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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 prevention of iodine deficiency disorders.

Our Goals
Goal 1: To support the harmonization of national and international 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

Support Us
We are a GiveWell-recommended standout charity for our work to support 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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It has been a positive and productive year for the IGN and the global effort towards the elimination of Iodine Deficiency Disorders (IDD). This year we celebrated a tremendous achievement: the virtual elimination of IDD in the Americas. As the first region to celebrate such progress, the Americas mark a significant first in the global fight against IDD. Read more below, in the Advocacy section, and in the November 2016 IDD Newsletter.

It has been 30 years since the founding of the International Council for the Control of Iodine Deficiency Disorders (ICCIDD). The ICCIDD helped establish an understanding of the underlying biological importance of iodine on thyroid physiology and brain development and facilitated the global effort to scale up Universal Salt Iodization (USI) programs in countries throughout the world. In 2015, the ICCIDD was renamed the Iodine Global Network (IGN). The IGN is unique in that we leverage the collective inputs and actions of our partners in the design, implementation and monitoring of national USI programs, including the salt industry, national governments, international development agencies and academia.

Over the past 30 years, as the iodine landscape has shifted, so too have our approaches evolved to meet ever-changing challenges. Today, our work continues to be guided by four core pillars as summarized below:

**Harmonization of national and global iodine programs.** Iodine nutrition operates in a dynamic environment with other fortification programs and as part of a broad nutrition and public health landscape. In 2016, the IGN collaborated closely with the Food Fortification Initiative (FFI), the Global Alliance for Improved Nutrition (GAIN) and the Micronutrient Forum (MN Forum) to develop a global repository to present uniform data using standard indicators on the status of food fortification programs. Perhaps the most exciting achievement of this work has been the close rapport and cooperation we have built with other groups supporting national fortification programs. In better aligning and harmonizing USI with other fortification programs, we have reinforced just how important it is that our efforts are coordinated. The IGN also contributed towards comprehensive USI program reviews in Bangladesh, Indonesia and Tanzania, bringing together all key partners to develop common plans to ensure greater program efficiency through joint planning and collaboration.

**Advocacy for political will.** Our advocacy work has centered on increasing the commitment amongst key stakeholders to improve the supply of iodine in the diet, primarily through USI. In 2016, our advocacy work focused on messages which emphasized the importance of optimal iodine nutrition during pregnancy, the use of iodized salt, rather than non-iodized salt, in the production of processed foods and condiments, and aligning USI with salt reduction efforts. Our advocacy work at the country level helps build commitment and political will amongst policymakers and the salt industry.

**Program monitoring.** To support program monitoring we have worked closely with UNICEF and the WHO to develop revised program guidance to better assess the effective implementation of USI, through enhanced tracking of the coverage and quality of iodized salt. In 2016, a major focus was to design and deploy new tools and indicators to measure the iodine content in the diet from different sources, and better analyze and present data on iodine status in populations.

**Rigorous research.** Robust evidence guides our work. Our recent research has investigated the extent to which iodized salt, when implemented as part of successful USI programs, can meet the needs of all segments of the populations, particularly those most vulnerable to its adverse effects including pregnant women. IGN, through our partner ETH, initiated important research to better estimate the magnitude of iodine insufficiency in different population groups.

Across these pillars, we have conducted a remarkable breadth of work throughout the world in 2016, 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.

In the last year, we said goodbye to some of the giants who pioneered...
this work. We lost Basil Hetzel, John Stanbury, Peter Laurberg, and Harry Black, all tremendous visionaries whose groundbreaking operational and scientific research provided the basis for the global progress against IDD. It was Basil’s vision that led to the founding of the ICCIDD in 1985 in Kathmandu, Nepal. I had the distinct honor, as a young intern at the World Health Organization in the mid-1990’s, of working closely with Basil, and recall his grace and wonderful sense of humor. He took me under his wings and provided wisdom and guidance. As my dear friend Graeme Clugston, another founding member of the ICCIDD, reminded us, it was Basil’s meticulous scientific work and its application which awakened the world to both awareness and action against the enormous global significance of IDD, recognized as the single greatest preventable cause of brain damage and mental retardation, a scourge of mothers and their developing fetuses, infants and children. It was his tremendous humility and ability to unify stakeholders from diverse backgrounds that catalyzed work towards the global elimination of IDD.

Indeed, the main objective of the IGN is to support and sustain programs to provide optimal iodine intakes and prevent iodine deficiency in all countries, a public health triumph befitting the bold vision of these leaders who paved the path for us.

I personally want to extend my warmest appreciation 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, without whom none of our achievements would be possible. We are delighted to tell just a few of the stories that have resulted from our humble efforts and our contribution to assure that every child is born with the opportunity to thrive and reach their optimal potential.

Jonathan Gorstein
IGN Executive Director
Seattle, Washington
USA

“In the last year, we said goodbye to some of the giants who pioneered this work. We lost Basil Hetzel, John Stanbury, Peter Laurberg, and Harry Black, all tremendous visionaries whose groundbreaking operational and scientific research provided the basis for the global progress against IDD.”

 Tributes:
Read our tribute to Peter in the August 2016 IDD Newsletter.
Read our tribute to Basil in the February 2017 IDD Newsletter.
Read our tribute to Harry in the February 2017 IDD Newsletter and read the UNICEF tribute.
Read more about John and Basil’s early work with IGN in our February 2011 IDD Newsletter.
Commemorating 30 Years

Since the ICCIDD (now IGN) was founded thirty years ago, we have grown into a global network hundreds strong, and iodine deficiency has plummeted globally.

A Global Coalition

Our growth and results are the direct consequence of the contribution of partners and collaborators, some of which include:
Global and regional iodine status in 2016 demonstrates astounding progress towards achievement of optimal iodine nutrition. This year, we marked major milestones in the fight against IDD and tracked unprecedented progress towards global elimination. In this section, we share trends in iodine status since 1993 and the current global map of national level iodine status, along with highlights of our work and progress in regions throughout the world.
Our Progress: The Dramatic Decline of Iodine Deficiency

Thanks to concerted global efforts, the number of iodine deficient countries has declined dramatically over the past twenty-five years. At the end of 2016, only 19 countries were classified as iodine deficient, down from 113 in 1993.

Recent modelling exercises have estimated that more than 750 million cases of goiter have been prevented due to Universal Salt Iodization programs, a result which has been seen across all regions of the world. Over the same period, millions of children have been born protected from preventable brain damage resulting from iodine deficiency, enabling them to reach their full development potential.

**Figure 1. Trends in the global status of iodine nutrition between 1993 - present**
The updated Global Scorecard tells a story of remarkable progress globally toward the achievement of optimal iodine nutrition. Out of 139 countries with data from the past 15 years, only 19 countries now report insufficient iodine intake, while 110 are classified with optimal iodine, and 10 at risk of excessive intake. The nineteen countries currently classified with iodine insufficient are: Angola, Burkina Faso, Burundi, Finland, Haiti, Israel, Italy, Democratic People’s Republic of Korea (DPRK), Lebanon, Mali, Madagascar, Mozambique, Russia, Samoa, South Sudan, Sudan, Ukraine, Vanuatu, Vietnam.

Since last year, four countries formerly classified as deficient have new data which indicates that they have successfully achieved iodine sufficiency: Albania, Ethiopia, Denmark, and the UK. Meanwhile, as the result of adverse changes to national programs, new survey data revealed that Burkina Faso and Vietnam slipped from iodine sufficiency to deficiency status, reinforcing the need to remain vigilant even when programs have been successful.

To download the Scorecard and global map, go to: www.ign.org/scorecard.htm
North America

In North America, the IGN worked with the American Thyroid Association (ATA) and the Council for Responsible Nutrition (CRN) to promote the importance of iodine. There are unique salt industry dynamics in the United States, where no program for USI exists and dairy is the primary source of iodine in the diet. Awareness of IDD is low among healthcare professionals and the general public. To address this information gap, the IGN participated in educational outreach activities including healthcare professional meetings, development of dietary guidelines, and surveying iodine content in prenatal multivitamins. Most notably, in 2016 the IGN, together with the ATA, released a statement in the international journal *Thyroid* on the importance of iodine and the fact that USI is the most cost-effective way to prevent iodine deficiency.

Central & South America

In Central & South America, there has been tremendous progress towards IDD elimination, and this past year IGN focused efforts on program sustainability and enhanced monitoring. IGN worked with partners in the region to maintain political will to continue support of national USI programs, to integrate IDD elimination into other national nutrition programs, as well as align USI with salt reduction efforts. With UNICEF, USAID and the Haitian Ministry of Health, IGN conducted a comprehensive analysis of the potential contribution of using iodized salt in processed foods to improve iodine status (see more on our work in Haiti below). In Argentina, IGN investigated how to further increase the reach of iodized salt in rural areas by supporting small-scale salt producers in the Northern provinces. Significantly, new surveys carried out in Brazil, Paraguay and Uruguay all recorded that they had achieved optimal iodine intake having corrected problems of excessive intake which had been reported earlier. Mandatory legislation for salt iodization has been in place in many countries in this region longer than any other part of the world and exists in all but two countries (Guyana, Belize). In the region, Haiti is the only country still classified as insufficient; 13 countries have no data available.
Western & Central Europe

In Western & Central Europe, most countries have optimal iodine intakes, although IDD continues to persist in a few relatively affluent countries, particularly amongst pregnant women. Over this past year, we helped support efforts to increase awareness about the importance of iodine and strengthen national programs in several countries. IGN sponsored a scientific symposium on iodine and pregnancy at the London Royal College of Obstetrics and Gynecology (read more below). IGN helped achieve a major breakthrough in the UK when a major supermarket chain, Morrison’s, agreed to stock iodized salt on its shelves. The IGN held a regional sustainability workshop in Sarajevo (Bosnia & Herzegovina) for countries in Central and Southern Europe, including the Balkans, to address challenges around iodine supply, quality of iodized salt production, and monitoring (read more below). The IGN has continued to be engaged in the EUthyroid Project, a coalition that brings together critical partners to support research and advocacy needed to eliminate IDD in this region (read more in the February 2016 IDD Newsletter). In the region, Finland, Israel, Italy and Liechtenstein* are categorized as insufficient; while 10 countries in the region have no data.

*Not a WHO member state, excluded from the count to enable comparisons with previous global and regional estimates
In Eastern Europe & Central Asia, IGN focused on strengthening iodine monitoring and surveillance systems, as well as on increasing awareness about the importance of iodine in countries without USI legislation and in others where there is the perception that the problem has been eliminated and requires no additional investment. In Russia, a country where iodine intake remains insufficient, IGN supported a communication campaign targeted to policymakers with the intention of generating support for the enactment of national food fortification legislation. Working with the National CDC in Georgia, we implemented a sentinel site monitoring system for micronutrients which enabled tracking of iodine status amongst school-age children (SAC) and pregnant women. IGN supported three iodine surveys in the region: one national assessment in Armenia and two small-scale surveys in Abkhazia, where moderate IDD was discovered (read more in the August 2016 IDD Newsletter), and in Nagorno-Karabakh. In the region, Russia and Ukraine are categorized as insufficient.

Abkhazia and Nagorno-Karabakh are self-proclaimed semi-independent states that are considered by the UN as territories of Georgia and Azerbaijan respectively.
Middle East & North Africa

In the Middle East & North Africa Region, the IGN played a major role to convene partners and strengthen national USI program coalitions. To improve the iodine status of Sudan, IGN supported technical and senior policy experts to travel to Spain to meet with Serra Salt Industries, where an agreement was reached to supply three salt refineries over the next two years. In Sudan, iodized salt currently covers only 10% of the population, and these new efforts put the country on track to achieve >90% coverage by 2019 (For more information, please read our country highlight on Sudan). In Lebanon, the IGN worked with UNICEF, American University of Beirut (AUB) and the Ministry of Health to revise legislation and to revitalize the salt industry (Read more in our country highlight below on our work in Lebanon). The IGN provided technical assistance for several national IDD surveys and research studies in Yemen, Djibouti, Egypt, Oman, Qatar, Saudi Arabia, and Bahrain. Leveraging the results from a recent survey in Egypt, IGN participated in a celebration of significant improvements in iodine status due to the collective efforts of multiple partners. In the region, Lebanon and Sudan, two of our major focus countries, are categorized as insufficient; 6 countries have no data.

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, to meet dietary iodine requirements. IGN worked with partners at UNICEF to assess the national market dynamics of iodized salt in processed foods in Burkina Faso, Ghana, Niger, Senegal and Togo. IGN worked with partners and national USI coalitions to ensure that USI legislation extends to all edible salt, including that used in households and in the manufacture of processed foods and condiments. In the region, Burkina Faso and Mali are categorized as iodine insufficient, while 7 countries have no recent data.
**Eastern Africa**

In Eastern Africa, the IGN helped to support the development of revised strategies and approaches to improve the coverage and quality of iodized salt, with a focus on supply-side activities. In Tanzania, the IGN undertook a comprehensive program review with UNICEF, GAIN, MI, the Ministry of Health, and Salt Producers. Through this effort, concrete steps were identified to consolidate the salt industry to improve the national supply of iodized salt by working with small-scale salt producers and establish centralized salt processing facilities. This follows a model developed and now being implemented in Ethiopia. Please see below for more information on our work in Tanzania. In the region, Burundi and South Sudan are categorized as iodine insufficient, while 3 countries have no data.

**Southern Africa**

In the Southern Africa region, IGN provided technical assistance to accelerate progress in several countries to improve iodine nutrition. The IGN facilitated the analysis and reporting of a national survey in Madagascar which indicated alarmingly low iodine status, and then worked with UNICEF and the Government to develop a strategic plan to address this urgent problem. As a short term measure, the IGN arranged for a one-time donation of KIO₃ from Japan to help establish a premix revolving fund and strengthen the salt industry. In Angola, IGN collaborated with Groundwork LLC, the Ministry of Health and the Ministry of Fisheries to carry out a comprehensive national program review which led to a number of concrete recommendations to strengthen the salt industry and iodization activities (read more on Angola below). In the region, Angola, Madagascar and Mozambique are classified as iodine insufficient, while 5 countries have no data.
South Asia

In South Asia, all countries are classified as having achieved optimal iodine status, although data for some countries are more than ten years old. In 2016, the IGN continued its longstanding association with the Government of India and other key partners to celebrate recent progress and identify how to further strengthen and sustain the national USI program. The IGN collaborated with UNICEF to undertake an interagency review of the Bangladesh USI program to examine current needs and develop a revised program based on strategic priorities (see more on the Bangladesh review below). In this region, the IGN has participated in initial discussions to explore opportunities and challenges of double fortified salt (DFS), which would include iron as well as iodine. The current approach under consideration is to deliver DFS through the public distribution system to reach only the most vulnerable segments of the population, but there is still much work to be done.
China & East Asia

In China, the IGN worked with other partners, particularly UNICEF and WHO to support the Government and Salt Industry in the face of changes to policy on IDD regulations and the salt monopoly. While China maintains adequate iodine status in the population at national level and has had one of the most successful USI programs in the world, recent industry reforms underway will require adjustments in program strategy and intensive monitoring. IGN participated in a series of national advocacy meetings to discuss how best to assure the sustainability of the USI program following industry reforms. In preparation, IGN developed several policy briefs describing threats which have occurred to other national programs following dramatic policy change. Read about our advocacy work in China below. In the region, only North Korea’s iodine status is classified as insufficient.

South East Asia & Pacific

In South East Asia & Pacific, IGN worked closely with UNICEF, MI and Government partners to help revitalize USI efforts in countries which had experienced backsliding in program performance. For example, in Vietnam, IGN contributed to the successful reenactment of mandatory salt iodization, and is now providing support to re-launch the USI program. In Papua New Guinea, IGN conducted a situation analysis to better understand salt market dynamics and established a robust monitoring system to track the adequacy of iodized salt being imported into the country. The IGN convened key partners to undertake a comprehensive review of the national USI program in Indonesia, reflecting on how best to sustain progress and align USI with the broader fortification agenda. Read more about our work in Indonesia below and in the region in the August 2016 IDD Newsletter. In the region, Samoa, Vanuatu and Vietnam are classified with insufficient iodine status; 11 countries do not have data. It should be noted that despite adequate intakes reported in SAC in Cambodia in 2011, the program has declined, and it is now likely that the country has insufficient intakes, as evidenced by recent data in women and pre-school children.
Advocacy is a hallmark of our work and is essential to generate the political will and commitment to support IDD elimination programs. We work closely with major international agencies, including UNICEF and WHO, to disseminate critical information on the importance of IDD, as well as to highlight major achievements and opportunities to further strengthen the design and implementation of national USI programs. In the following pages we highlight just a few of the major advocacy events undertaken in 2016.
In the UK, recent studies have found that pregnant women remain mildly-to-moderately iodine deficient. This is true for several countries throughout the world, and particularly in countries like the UK, where salt iodization is not mandatory. This is cause for serious concern given that deficiency during or prior to pregnancy can have devastating consequences for the baby’s developing brain. Pregnant and lactating women require sufficient iodine intake to support a developing fetus and breastfeeding infant.

To help bring greater attention to this issue, the IGN held a symposium on Iodine and Pregnancy for Health Professionals at the Royal College of Obstetricians and Gynaecologists, London, UK on 17th March 2016. Researchers, health professionals, and advocates sought to answer an urgent question: Why has iodine deficiency failed to capture the attention of policymakers and public health authorities in the UK and what can be done to promote strategies to achieve optimal iodine nutrition in pregnancy?

Participants discussed IDD’s consequences and solutions. The vehement consensus from the symposium was that the UK must move forward and develop policies to ensure iodine sufficiency. To invest in its population and national productivity, the UK should enact mandatory salt iodization, or require iodized salt in processed food, such as bread. Education campaigns are needed to increase awareness among the public about the importance of iodine during pregnancy.

IGN and partners urged the UK to enact a long-term, viable and sustainable program for the prevention of iodine deficiency.

**Supporting Healthy Pregnancies in the UK**

"The IGN urges the UK Government to provide the necessary support to determine conclusively the iodine status of the UK population, especially pregnancy women."


**MORE ON PREGNANCY AND IODINE:**


The Symposium in the Lancet: *Iodine deficiency in the UK: grabbing the low-hanging fruit*.

To read more about pregnancy and iodine, go to: *February 2016 IDD Newsletter — Focus on Women*
Sustainability Workshop for IDD Programs in Central and Eastern Europe

*October 13–14, 2016, Sarajevo (Bosnia and Herzegovina)*

Following the success of a regional sustainability workshop in the Central Asia sub-region in September 2015 (see our *IDD Newsletter November 2015*) UNICEF and the IGN held a consultative meeting for the Central and Southern European countries of the region, on October 13–14, 2016 in Sarajevo (Bosnia and Herzegovina). The workshop convened government officials; experts in public health, nutrition and endocrinology; salt industry representatives; NGOs; special subject matter invitees; and UNICEF, WHO and IGN officers.

Delegates hailed from Albania, Bosnia and Herzegovina, Bulgaria, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia, collectively representing a population of 51 million people. Participants shared insights from country experiences with regard to forming strong USI coalitions, conducting effective surveillance, monitoring and evaluation, and ensuring high coverage of high quality iodized salt.

Country teams outlined several key actions, or a “Road Map,” to guide IDD elimination strategies and steps, with the intention to share among national stakeholders after the workshop. A partnership was also formed to strengthen policy and advocacy among all countries in the region. Read more about the workshop in our *November 2016 IDD Newsletter*. 
This year the IGN celebrated critical progress towards achievement of the elimination of IDD in the Americas.

**Celebration in Cancun**

**October 24th, 2016, Cancun, Mexico**

The IGN held a special symposium at the Micronutrient Forum Global Conference in Cancun, Mexico, to celebrate progress in the Americas and the benefits realized for the people in the region. This achievement was a watershed moment for the Americas that signaled an important shift in our strategy to focus more on consolidation of progress, sustaining achievements, and streamlining iodine programs into the broader nutrition and development agenda.

The event provided an opportunity to recognize the longstanding commitment and profound contribution of Eduardo Pretell, who retired as the IGN Regional Coordinator for the Americas.

The American continent has a long history of iodine deficiency. Goiter and cretinism caused by iodine deficiency were once widespread. In 1990, the World Summit for Children endorsed Universal Salt Iodization (USI). Since then, working in partnership with UNICEF, PAHO/WHO, and IGN, most national governments in Latin America have rapidly and effectively implemented national USI programs.

Read more about this seminal event in the global fight against IDD in our Newsletter, and The Lancet:

*November 2016 IDD Newsletter*

Iodine and Thyroid Disease Conference
19-20th October, Harbin

In 2016, China announced that it will reform its salt monopoly, lifting state controls on prices and distribution that have presided over the salt industry for thousands of years. China’s USI program is one of the most successful in the world and it will be imperative to maintain rigorous monitoring to track program performance and iodine status in the population in the face of this policy reform.

The IGN with partners participated in an Iodine and Thyroid Disease Conference in Harbin, China on 19 and 20 October 2016. It was co-organized by the IGN, the Chinese Medical Association, the Chinese Nutrition Society, and the China National Salt Industry, and supported by China’s National Health and Family Planning Commission, WHO and UNICEF.

More than 120 participants gathered, which included clinicians, nutritionists, government officials, and representatives of the salt and food industry. The purpose was to review the USI program, review current program recommendations, discuss issues with USI implementation and methods for surveillance and monitoring, all with respect to the salt industry reform.

The IGN, together with UNICEF, and WHO, will continue to support the Chinese government to be a global leader in the fight against iodine deficiency.

Read more about this event in the August 2016 IDD Newsletter.

Left: Chinese children; Workers harvest dried salt in Yanchi Village of Gaotai County, northwest. China’s Gansu Province.
Monitoring and program guidance are critical to provide evidence and data to strengthen national iodine programs. In 2016, we worked closely with UNICEF, WHO, CDC and other partners on the development of revised program guidelines to track the coverage and quality of iodized salt. We also led efforts to improve the tools and methods to measure the contribution of iodine from different dietary sources.
**Monitoring and Program Guidance**

Updated Guidance to Support the Monitoring and Evaluation of Salt Iodization Programs: Program Brief in Development

The IGN worked with UNICEF, WHO, CDC, and other partners to develop a Program Brief to improve the monitoring of USI. UNICEF commissioned the writing of the Brief to support managers and those responsible for the monitoring and evaluation of national programs. It is based on experience from the large number of scaled up salt iodization programs which have provided important lessons on better ways to monitor, assess, present and interpret data on the status of salt iodization efforts and evaluate their impact. The four most critical lessons featured in the Program Brief include:

1. When measuring the iodine content of salt, quantitative tools are required. Rapid test kits (RTKs) for salt testing are unable to reliably detect the actual iodine levels and are only appropriate to differentiate between non-iodized and iodized salt, i.e. salt which contains any iodine.

2. When interpreting, and presenting the iodine status of the population based on spot urinary iodine concentration (UIC) data, it is only valid to consider the median UIC (mUIC) value which indicates the iodine status of the entire population group being assessed. It is not appropriate to use the proportion of individual UIC values above or below population status cut-offs to define the proportion of individuals with deficient, optimal or excess iodine status.

3. When evaluating the performance of salt iodization and its impact on iodine status it may be useful to analyze and present findings for different sub-groups. This would help to verify progress across all groups, including those most vulnerable, and help make program adjustments in cases where inequities are identified.

4. It is important to assess the main sources of dietary salt and iodine intake to help inform where improvements to USI programs and changes in salt iodine standards may be required.

*Right: Report from the meeting that generated the updated program brief guidance. To read the full report, click [here](https://www.unicef.org/iodine)*
Global Progress Report submitted to the 69th World Health Assembly

As WHO prepares to implement the Vitamin and Mineral Nutrition Information System (VMNIS), the Iodine Global Network has been tracking the global progress of public health efforts to eliminate IDD and achieve optimal iodine nutrition.

As part of this effort, the IGN worked with WHO to prepare a progress report which was submitted to the 69th World Health Assembly (23-28 May 2016), which reached the Ministers of Health from all WHO member states. The report emphasized the progress made in reducing iodine deficiency globally, and described the steady decline in the number of countries classified with inadequate iodine intakes between 1993 and 2016.

The progress report reinforced the 2014 WHO guidance on salt iodization which recommended that all food-grade salt, which is used in households and food processing, be fortified with iodine for the prevention and control of iodine deficiency disorders.

The report also recognized that strategies for salt reduction and salt iodization are compatible and that monitoring of both salt/sodium intake and iodine intake at the country level is needed to ensure that individuals consume sufficient iodine despite reductions in salt intake.

*Right: Salt production at the Lebanese Pearl Food Company in Anfeh, North Lebanon*
A New Repository for Food Fortification: Helping to Map and Track Global and National Food Fortification Programs

The IGN, the Global Alliance for Improved Nutrition (GAIN), the Food Fortification Initiative (FFI), and the Micronutrient Forum (MNF) are developing a repository for the presentation of data on the current status of food fortification programs, considering all food vehicles and nutrients.

The objective of the global fortification repository is to achieve uniformity amongst major fortification partners on nutrition and fortification-specific indicators for regular collection and reporting, applicable at national and global levels. This enables key stakeholders, whether Government policy makers, donors, or international development partners, to get a snapshot of current fortification programs, their alignment with other micronutrient interventions, and where there are gaps which require attention.
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 2016 to enact legislation, reform industry, and support enabling environments for IDD control. Key highlights are featured from Angola, Bangladesh, Haiti, Indonesia, Lebanon, Sudan, and Tanzania.
What is the situation in Angola?

Iodine deficiency has long been recognized as a serious public health problem in Angola. However, there had not been a comprehensive or recent assessment of iodine status in children and women, nor of the salt industry to better understand how to strengthen the national USI program.

What have we helped to achieve?

To address the information gap that existed, the IGN, together with GroundWork LLC, UNICEF and the Ministry of Fisheries (the Ministry primarily responsible for the USI program), conducted a situation analysis of Angola’s salt iodization program in July 2016. The team compiled available data related to the salt industry and current iodization capacity with a view to making research and programmatic recommendations. On the basis of the review, Angola’s Ministry of Fisheries conducted a three-day workshop with all key stakeholders in September 2016 to develop a new national plan of action and set strategic priorities to strengthen the program.

What are the next steps?

With partners, the IGN plans to conduct a survey in Angola in 2017 to generate critical data on the coverage of iodized salt, salt consumption patterns and the iodine status of the population. These data will be critical to help inform where there are opportunities to increase the supply of adequately iodized salt.

To learn more about our work in Angola, see our November 2016 IDD Newsletter.
What is the situation in Bangladesh?

Bangladesh has had a longstanding mandatory salt iodization program and has achieved significant success over the years, however recent surveys indicate that there has been some stagnation in program performance, with the coverage of the population with adequately iodized salt coverage hovering around the 50% mark. Considerable efforts are required to reach the USI target of >90% coverage and assure that the program reaches all segments of the population. The salt industry used to be highly fragmented with a large number of small-scale salt producers operating equipment with basic technology.

What have we helped to achieve?

In 2016, UNICEF commissioned the IGN to undertake a comprehensive review of the USI strategy in Bangladesh. IGN collaborated with the Centre for Community Medicine at the All India Institute of Medical Sciences (AIIMS), New Delhi. National and international experts, including the former Salt Commissioner of India, visited Bangladesh between 20–29 August 2016 to develop recommendations to refine and enhance the USI strategy in Bangladesh. The main recommendations of the IGN review mission to Bangladesh were to modernize the salt industry, mainstream and integrate the Control of Iodine Deficiency Project (CIDDP) as part of the national nutrition program architecture and expanding the USI coalition in Bangladesh.

What are the next steps?

IGN will continue to work with partners in Bangladesh to strengthen the USI program to overcome the plateauing of salt iodisation coverage with a focus on further consolidation of the salt industry to improve efficiency and performance.
What is the situation in Haiti?

Haiti is the only country in the Americas still classified as being iodine insufficient. Although Haiti has a USI program, the destruction of major salt plants following the 2010 earthquake and the highly fragmented nature of the salt industry, has hampered efforts to scale-up salt iodization. While studies over the past two decades have indicated that iodine deficiency is widespread, Boston University conducted a study in 2015 that found Haitian pre-school children in three different regions of the country with adequate iodine intakes, but it was unclear what the major source was of the iodine in the diet.

What have we helped to achieve?

In 2016 IGN partnered with USAID and UNICEF to undertake a joint mission to review the current universal salt iodization (USI) program in Haiti. Over four days (26–29 July), we worked under the leadership and guidance of Dr. Joseline Pierre Marhone, Director of Nutrition in the Ministry of Health, to meet with key stakeholders including Government staff, Development partners, Salt Industry and Food Industry representatives. The mission revealed that the widespread use of bouillon cubes, which is produced with salt as a major ingredient, could be a major source of iodine if the salt used in its manufacture was adequately iodized.

What are the next steps?

The mission led to a number of concrete recommendations, mainly focused on generating additional data on salt consumption patterns, including the different dietary sources including condiments. The IGN will continue to collaborate with partners to support the national program by conducting a national survey of iodine status and a study to review the salt situation. As a result of this additional evidence, partners will support the Government to design a national action plan to work toward iodine sufficiency.

To read more about our work in Haiti, see our August 2016 IDD Newsletter.
What is the situation in Indonesia?

While salt iodization has been in place for over twenty years, it has been a challenge to sustain progress. Recent data suggest that the coverage of iodized salt has stagnated, although iodine status reflects sufficient intakes at the national level. While salt iodization is mandatory, there has been weak implementation in the face of decentralization, and disparities exist between Provinces.

What have we helped to achieve?

Nutrition International (formerly the Micronutrient Initiative) supported the IGN to undertake a comprehensive review of the national USI program in Indonesia, reflecting on how best to accelerate and increase progress and align USI with the broader fortification agenda. A major focus was to consider how to optimize different approaches for salt producing and salt importing provinces which take into account variations in capacities and constraints between large-, medium- and small-scale facilities to ensure adequate iodization. Information recently collected on the use of salt by food processors, including whether that salt is iodized, was also reviewed.

What are the next steps?

In Indonesia, plans are underway to establish a single coordinating committee for food fortification, which will include the overall management of salt iodization, under the Scaling Up Nutrition (SUN) Framework in the National Planning Agency (Bappenas). The IGN will continue to support this committee and promote efforts to encourage that iodized salt be used in processed foods, such as instant noodles and condiments. At the same time, the IGN will work with UNICEF and the Government to ensure that all segments of the population in all regions of the country are reached with adequate iodine.

Read more about our work in the region in the May 2016 IDD Newsletter.
What is the situation in Lebanon?

A nationally representative survey conducted by IGN and the American University of Beirut (AUB) in 2013 revealed that iodine intakes were clearly deficient. Although iodized salt legislation was in place, regulations were not being enforced, were complex and difficult to implement. Also, the Government price set for KIO$_3$ was exorbitantly high. As a result, the salt industry was not producing adequately iodized salt.

What have we helped to achieve?

In 2016, IGN and AUB developed an influential policy brief which emphasized the importance of iodine deficiency and the need for the Government to revise its legislation and support the salt industry. This catalyzed government to hold a meeting of all national stakeholders: policymakers, UNICEF, local NGOs, salt industry representatives, and researchers. Several key actions were prioritized through that process, including the need to assist in the procurement of KIO$_3$ and salt testing equipment which could enable salt producers to assure that the iodine levels in their salt was meeting standards. IGN worked with UNICEF to improve access to affordable KIO$_3$. IGN purchased equipment to quantitatively test iodine in salt, and installed this at the four major salt producers, with technical support. IGN worked with the Ministry of Health to simplify administration and enforcement of the existing legislation.

What are the next steps?

IGN will continue to support salt producers with a focus on regulatory monitoring, which will lead to a dramatic increase in the production of adequately iodized salt. In 2017, the IGN and AUB will conduct a survey using the same sample frame as in 2013 to assess changes in iodine intake and the iodine status of the population.
What is the situation in Sudan?

Sudan is one of two remaining countries in the Middle East & North Africa region classified as iodine deficient. A major problem in the past was that, in spite of the fact that legislation was in place making iodization of salt mandatory and a widespread communications campaign had been implemented promoting the importance of iodized salt, less than 20% of the edible salt being produced was iodized. In 2016, IGN convened a series of meetings with key partners which led to the development of a new National Plan of Action. One of the key priorities was to address the lack of modern processing technologies, and explore the feasibility to consolidate and upgrade salt production facilities.

What have we helped to achieve?

The IGN, in partnership with UNICEF, helped to establish a forum for investment to fund modern iodized salt production in the country. IGN facilitated technical and senior policy experts to travel to Spain to meet with Serra Salt Industries which specializes in the design and construction of salt processing equipment. An agreement was reached to supply Sudan with three salt refineries over the next two years. In a gesture of unprecedented commitment, participants have agreed to achieve > 90% coverage by 2019.

What are the next steps?

In 2017 and beyond, the IGN will continue to support Sudan’s effort to shift from the traditional salt industry to a modern model with advanced iodization technology and proper quality control systems. The IGN will collaborate with partners and Serra Salt Industries to oversee the installation of new plants and ensure that capacity is in place for its use and maintenance.
What is the situation in Tanzania?

At the national level, Tanzania has achieved optimal iodine intake, overcoming a historically high prevalence of iodine deficiency. However, regional disparities indicate that 8 of the country’s 30 regions have suboptimal iodine intake. Recent changes in regional trade have increased the availability of iodized salt from Kenya which has posed a dilemma—while it provides adequately iodized salt to the population, it is a threat to salt producers in Tanzania. An additional challenge is that the salt industry in Tanzania is highly fragmented with a large number of small-scale producers who operate with poor quality technology.

What have we helped to achieve?

Nutrition International (formerly the Micronutrient Initiative) commissioned IGN to work with other partners and the Government of Tanzania to conduct a review of the USI strategy, identify programmatic priorities and propose structural reforms for the USI program. A major recommendation which emerged from the mission was to explore the feasibility of consolidating the salt industry by shifting the responsibility of small-scale salt producers to harvest and supply raw salt to centralized processing facilities which can then clean, refine and iodize salt to improve the quality of iodized salt and business viability.

What are the next steps?

Based on the mission, the Government will consider how best to push ahead with industry reform. It will be important to achieve equitable and sustainable optimal iodine intake in Tanzania, whereby programmatic reform would target the regions identified with the lowest iodine intake, along with the producers supplying those regions.

This work is reinforced by a political mandate to bolster the national economy and transition Tanzania from low to middle income status, which recognizes the importance of consolidation and strengthening of the salt industry.

To read more about our work in Tanzania, see our [IDD Newsletter Feb 17](#).
Communications activities in 2016 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.
Use of celebrities to promote our cause

The IGN partnered with a new online charitable platform, All Charities UK, to launch an awareness and fundraising campaign with the help of a celebrity, Xenia Tchoumitcheva. Known to her Instagram fans as Xenia Tchoumi, the Swiss-Russian model and social influencer managed to raise almost 2,500 USD while promoting the awareness of iodine deficiency among her followers. Read more in our January 2017 IDD Newsletter.

IDD Newsletter

Three decades of the IDD Newsletter

The IDD Newsletter began as a black and white, two-page pamphlet in 1985, and gradually evolved into a quarterly publication produced in color.

A decade under Editor Michael Zimmermann

2016 was the IDD Newsletter’s 10th anniversary under the editorship of Michael Zimmermann at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland.

The IDD Newsletter helps to disseminate critical IDD research, program, and policy developments. In 2016, it had 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. To subscribe to the IDD Newsletter, go to: www.ign.org/idd-newsletter-dASHBOARD.htm

Poetry Anthology to Support the IGN

Independent Variable Poetry Anthology

The Iodine Global Network collaborated with a Creative Writing student from Liverpool John Moores University, Callan Waldron-Hall, on a science-themed poetry anthology. Proceeds from the sale support the Iodine Global Network and our work to eliminate iodine deficiency around the world and help to raise awareness of iodine deficiency in the UK.

To order a copy, please email Callan on independentvariable@hotmail.com or contact him on Facebook (@independentvariable) or twitter (@IVanthology).

Iodine Message Board

A public forum to exchange views on iodine nutrition, salt iodization, and programmatic guidance. Go to: www.ign.org/forum
IGN and Iodine Deficiency in the News

**BBC World Service Elements**

BBC World Service program ‘Elements’ featured an episode on iodine deficiency in India. Listen to hear more about cretinism in India, iodized salt, and the contribution of Chandrakant Pandav, the IGN Regional Coordinator for South Asia:

Listen to the podcast [here](#); or [download the MP3](#)

**ABC Australia Broadcasting Corporation**

ABC Australia Broadcasting Corporation interviewed Creswell Eastman, a former IGN Board Member and one of the early members of IGN when it was still the ICCIDD.

Listen to the audio: [How Creswell Eastman saved a million brains](#)

And read more from Cres on our website: [A simple solution to lift the performance of Australian school children](#)

Watch a video about how IGN’s Creswell Eastman saved a million brains
Finances. Our funding remained strong in 2016, thanks to the generosity of our donors. Here we share details about our major donors and our financial statement.
Fundraising – The Iodine Global Network is recommended as an outstanding giving opportunity

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 third 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.

“We are extremely grateful to all our donors who have supported us to advance salt iodization programs and help children reach their full intellectual potential.”

- Michael Zimmermann, IGN Chair

Doing good with iodized salt

In 2016, 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

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

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In 2016, the IGN had a strong financial position. Revenues realized were $US 915,348 which compares to $US 1,102,154 in 2015.

The total expenditure was $US 919,928, which compared to $US 1,040,848 in 2015. The bulk of the budget in 2016 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 2016, thanks to donor support, the IGN was able to support USI programs and specific activities across all regions. The total regional expenditure in 2016 was $US 316,766, compared to $US 300,332 in 2015. The regional breakdown is presented to the right, top.

The distribution of expenses by budget category is presented to the right, bottom. Almost 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
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 2016 meetings and welcome newly elected leaders.
2016 Board Meeting & Elections

The Iodine Global Network’s Annual Board Meeting took place jointly with the meeting of its Management Council, in London on March 16–20. For more information on the meeting see our February 2016 IDD Newsletter.

New Directors elected to the Board:
Rishi Kansagra
Director of Royal Salt Limited in Nigeria and of Seven Seas Salt Limited in Ghana. Sits on the Advisory Board for Kensalt Ltd in Kenya.

Napaphan Viriyautsahakul
Director of Bureau of Nutrition, Ministry of Public Health in Thailand since March 2012. Manager of Thailand’s iodized salt program.

Srinivasan Krishnamachari
Professor of Psychiatry, and former Dean, St John’s Medical College, Bangalore, India. Has a special interest in maternal and child health, role of nutrition on child health outcomes.

Retired from the Board:
Creswell Eastman, Australia

2016 Board, Iodine Global Network

Chair, Michael Zimmermann, Switzerland
Treasurer, Nora Beninger, Canada
Secretary, Daniel Levac, Canada

Maria Andersson, Switzerland
Luiz Caetano, Brazil
Omar Dary, USA
Luz Maria de Regil, Canada
Ashvini Hiran, India
Rafael Flores-Ayala, USA
Greg S. Garrett, Switzerland
Roland Kupka, USA
Mu Li, Australia
Stan Soderstrom, USA
Peter Walker, Canada
Rishi Kansagra, Nigeria
Srinivasan Krishnamachari, India
Napaphan Viriyautsahakul, Thailand

In addition, the World Health Organization is an observer to the IGN Board (since 2014 represented by Lisa Rogers).

To see the bios of Board Directors, go to: www.ign.org/our-leadership_1.htm

Left: New Directors, top - bottom: Rishi Kansagra, Napaphan Viriyautsahakul, Srinivasan Krishnamachari
IGN Management Council Meeting
16-20 March 2016, London, UK

The Management Council met jointly with the Board in London on March 16–20, 2016. The meetings 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.

To contact our regional representatives, go to: http://www.ign.org/our-regional-representatives.htm