available, adolescent and adult populations) from the last 15 years.

**GLOBAL MAP OF IODINE STATUS IN 2017**

Fewer than 20 countries are currently classified with insufficient iodine intake and are vulnerable to iodine deficiency.

**IGN Global Map & Scorecard of Iodine Nutrition Status**

Our Scorecard tracks progress against iodine deficiency globally over time, and in 2017 demonstrates remarkable progress toward the achievement of optimal iodine nutrition.

In 2017, only 19 countries remain vulnerable to iodine deficiency: Angola, Burkina Faso, Burundi, Finland, Haiti, Israel, Italy, Korea, Democratic People’s Republic of (DPRK), Lebanon, Mali, Madagascar, Mozambique, Russia, Samoa, South Sudan, Sudan, Ukraine, Vanuatu, Vietnam. In 2017, iodine status data were available for 142 countries, covering more than 97% of the world’s population.

Download the 2017 Scorecard and global map here: [http://www.ign.org/scorecard.htm](http://www.ign.org/scorecard.htm)

**Map**

The 2017 global map of iodine status is based on median urinary iodine concentration (UIC) of school-age children (or where not available, adolescent and adult populations) from the last 15 years.
Globally, 86% of the population in LMIC’s now has access to iodized salt.


Based on Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other nationally representative household surveys between 2011-2017. To access the data visit: https://data.unicef.org/topic/nutrition/iodine-deficiency/.

Map

Percentage of households consuming salt with any iodine, 2017.
Millions of children have been protected from brain damage resulting from iodine deficiency, enabling them to reach their full development potential.

Iodine is critical in the development of a child’s neurological system, 90% of which occurs before age 5 (Harvard Center for the Developing Child).

Goiter has been virtually eliminated

Over the past 25 years, more than 750 million new cases of goiter have been prevented, a result which has been seen across all regions of the world.

Goiter is an enlargement of the thyroid gland due to insufficient iodine (right).

For decades, the main indicator of iodine deficiency in a population was the prevalence of goiter. Goiter was common in many regions of the world as recently as 1993, but now has been virtually eliminated due to the success of USI programs.
GLOBAL HIGHLIGHTS

We work at the international level to facilitate harmonization between partners, iodine deficiency control programs, regions, and countries. Harmonized global action against iodine deficiency helps ensure that women around the world enter pregnancy iodine sufficient, thus giving children a better chance to achieve their full developmental potential.
GFDX, A NEW HOME FOR FOOD FORTIFICATION DATA (1/2)

Launch of the Global Fortification Data Exchange (GFDx)

Providing actionable, visual food fortification data: fortificationdata.org

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 GFDx is a new analysis and visualization tool for food fortification data, created to empower governments, donors, implementing agencies, and other members of the global health and development community to make data-driven decisions to plan, resource, and track food fortification policies and programs.

THE DATA:
- Food Vehicles: Salt, Maize Flour, Oil, Rice, Wheat Flour
- Legislation Status
- Fortification Standards
- Food Intake & Availability

GLOBAL AND ACROSS TIME:
- 230 Countries
- 1942 to the Present

GLOBAL AND ACROSS TIME:
- Generate Customized Maps, Charts and Tables
- Access the Data for Offline Analysis
Providing actionable, visual food fortification data: fortificationdata.org

COMING SOON IN VERSION II:
- Estimates of the coverage of fortification programs
- Quality and compliance of food fortification

Sign up to receive updates as new data and features are added, or get in touch let us know what you think.
RESOURCE PACKAGE LAUNCHED ON IODINE AND USI PROGRAMS

New resource package provides access to comprehensive information on iodine nutrition including evidence, global policy, case studies, and guidance to design a Universal Salt Iodization program in your country.

In 2017, we launched a Resource Package to provide a comprehensive toolkit for program managers working in the field in iodine nutrition. The Resource Package houses the latest information on iodine nutrition and key program elements to increase the supply and availability of iodized salt and improve iodine intake.

As a definitive source for IGN’s public, private, scientific, and civic partners, the tool is an invaluable mechanism for the diverse stakeholders working around the globe to eliminate iodine deficiency.

Please visit our Resource Package, and share with your networks: http://www.ign.org/rp.htm

Resources For Program Managers

1. About iodine and Iodine Deficiency Disorders (IDD)
2. Eliminating IDD through Universal Salt Iodization (USI)
3. Global progress against IDD
4. Iodine and the broader nutrition and development landscape
5. Programs: Designing IDD elimination programs
6. Programs: Salt production and iodization
7. Programs: Advocacy and political commitment
8. Programs: Legislation, regulation, enforcement
9. Programs: Monitoring performance and impact
10. Programs: IDD communication and demand creation
11. Global partners against IDD
12. General media

7. Programs: Advocacy and political commitment

- Advocacy for USI: Best practices
- National coalitions
- Partnership with private sector: a path to combat iodine deficiency through Universal Salt Iodization in Indonesia [2017]
- The #FutureFortified Global Summit on Food Fortification. Event Proceedings and Recommendations for Food Fortification Programs [2015]
- Investing in the future. A united call to action on vitamin and mineral deficiencies: Global Report 2009 [2009]
- The national program for the elimination of IDD [2004]
- Scaling-Up Nutrition (SUN) Movement
Our work is ultimately most important and relevant at the country and regional level where our coordinators work in close collaboration with partners to strengthen and support USI programs. What follows are brief highlights from each of our eleven regional offices.
In North America, while iodine intake is classified as optimal at the population level, the main sources of dietary iodine in the United States and Canada have long been milk and other dairy products. Sales of iodized salt are low in the US, and with the rise in the popularity of dairy alternatives, such as soy milk, there may be repercussions for iodine nutrition.

In 2017, we worked to increase awareness of iodine nutrition among medical providers and the general public, advocated for the inclusion of iodine nutrition in medical guidelines, and recommended iodine be included in all prenatal vitamins.

Recent data demonstrates that pregnant women in the US may be mildly deficient.
Virtually all countries in Central American & the Caribbean have established and sustained salt iodization programs to achieve healthy iodine nutrition – a public health victory for mothers and newborns.

In 2017, the IGN with our partners supported countries to sustain progress through strengthened monitoring and surveillance systems. To further embolden our long-term support in the region, we established a close partnership with the Institute of Nutrition of Central America and Panama (INCAP) and are undertaking joint operational research in Nicaragua, Guatemala, and Panama. In Belize and several countries in the Caribbean, we supported small-scale surveys in collaboration with ETH Zurich, PAHO, and UNICEF. In Mexico, we provided technical assistance to investigate disparities in iodine nutrition in some regions of the country which consume locally produced artisanal salt. In Haiti, we partnered with UNICEF and Boston University to initiate a national iodine survey to assess iodine status and the contribution of iodized salt in bouillon to meeting dietary iodine requirements.
In South America in 2017, following the *celebration in 2016 of the virtual elimination of iodine deficiency in the region*, we continued to focus on strengthening systems to ensure that programs and achievements are sustained.

To this end, we worked with Governments to integrate monitoring of salt iodization and iodine status into existing national nutrition surveillance systems and government programs. We also expanded our work to align salt iodization with salt reduction programs, with Governments, UNICEF and the Pan American Health Organization, emphasizing the compatibility of these two public health strategies. In Argentina, the IGN worked with small producers to improve quality production of iodized salt to assure that they supply rural communities with adequately iodized salt.

**MAP LEGEND**

- Insufficient iodine intake (mUIC <100 µg/L)
- Optimal iodine intake (mUIC 100-299 µg/L)
- Excessive iodine intake (mUIC ≥300 µg/L)
- No data
In Western & Central Europe, optimal iodine nutrition remains elusive in a number of countries, especially among pregnant women, who need higher iodine intakes to support fetal thyroid development. Indeed, one of the fascinating aspects of iodine deficiency is that it transcends economic development and is as much a problem in industrialized countries as it is in other regions of the world.

In the UK, we worked with large supermarket chains, including Morrisons, to advocate for iodized salt to be sold. In Ireland, we provided support to engage nutrition policymakers, reviewed the feasibility of food fortification, and surveyed iodized salt availability. In Israel, IGN worked closely with the Ministry of Health and the National Bakery Association to explore the feasibility of using iodized salt in bread and bread products which is imperative given recent data which suggests that iodine intakes are extremely low in that country. Iodine deficiency is also reappearing in Norway, and IGN is supporting initiatives to work with the Government to consider appropriate strategies to increase the supply of iodine in the diet.
In Eastern Europe & Central Asia, the majority of countries have successfully established USI programs and have achieved optimal iodine nutrition. Meanwhile other countries have yet to adopt salt iodization and sub-optimal iodine intakes remain.

IGN is working on both of these fronts, advocating to sustain USI in several countries with successful programs, and in others, encouraging the use of iodized salt in processed foods, such as bread and dried meats, as a means of increasing the supply of iodine in the diet.

In Russia, where iodine intake remains insufficient, the IGN contributed to a communications campaign to raise awareness about the importance of iodine deficiency among Russian media and policymakers. In Georgia and Armenia, IGN was responsible for the generation of new data as well as strengthened routine surveillance systems, which confirmed that both of those countries have successfully sustained optimal iodine intake. (Read more about our work in Armenia below, and in our blog and newsletter.)

MAP LEGEND
- Insufficient iodine intake (mUIC <100 µg/L)
- Optimal iodine intake (mUIC 100-299 µg/L)
- Excessive iodine intake (mUIC ≥300 µg/L)
- No data
In the Middle East & North Africa region, IGN navigated myriad challenges, including food insecurity and political instability.

We focused on high burden countries where iodine nutrition activities and the supply of adequately iodized salt is low, such as in Sudan, or where iodine levels in the population were high, as in Djibouti. Read more on Djibouti below. In Sudan, we helped make groundbreaking progress toward modernizing iodized salt production, facilitating commitment of the Government and key partners to procure and import three new salt production plants that together will meet 40% of the population's requirement of iodized salt (read more in our blog and newsletter).

We also worked to sustain well-established salt iodization programs in the Gulf region and Egypt, and to increase political will in countries with no iodization policy, such as Morocco.
REGIONAL SUMMARIES

WEST & CENTRAL AFRICA

In West & Central Africa, work has focused on developing a better understanding of the potential contribution of iodized salt in processed foods and condiments, including bouillon, which is widely consumed, to meet dietary iodine requirements. The IGN has been leading a multi-partner effort to develop recommendations and guidelines to include the use of iodized salt in bouillon and salty condiments in the region.

IGN partnered with UNICEF to undertake a regional situation analysis including reviewing USI legislation for all 24 countries in the region and provided guidance on changes to regulations to encourage iodized salt use by the food industry.

MAP LEGEND
- Insufficient iodine intake (mUIC <100 µg/L)
- Optimal iodine intake (mUIC 100-299 µg/L)
- Excessive iodine intake (mUIC ≥300 µg/L)
- No data
In the Eastern and Southern Africa Region, dramatic progress has been made over the past decade towards establishing USI programs and achieving optimal iodine nutrition in many countries, while insufficient iodine intake remains in four countries in this region.

In 2017, we worked with partners to design surveys to measure population iodine nutrition and iodized salt coverage in Angola and Burundi (two countries still classified with sub-optimal iodine intake). The data will inform future actions (read more about Burundi below).

In Tanzania, we promoted iodine nutrition to become an integral component of their multi-sector nutrition program, and we are working with key stakeholders to explore the possibility of salt industry consolidation that will improve the efficiency and sustainability of USI (read more about Tanzania below and in our blog).
In South Asia in 2017, all countries in the region are currently classified to have achieved optimal iodine nutrition, a monumental milestone. Our focus has shifted to sustainability, and to reaching vulnerable segments of country populations.

In India, the IGN with our partners helped to facilitate national and state coalition meetings with key stakeholders required to support USI. The IGN also assisted the Indian government with their program for the production and distribution of double fortified salt - salt with both iodine and iron - through the public distribution system, in order to better understand the optimal conditions for the effective implementation of this intervention. In Bhutan and Myanmar, IGN and partners assessed current iodine programs and formulated recommendations to sustain USI.
In China, new regulations have effectively revoked the country’s longstanding salt monopoly, leading to an open and free market for the salt industry. To uphold historic achievements of optimal iodine nutrition in China, IGN advocated for strong monitoring to track any changes in the iodine situation which may result from this significant policy change. We also helped to develop and incorporate iodine content as part of the standard medical curriculum so that all new doctors are aware of the importance of iodine nutrition and the legacy of iodine deficiency which was once widespread prior to the establishment of salt iodization in 1995.

In DPRK, the IGN undertook a series of high level technical consultations to review the production of iodized salt. We developed a series of concrete proposals to improve the quality of raw salt and iodization quality. (Read more about our work in DPRK below in our blog.)
While many countries in the Southeast Asia and Pacific Region have had successful USI programs, that progress appears to be slowing and even reversing in some settings. Low political commitment, potentially due to misunderstanding that IDD has been eliminated and no longer requires investment and attention, is a challenge.

IGN is working with partners to advocate for program sustainability. We are supporting countries to strengthen basic program elements, such as reviewing of national legislation, regulatory monitoring and iodine procurement systems.

In Vietnam and Cambodia, we supported studies to examine the use of iodized salt in salty condiments like fish and soya sauce. (Read more about our work in Vietnam below and in our blog.) In the Pacific Islands, we continue to advocate for mandatory legislation for iodized salt, and to focus on how to address the fact that some populations, such as in Papua New Guinea, do not routinely consume salt.
TECHNICAL HIGHLIGHTS

The IGN works in every region of the world to support optimal iodine nutrition. Here we highlight just some of the technical assistance extended in 2017.
IN TANZANIA, TREMENDOUS COMMITMENT TO ADDRESS MICRONUTRIENT MALNUTRITION

Tanzania has committed to a far-reaching public-private partnership to address nutrition in general and food fortification. Tanzania held its first National Summit on Food Fortification on 23-24th August 2017, as part of the implementation of the National Multisectoral Nutrition Action Plan (NMNAP).

It was recognized at the summit that good nutrition is a right and not a privilege of the few, and that it’s a critical component of making Tanzania a middle-income country by 2025.

Stakeholders committed to good multisectoral nutrition governance to enforce food fortification regulations, allocate resources to nutrition, and monitor impact to decrease unacceptably high levels of malnutrition.

The meeting reinforced the commitments from the 2015 Arusha Summit. IGN Regional Coordinator Festo Kavishe led advocacy efforts for salt iodization. For the full story of the partners involved and IGN’s role, read the report on Researchgate.

— Tanzanian Vice President Samia Suluhu Hassan, Azania Post
SUSTAINING UNIVERSAL SALT IODIZATION IN EGYPT:
PROGRAM SUCCESSES AND CHALLENGES

USI Sustainability Workshop, 20-21st December, 2017, Cairo, Egypt

To review and celebrate progress of the Universal Salt Iodization program in Egypt, the IGN held a USI sustainability workshop in Cairo on 20-21st December, 2017. The workshop brought together key stakeholders from government, UN agencies, and the salt industry to reaffirm commitment and develop a workplan to identify strategic opportunities to further strengthen and sustain program success in Egypt.

Read more about the workshop in our February 2018 IDD Newsletter.

Left: Izzeldin Hussein, IGN Regional Coordinator for the Middle East and North Africa (far right), with delegates from the USI Sustainability Workshop. Delegates included representatives from the Ministry of Health and Population (MOHP), National Nutrition Institute (IDDSSE, NNI), Food Standards Organization/Ministry of Industry, Ministry of Supply, as well as salt producers and development partners UNICEF, WHO, and IGN.
SUSTAINING IDD ELIMINATION IN BOLIVIA THROUGH BETTER MONITORING OF IODIZED SALT

Advocacy Meeting, 6th December, 2017, Cochabamba, Bolivia

IGN supported an advocacy meeting in Cochabamba, Bolivia, in partnership with the Bolivian Ministry of Health. Government officials from regions with the lowest iodine intakes came together to review challenges and innovate program opportunities to increase the reach and supply of iodized salt in their regions.

Read more about the workshop in our February 2018 IDD Newsletter.
IGN, EUthyroid, and the European Thyroid Association (ETA) co-hosted a symposium dedicated to iodine nutrition in Europe, as part of the annual ETA meeting, in Belgrade, Serbia. The meeting welcomed iodine experts from across the continent, including from UNICEF, Eu-Salt and the World Iodine Association.

Experts discussed monitoring, policy, evaluation and strategies to improve iodine intake through iodized salt.

Read more in our November 2017 IDD Newsletter.

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Europe has a lot of experience with harmonization across borders, but in the prevention of iodine deficiency we don’t make use of this expertise.

— John Lazarus, IGN Regional Coordinator for Western and Central Europe
IGN convened a technical consultation with key partners including UNICEF, Nutrition International, GAIN, Helen Keller International, the George Institute (Sydney), GroundWork International, and the University for Development Studies (Tamale, Ghana) to examine the role of iodized salt in processed foods and condiments.

The meeting reviewed current evidence and experiences and provided the basis for the development of program guidance which will help countries to integrate the use of iodized salt by the food industry as part of their national USI strategy. The guidelines have been developed and are being field tested in a number of countries in 2018.

*Khok Saath Iodized Salt Factory, Vientiane, Laos.*
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 2017 to enact legislation, reform industry, and support enabling environments for IDD control.
Celebrating Armenia’s recovery from historic iodine deficiency to sustained healthy iodine nutrition for the past decade

What is the situation in Armenia?

According to new findings, Armenia has recovered from historic iodine deficiency to sustain 10 years of healthy iodine nutrition. This achievement is the direct result of the high level political commitment of Universal Salt Iodization (USI).

What have we helped to achieve?

Our advocacy efforts have contributed to the positive enabling environment which has translated to commitment and investment that has made Armenia’s program a sustained success.

Most recently we worked with partners to assess the iodine status among populations most affected by deficiency – school-age children, women of childbearing age, and pregnant women. We shared the findings of sustained iodine intake levels with stakeholders including local clinicians, policy makers, and members of the scientific community.

What are the next steps?

The country can shift its program focus to sustainability, and to addressing other nutrition problems, such as anemia and neural tube defects (NTD) due to deficiency of dietary folic acid.

Read more about our work in Armenia in our blog and newsletter.
COUNTRY HIGHLIGHTS

BURUNDI

Burundi’s first national survey hits the field

What is the situation in Burundi?

Burundi is a salt importing country, and because of a lack of controls, it has been difficult to assure that all salt entering the country is adequately iodized.

What have we helped to achieve?

In 2017, the IGN in partnership with the Burundi Government and UNICEF initiated the country’s first national survey on iodine. Measuring iodine status is a critical step to better understand the current situation in order to inform next steps toward optimal iodine nutrition. Survey implementers in Burundi have successfully secured ethical clearance and trained field workers.

What are the next steps?

The Ministry of Health and the National Bureau of Statistics in Burundi, supported by IGN and UNICEF Burundi, will undertake a comprehensive survey of the iodine status in women of reproductive age, and the household coverage of adequately iodized salt. Once the findings are analyzed, we will work with stakeholders to inform program development to prevent iodine deficiency in Burundi.

Read more about our work in Burundi in our blog.

Right: Field workers in Burundi receive training to collect data on iodine status.

*WHO iodine nutrition categories based on median urinary iodine concentration: Insufficient: < 100 µg/L, Optimal: 100 – 299 µg/L, Excessive: ≥ 300 µg/L

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

Navigating new waters in Djibouti

What is the situation in Djibouti?

In Djibouti, iodine and sodium intake are currently in excess, in large part due to the consumption of groundwater and its unique physical and chemical characteristics. However, Djibouti’s water source is changing, with a new pipeline in development to channel water from Ethiopia in an effort to address the high sodium levels.

What have we helped to achieve?

In anticipation of changes to Djibouti’s drinking water, IGN is working with partners in the field to increase the supply of iodine through Universal Salt Iodization (USI) so that with modernization of the country’s irrigation system, there will no compromise to iodine nutrition.

As a first step, IGN supported a national survey and situation analysis to understand the current situation. IGN with our partner UNICEF met with policymakers to share the survey findings that revealed water to be Djibouti’s sole source of iodine.

What are the next steps?

The Ministry of Health and IGN’s partners have committed to develop a strategy for iodine deficiency prevention, beginning with evaluating the new iodine situation once the pipeline is functional.

Right: Water samples were collected across Djibouti to measure iodine concentration.

Djibouti

IGN Region: Middle East & North Africa

Country Population: 971,408

Median Urinary Iodine Concentration: 335 µg/L (2015)

Iodine Nutrition Status: Excessive*

Data Level/Age Group Measured: National, School-Aged Children

HH Coverage With Iodized Salt†: 4.4% (2006 Household Survey)

*WHO iodine nutrition categories based on median urinary iodine concentration: Insufficient: < 100 µg/L, Optimal: 100–299 µg/L, Excessive: ≥ 300 µg/L
†Percentage of households consuming salt with any iodine. UNICEF 2018
COUNTRY HIGHLIGHTS

NORTH KOREA

In North Korea, finding solutions to unique challenges in salt production and processing

What is the situation in North Korea?

North Korea is the only country in the China & East Asia region that is classified with sub-optimal iodine intake. The raw salt produced in North Korea has relatively low-purity and a high moisture content which requires drying before it can be iodized, making salt production expensive and time-consuming.

What have we helped to achieve?

In partnership with UNICEF and Government stakeholders, the IGN visited several salt farms in North Korea to devise a new strategy for more efficient raw salt production and processing. With the recommended new strategy, several salt farms will harvest salt less frequently, using techniques to produce higher quality raw salt. Salt will be left in the salt pains to dry completely through evaporation, and will be iodized directly in the pan, eliminating the need for centrifuge machines which have been inefficient and ineffective.

What are the next steps?

North Korea’s leadership hopes to supply enough iodized salt to provide 4.5 g of iodized salt per person per day for direct consumption, as well as for other household uses, including production of kimchi, a staple in Korean cuisine.

Read more about our work in North Korea in our blog and our newsletter.

Right. IGN Regional Coordinator Karen Codling (front row, third from L) and the IDD Elimination Technical Working Group.

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North Korea

IGN Region: South East Asia & Pacific Region

Country Population: 51,164,435

Median Urinary Iodine Concentration: 97 µg/L (2009-2010)

Iodine Nutrition Status: Excessive*

Data Level/Age Group Measured: National, School-Aged Children + Adolescents (Ages 10-18)

HH Coverage With Iodized Salt†: No Data

*WHO iodine nutrition categories based on median urinary iodine concentration: Insufficient: < 100 µg/L, Optimal: 100–299 µg/L, Excessive: ≥ 300 µg/L
†Percentage of households consuming salt with any iodine. UNICEF 2018.
RUSSIA

National Communications Campaign in Russia promotes the urgency of iodized salt

What is the situation in Russia?

In Russia, iodine intake remains insufficient, the third largest country population at risk of IDD, with hundreds of thousands of children born without protection against brain damage.

What have we helped to achieve?

In 2017, the IGN contributed to a communications campaign to raise awareness about the importance of iodine deficiency among Russian media and policymakers.

The Communications campaign boosted the Ministry of Health-led advocacy efforts to pass an amendment mandating the use of iodized salt in bread baking, together with increasing the availability of iodized salt in retail trade. Representatives of the Union of Bakers and the Research Institute of the Bakery Industry have voiced their support.

What are the next steps?

IGN and partners will continue to advocate for mandated iodized salt in bread and increased supply of iodized salt to consumers, led by Gregory Gerasimov, IGN Regional Coordinator for Eastern Europe & Central Asia.

Above. Press conference on Russia Today, "Iodine Deficiency Disorders—time to make a decision," with top medical experts, NGOs and representatives of the baking industry.

*WHO iodine nutrition categories based on median urinary iodine concentration: Insufficient: < 100 µg/L, Optimal: 100–299 µg/L, Excessive: ≥ 300 µg/L

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

Setting the stage for transformation of Tanzania’s salt industry to improve the supply of adequately iodized salt

What is the situation in Tanzania?

At the national level, Tanzania has achieved optimal iodine status, however regional disparity persists, with 8 out of 30 regions not being reached with adequately iodized salt.

Part of the challenge is that Tanzania has many small-scale producers, and raw salt is produced with inconsistent size and quality, making it more difficult to iodize, while markets remain evasive making salt production a poor business proposition.

What have we helped to achieve?

In 2017 we worked closely with key partners, including UNICEF, GAIN, Nutrition International (formerly Micronutrient Initiative), Salt Producer Associations, and Government Ministries to lay out the steps to consolidate the salt industry and centralize salt processing, including iodization.

What are the next steps?

Transformation of the Tanzanian salt industry is now underway. Under the new model, consolidation will support small scale producers and improve the iodized salt supply to meet the nutritional needs of Tanzanians.

In 2018 we hope to apply lessons from Tanzania to other countries in the Eastern & Southern region particularly Mozambique and Madagascar, which have also been plagued by the challenge of a highly fragmented salt industry.

Read more about Tanzania in our blog and IDD newsletter. Read more about IGN’s participation in Tanzania’s first ever national Summit on Food Fortification, in Dar Es Salaam, Tanzania, August 23-24, 2017 above, in the Regional Highlights section.
COUNTRY HIGHLIGHTS

VIETNAM

In Vietnam, raising the alarm of the return of iodine deficiency

What is the situation in Vietnam?

After the tremendous development of a national salt iodization program, Vietnam faces the challenge of backsliding, due to waning commitment because of the misperception that iodine deficiency is no longer a visible problem and that the problem had been ‘eliminated.’

What have we helped to achieve?

IGN and partners are raising awareness about the decline in the supply of iodized salt and a return of iodine deficiency in the country.

IGN worked with UNICEF and CDC in Vietnam to support the Government to implement a Decree, passed in 2016, that mandates the use of iodized salt in processed foods. We met with fish sauce producers to facilitate buy-in, and reviewed lessons from Cambodia which has faced the same issue and has demonstrated that iodized salt could be used in the production of fish sauce without any adverse effects.

What are the next steps?

IGN will continue to work with partners to sustain iodine nutrition through policy implementation and strengthened regulatory monitory, with a focus on advocating for mandatory iodized salt in salty condiments like fish and soy sauce.

Read more about our work in Vietnam in our blog.

Vietnam By © Linda De Volder via Flickr_CC BY NC DC
COMMUNICATIONS

Highlights from 2017 focused on telling stories from the field and disseminating our progress towards global IDD elimination. In the following section we share some highlights from 2016 as well as some IGN stories in the media.
A new publication brings you our stories from the field

In September 2017, we launched The Iodine Blog to share stories about our work in countries across the globe.

Designed to complement our quarterly publication the IDD Newsletter, The Iodine Blog provides more frequent stories from our work in the field and across the globe to eliminate iodine deficiency. In countries throughout the world, our Regional Coordinators are working in support of national programs to achieve optimal iodine nutrition. Our blog provides a closer look behind the scenes of that work, and into our collaborations with partners on the ground.

Read and subscribe: [http://www.ign.org/iodineblog.htm](http://www.ign.org/iodineblog.htm)
Our flagship publication

The IDD Newsletter disseminates critical IDD research, program, and policy developments. It has an international readership of around 10,000 research scientists, policymakers, and nutrition program managers. It is published and distributed free of charge by e-mail and post.

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IODINE GLOBAL NETWORK is a nongovernmental organization dedicated to sustained optimal iodine nutrition and the elimination of iodine deficiency throughout the world.

IN THIS ISSUE

- Brazil iodine sufficient after lowering salt iodine levels
- Iodine-rich groundwater provides sufficient dietary iodine in Djibouti
- Israel reports one of the lowest iodine intakes in the world
- Global Repository of Food Fortification launching in 2017

COMMUNICATIONS

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IGN IN THE MEDIA

GLOBAL HEALTH

How a Tsunami in Japan Endangered Children in Cambodia

Salt producers in Cambodia’s Kampot province. The country’s soils are naturally low in iodine, and the population has long struggled with iodine deficiency.

By Donald G. McNeil Jr.
May 16, 2017

The tsunami and nuclear disaster in Fukushima, Japan, now threaten the developing brains of children in Cambodia — but not for reasons anyone would have expected.

Iodine deficiency, the art of boxing and wellness dreaming

Is your diet putting you at risk of iodine deficiency?

- Bread and milk contain the essential nutrient iodine. But if you’re one of those people who hate bread and dairy out of your diet, are you at risk of iodine deficiency?

- ABC Opens Vegetarian children?

Richard Walker is a vegetarian, and he’s the father of two young children. So, since he and his partner don’t eat meat, does this mean his kids shouldn’t either?

The Exercise Room: Boxing workout

In this episode

Life Matters

Program Home Past Programs Fact

In Shaping A Nation’s IQ, The Answer Is In Salt

It’s something that affects all of us, in fact, if you don’t consume it at all then you die. We’re talking about sodium chloride, better known as the food additive, salt. This is something so standard in our diet, but in many countries, iodized salt (which is salt fortified with the mineral iodine), remains the difference between a baby born with an intellectual disability or not. The issue remains a global problem and it is a significant burden to public health across the world.

Even more lowering, individual deficiencies no more equalize in their impact on IQ scores, either within or across populations in any proportion of iodine deficiency in the individual.

Opinion: Fighting hidden hunger with data

This piece was written jointly by members of the Global Fortification Data Exchange core group. Laurence Haddad is the executive director of GAIN; Scott J. Montgomery is director of the Food Fortification Initiative; Dr. Jonathan Cornelius is executive director of the Iodine Global Network; and Fernando Martinez is senior advisor to the Micronutrient Forum Secretariat.
Our funding remained strong in 2017, thanks to the generosity of our donors. Here we share details about our major donors and our financial statement.
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 fourth year in a row. This highly prized recognition is awarded to only a few charities each year which have demonstrated impact, efficient program management, and transparency.

**GiveWell**

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

**The Life You Can Save**

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.
In 2017, the generous contributions provided by GiveWell, The Life You Can Give, Effective Altruism Trust, Giving What We Can and other donors have allowed us to accelerate efforts to establish and sustain programs in high-burden countries. We continue to be supported by our long-term donors, including Kiwanis, UNICEF and USAID.

**Impact Calculator**

Salt iodization costs pennies: only about US$ 0.02–0.05 per child covered worldwide, and every US$1 invested in salt iodization could bring a cost-benefit of at least $30. We have collaborated with ‘The Life You Can Save’ to provide a tool for our existing and future donors to calculate the impact of their donation. Go to: [www.ign.org/impact-calculator.htm](http://www.ign.org/impact-calculator.htm).

**Give to IGN**

All donated funds go to support projects at the national, regional, and global level. Because we work throughout the world, your request to direct funds to a specific country or region can usually be accommodated. To find out how to donate, please follow link below: [www.ign.org/Donation](http://www.ign.org/Donation).
In 2017, the IGN had a strong financial position. Revenues realized were $US 1,224,904 which compares to $US 915,348 in 2016.

The total expenditure was $US 1,207,568, which compared to $US 906,458 in 2016. The bulk of the budget in 2017 was allocated to support our technical work in the field, including the activities of the Regional Coordinators to support IDD programs in specific countries, regional workshops, and communications.

In 2017, thanks to donor support, the IGN was able to support USI programs and specific activities across all regions. The total regional expenditure in 2017 was $US 349,911, compared to $US 316,766 in 2016.

More than 80% of our expenditures were focused on advocacy, direct technical support, and assistance to country programs.

To download the IGN Financial Statements, go to: www.ign.org/about.htm
GOVERNANCE

Our Governance is comprised of our Board and Management Council, and led by our Executive Director, along with our Board Chair, Treasurer, and Secretary. In the following pages we share our 2017 meetings and welcome newly elected leaders.
2017 Board Meeting & Elections

The Iodine Global Network’s Annual Board Meeting took place in Geneva on December 11-12th, 2017. The meeting was hosted with support from Global Alliance for Improved Nutrition (GAIN).

New Directors & positions elected to the Board:

Noor Khan  
*Nutrition International, Ottawa, Canada*

Venkatesh Mannar  
*University of Toronto, Toronto, Canada*

Rafael Flores-Ayala was elected as the new Secretary.

Directors Re-elected to the Board:

Omar Dary, Greg Garrett, Roland Kupka, Stan Soderstrom

Retired from the Board:

Daniel Levac, *Bruyère Continuing Care, Canada* (served the Board as Secretary & Treasurer)

Ashvini Hiran  
*Tata Salt, India*

Luz Maria de Regil  
*Nutrition International, Canada*

2017 Board, Iodine Global Network

**CHAIR**  
Michael Zimmermann, *Switzerland*

**TREASURER**  
Nora Beninger, *Canada*

**SECRETARY**  
Rafael Flores-Ayala, *USA*

Maria Andersson, *Switzerland*

Luiz Caetano, *Brazil*

Omar Dary, *USA*

Greg S. Garrett, *Switzerland*

Rishi Kansagra, *Nigeria*

Noor Khan, *Canada*

Srinivasan Krishnamachari, *India*

Roland Kupka, *USA*

Mu Li, *Australia*

Stan Soderstrom, *USA*

Napaphan Viriyautsahakul, *Thailand*

Peter Walker, *Canada*

Lisa Rogers, *Switzerland* (Observer to the Board, World Health Organization).
IGN Management Council Meeting
15-17th February 2017, Dakar, Senegal

The IGN Management Council met in Dakar, Senegal, on February 15-17th, 2017. The meeting brought together the IGN Regional Coordinators to reflect on key highlights which took place in their respective regions over the previous year, and to define strategic priorities for the coming year.

### Regional and Deputy Regional Coordinators

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<th>Coordinator</th>
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<td>Elizabeth N. Pearce</td>
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<td>CENTRAL AMERICA &amp; CARIBBEAN</td>
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<td>Gary Ma</td>
<td>Australia</td>
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**CONGRATULATIONS!**

Congratulations to Chandrakant S. Pandav for the WHO Public Health Champion Award

Chandrakant Pandav, IGN Regional Coordinator for South Asia, was awarded the WHO Public Health Champion Award for his long and sustained service to public health, on April 7, 2017

Right: Dr. Henk Bekedam, representative of WHO India, honoring Chandrakant Pandav

Read more in our IDD Newsletter.