

Annual Report 2020



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

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## **Message from our Executive Director**



Werner Schultink Executive Director



Since I became Executive Director of IGN in January 2021, I have been reflecting on the unique and major public health success of IDD elimination efforts in the context of where we are today.

Between 1985, when IGN's precursor, the ICCIDD, was founded, and our establishment of the Iodine Global Network in 2014, salt iodization became mandatory in about 100 additional countries around the world, and 88% of households worldwide had iodized salt in their homes. The number of iodine deficient countries dropped from 113 in 1993 to just 19 in 2017, and hundreds of millions of people who otherwise would have suffered from the consequences of iodine deficiency now have adequate status.

In March 2021, the Lancet published an update to its 2013 series on maternal and child under nutrition progress, noting the success achieved in the elimination of iodine deficiency. The Lancet re-confirmed that the fortification of staple foods and condiments is highly cost effective and beneficial, and once more listed salt iodization as one of the key strategies to improve nutrition. However, it was also pointed out that lasting nutrition improvements will remain elusive without continued concerted action. The reasons for the successes of the past three decades centre largely on the fact that salt iodization became a global campaign. Effective advocacy based on science showed the impact of iodine deficiency on brain development and learning ability. UN resolutions on the issue helped convince governments to act, leading to large-scale salt iodization programs. Global partnerships with the salt industry and with civil society through organizations like Kiwanis International, led to demand creation and funded action in countries. Regulatory frameworks were set up for salt iodization, and consumers were engaged through effective communication.

However, lasting elimination of iodine deficiency depends on stable and continued iodization of salt worldwide, and we have not yet achieved that. The notion that the job is done is false. As noted in The Lancet, some 20-25 countries are still deficient, and women of reproductive age in low-,middleincome, and even in some affluent countries, are frequently iodine deficient, even when overall national population status is judged as adequate. Continuity of salt iodization in quite a number of countries has not been achieved, and regulatory frameworks are not effective. Several countries are slipping back. The poorest households are often the most vulnerable: those who need optimal iodine nutrition and brain development the most. Our efforts need to adapt to this changed reality. We must recognize that we live in a more fragmented era that has created many demands on our time, resources and attention, even before the COVID-19 pandemic began. Nutrition programs aim to address a wider variety of areas – obesity, stunting, micronutrients, acute malnutrition, food systems, and humanitarian challenges, and less frequently focus on single issues.

I believe it is time to re-brand efforts on IDD elimination, dispel the notion of false security that IDD is a thing of the past, and push for vigilance, with more focus on sustainability and national ownership, and better integrating salt iodization with the broader food fortification agenda and national nutrition policy. In partnership with organizations like UNICEF, WHO, Kiwanis, the Bill & Melinda Gates Foundation, Nutrition international and GAIN, we are advocating to secure commitments to staple food fortification at the upcoming UN Food Systems and Tokyo Nutrition for Growth summits. Areas of focus include better and more innovative use of data, improved monitoring across all fortified foods, and better fortification legislation and enforcement. IGN's strong regional networks are a source of knowledge and strength and are at the heart of our work. Their focus for the coming year will be to catalyse and strengthen national ownership, funding and partnerships around salt iodization and more broadly. We'll be looking further at the impact of processed foods on population iodine status and exploring new monitoring options so we can identify problems and take corrective action. We're exploring the importance of regional trading, regulations and bodies as a way of driving progress.

This has been a difficult year for all of us, and COVID-19 impacted our work. We have had to do things differently, and that has informed and strengthened our organization. We thank all of our partners and supporters and look forward to working with you over the coming year.

## A look at the past and what it means for the future



## The problem of iodine deficiency

Iodine deficiency, the world's leading cause of preventable mental impairment, is kept at bay through a global public health and private sector initiative to iodize edible salt.

The health of all population groups can be affected by iodine deficiency. A particularly damaging consequence of iodine deficiency is the fact that insufficient iodine intake during pregnancy can lead to lasting brain damage that reduces a child's IQ by 8 to 10 points <sup>1</sup>, and up to 13.5 points in areas of severe deficiency <sup>2</sup>. A 2019 study among 6180 mother-child pairs from The Netherlands, UK, and Spain concluded that mild to moderately low levels of iodine in early pregnancy (before week 12) were associated with poorer child verbal IQ scores <sup>3</sup>. Adequate iodine during early life is crucial to children's ability to reach their full potential at school and benefit fully from their education.

The cost of prevention is small – US 5c  $^4$  a year for a lifetime of protection. The returns are high. On average, every dollar spent on salt iodization yields a \$30 return through improved learning, which leads to greater productivity in later life and boosts the economies of the nations in which these children live. Just two to three decades ago, iodine deficiency was a widespread and global public health problem. Hundreds of millions of children around the world suffered from IQ loss, goitres, and other debilitating forms of iodine deficiency. Today, thanks to the work of the global initiative, 88% of the world's households have access to iodized salt <sup>5</sup>.

The investment that many organizations made in ending this global threat has resulted in hundreds of millions of children being protected against iodine deficiency, thus creating better futures for them, their children and their nations.

But as time passes and the world's attention turns to other problems, the foundations of some of the programs to protect children's iodine nutrition are crumbling. Studies and surveys over the past decade have drawn attention to the fact that sliding back does occur and that pregnant women especially are at risk, even in countries with otherwise well-advanced general governing and health systems. For example, it is estimated that up to 50% of newborns in Europe might not reach their full cognitive potential due to insufficient iodine intake <sup>6</sup>. Knowledge about the importance of iodine nutrition among senior decision-makers has declined or is inadequate, and public understanding has diminished or disappeared. The gatekeepers – decision makers, program managers and the private sector – may have become complacent. This means that in some countries, not all salt is iodized and iodine deficiency disorders are still prevalent. In others, iodine nutrition has worsened, placing population groups again at risk. Policy, regulatory frameworks, monitoring and quality control are weak in many countries.

Programs were initially set up with a specific focus on eliminating iodine deficiency. While successful, this strategy sufficiently failed to consider national contexts and competing priorities, challenges which have only worsened over time. To be successful, programs must be embedded within broader national policies and implemented as part of wider programs (e.g. nutrition, food fortification). Salt iodization efforts are not achieving optimum iodine nutrition for all. Review of national programs have identified gaps that threaten completion of the job, or sustaining the success achieved.

New solutions for old problems are needed. Efficient ways to address common problems, and increased focus on use of iodized salt in processed foods can all help stabilize national efforts.

#### **How IGN helps**

IGN strives for a world where all people attain optimal iodine nutrition and children can reach their full cognitive potential. Our overarching goal is to ensure that all populations achieve and maintain iodine sufficiency and that the structures to do so are permanently established in all countries and regions. We are the convening center of a large global network/ coalition. Our institutional memory of previous efforts and this convening role in engaging partners means we are ideally placed to create a partnership to move this agenda forward.

Through our network of regional and national coordinators, we constantly explore issues that inhibit or threaten national progress; work to understand and recognize the effects of dietary changes such as use of iodized salt in processed foods and progress with salt reduction; and to sustain critical partnerships that provide support to address emerging issues. We have a deep understanding of the salt industry and its critical role in ensuring adequate iodine intake, and we are well positioned to ensure that iodine is or becomes part of the broader nutrition and fortification agendas. IGN has historically anticipated opportunities to strengthen universal salt iodization while responding quickly to threats such as the potential of COVID-19 to disrupt production and distribution. Our convening role leveraged the unique expertise and geographic positioning of key technical partners to make optimum use of resources.

The public health success achieved in just three decades has given us a wealth of understanding about what works and what does not. We know that continued monitoring, updating and use of knowledge, building technical know-how, strengthening political will and public engagement are required to protect this progress, and to reach those still unprotected. We know that we can achieve measurable and sustainable success and that in doing so, we can create a world where all children are born protected from iodine deficiency, and will enter school with the abilities they need to learn, thrive, and help their families, their communities and their nations to grow and to prosper.

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## The year that changed everything

With the impact of the COVID-19 pandemic and the worldwide actions undertaken to combat the spreading of the virus, it became clear that the production of iodized salt could be affected in several ways.

Transport of commodities costs rose. Governments' attention for 'normal' health and nutrition issues, including salt iodization, was diverted. Fewer production oversight and inspection visits took place, and management of programs often switched to virtual mode. All these factors are important for the implementation and effectiveness of salt iodization programs.

One of IGN's roles is to anticipate and review potential threats to the progress made with salt iodization, and to use our network of stakeholders to define and support actions to address these risks.

Working through our regional coordinators, IGN initiated an informal survey in summer 2020 among a selection of well-informed program managers, salt producers, and others, to assess the importance of these potential disruptions and the impact on the supply of adequately iodized salt. We found that while there are real and anticipated increases in potassium iodate costs that will be reflected in a small increase in the price of iodized salt reaching the market, there were no marked disruptions in supply.

In several countries, iodized salt production is a priority industry, thus avoiding issues around the presence of labour and stabilizing supply. However, inspections and monitoring have been impacted in a number of countries.

This initial rapid assessment does not present a comprehensive picture of the situation or of emerging trends that might threaten USI programs. While many countries appear to be moving toward resumption of normal life, many continue to experience a substantial number of COVID-19 infections and societal disruption. The pandemic may also cause future issues with food supply and impact normal industrial and agricultural production. This unpredictability suggests that an early warning system focussed on basic production and supply factors would be a good investment to alert public health experts at national, regional and global levels of potential disruptions to progress made with USI, for both the pandemic and other threats to iodization programs. It could be expanded to include the broader fortification agenda.

Beyond salt production, the pandemic has impacted our ability to obtain information on challenges, engage with stakeholders to develop action plans, to conduct research, carry out surveys and to monitor activities. The switch to virtual meetings has been challenging in terms of building support for program implementation. But we are continuing to challenge ourselves to find new and sustainable ways of working. On the positive side, the pandemic has led to more engagement online with stakeholders and supporters, improving efforts to align programs – several meetings to develop and monitor Country Action Plans, developed as part of the IGN's regional roadmapping process, were successfully held online, including in Afghanistan.

Normally, the IGN team gets together once a year to review and plan its work to protect the brains of children through improved nutrition. In 2021, it happened virtually across many time zones in several different regions – but we all finished the meeting with a smile!



## **Communications activities**

#### **Advocacy partnerships**

IGN and its partners, including GAIN, UNICEF, Micronutrient Forum, BMGF, WFP and others have advocated to place food fortification at the heart of major events happening in 2021 on nutrition, including the UN Food Systems Summit and the Tokyo Nutrition for Growth Summit. Messaging focuses around food fortification's role in providing affordable, nutritious foods to large segments of the population. A Commitment Guide has been published to help donors, governments and the private sector to promote and improve fortification efforts. IGN **Executive Director Werner Schultink participated** in the 2021 Second Global Summit on Food Fortification virtual series, speaking about consolidating gains in salt iodization as part of a session on reaching the most vulnerable with fortified foods.

IGN contributed to an important brief on food fortification and COVID-19 issued in September 2020. The brief recommends that actions to strengthen fortification programs be part of the response to the pandemic, as it delivers both improved nutrition and resilience. ign.org/cm\_data/Call\_to\_action\_on\_FF\_ and\_the\_COVID-1919\_pandemic.pdf

#### **Communications products**

IGN communicates via a quarterly newsletter, a blog and social media, including LinkedIn and Twitter.

The IDD newsletter, our flagship publication, distributes critical research as well as program news and recent developments. It reaches thousands of research scientists, policymakers and nutrition program managers around the world. Our thanks go to the Kiwanis Children's Fund, UNICEF, and the Swiss Federal Institute of Technology (ETH Zurich) for supporting its publication.

Our blog, issued every second month, covers topical issues and keeps readers – both donors and stakeholders - updated with developments both at IGN and on the topic of iodine nutrition. In 2020, the blog kept the salt iodization community updated on developments around COVID-19 and the need for early warning systems to prevent disruptions in supply. The Life You Can Save, an NGO that empowers people to take action in the fight against extreme poverty, asked us to write a piece for their newsletter in September 2020 thelifeyoucansave.org/charity-stories/protectingprogress-in-a-time-of-covid

#### Activities

Because COVID-19 restrictions and distancing limited connections and contacts within the iodine nutrition community, IGN Board Chair Michael Zimmerman promoted a sense of community with a series of "Zoomposiums" where we could gather to discuss recent developments. The first took place in November 2020, with participants from across the Americas to Europe, Africa, Asia and China learning about the use of iodized salt in processed foods and on iodine in pregnancy. The series is now attracting a wide attendance among scientists and program managers from around the world.





## **Global iodine status**

One of the most important roles we play at IGN is to compile data from urinary iodine concentration (UIC) studies conducted throughout the world and to continually monitor global iodine status. WHO/UNICEF/IGN defines adequacy of iodine intake and iodine status based on the median UIC obtained in cross-sectional populationbased studies.

The IGN Scorecard presents the most recent UIC data in school-age children (and in some countries in other population groups) as a proxy for the general population for 194 WHO Member States. Cross-sectional UIC studies have been conducted in 152 out of 194 countries in the past 15 years: in 132 countries, the studies were nationally representative. In 2020, the Scorecard was updated with six new nationally representative surveys conducted in Bulgaria, China, Morocco, Myanmar, Somalia and Sudan.



Children in primary school in Somalia - Photo by Knowles-Coursin. © UNICEF / UN060477

## Countries with adequate iodine nutrition

The iodine intake in the general population is assessed as being adequate in 118 countries (Figure 1). The number of countries with adequate iodine intake has nearly doubled over the past 20 years from 67 in 2003, to 105 in 2011 and to 118 in 2020, reflecting the effectiveness of successful implementation of salt iodization worldwide. Morocco and Sudan, two countries previously classified as iodine deficient, now report to have an adequate iodine status. But as household use of iodized salt is far from universal, it is likely that some population groups population do not have an adequate iodine status.

## Countries that are iodine deficient

In 2020, globally, 21 countries (out of 152 countries with data) still have insufficient iodine in their diets (Figure 1). Iodine deficiency remains in all regions worldwide and affects populations at all stages of economic development. Iodized salt is produced or imported in all iodine deficient countries, but factors such as low coverage among households, inadequate quality, and low use of iodized salt in processed foods have hindered the adequate improvement of iodine status. In Madagascar, the mandatory salt iodization program faced problems and largely came to a halt but is now up and running again. In Vietnam, weakening of the previous mandatory legislation allowed introduction of non-iodized salt and iodine status decreased. In Cambodia, the production of iodized salt declined when the supply of potassium iodate was no longer subsidized and the amount of iodine in fortified salt decreased. Several countries have low nationwide coverage and large regional variations in iodine status, e.g. Sudan, Burkina Faso, Bangladesh, Afghanistan and Russia. In Haiti and Iraq, natural disasters and war, respectively, disrupted implementation and monitoring of salt supply and the distribution chain. The iodine intake is also surprisingly inadequate in several countries in Europe with strong health systems and otherwise successful public health programs (Norway, Germany and Finland).

## Countries with excessive iodine intake

Worldwide, 13 countries have documented excessive iodine in their diets. Excess iodine intakes in populations can result from diets that are naturally high in iodine and/or groundwater. In situations where the iodine intake is excessive, the salt iodization level should be reduced to bring down the population iodine intake. Somalia used to have high iodine concentration in drinking water and salt iodization therefore is not implemented. Although the latest national survey in Somalia observed high water iodine concentrations and high UIC in women, the overall intake is no longer classified as excessive.

## Targeted UIC assessment in vulnerable population groups

National level median UIC may hide disparities in iodine intake among sub-groups, including those in a specific geographic region, lower socioeconomic status, with varying diets and/or salt sources. If resources allow, the iodine intakes should be assessed among different subsets of the population, particularly among groups vulnerable to deficiency, such as the poor in remote areas and those likely obtaining non-iodized salt. Such stratified analyses may help identify remaining sub-national challenges and allow refinements to improve programs.

## Global iodine status



Legend	Insufficient	Adequate	Excessive
National data	• 18	• 105	9
Sub-national data	• 3	<b>1</b> 3	• 4
No data	42		

Estimated iodine nutrition in 194 WHO Member States in 2020 based on national median UIC in school-age children obtained from studies conducted between 2005-2020.

a) Median UIC ≤ 100 µg/L; b) Median UIC 100-299 µg/L; c) Median UIC ≥ 300 µg/L; d) Number of countries. Reproduce with permission from (7). UIC, Urinary iodine concentration.

## IGN's regional roadmapping

The lion's share of IGN's work focuses around activities at country and regional level to eliminate iodine deficiency. Our regional roadmapping process, undertaken with key partners, such as UNICEF, is happening in five regions around the world.

Our roadmaps identify gaps, weaknesses and opportunities in regional efforts and national programs, enabling us to create a theory of change that engages key actors at regional and national level and empowers them to advocate for progress on specific issues. The process facilitates the creation of a longer-term (5 years) evidence-based regional strategic direction on which Country Action Plans and regional annual workplans can be based.

The roadmapping process improves multi-stakeholder communication, consultation and collaboration, not only on the issue of iodized salt, but across the broader food fortification agenda. It facilitates sharing of experiences and lessons learned between countries and stakeholders, and help with the tracking of progress. Through the consultation process, we aim to create ownership of the results of the roadmap analysis so that there is buy in and higher chance for implementation.

The process looks at common issues and activities across regions. Supply issues relate to situations such as a dependency on a few salt producing countries; the role the processed food industry plays, and whether they are using iodized salt; and helping poorly performing producers through the use of innovative business models. Consumer awareness activities involve school curricula, front of pack labelling, and social media. On policy and enforcement, the objectives are to embed iodine in nutrition policies and fortification programs; emphasize national oversight and ownership, and seek alignment with salt reduction efforts.

The roadmapping also involves a focus on bottlenecks and underlying problems - national averages masking sub-national gaps; protection of population groups such as pregnant women, and the correct interpretation of existing data, and the collection and/or use of the right data that helps to answer program questions. This graphic outlines the process and status of existing roadmapping, and some of these activities will be covered in our round-up of the year's work. With additional funding, and further engagement, IGN hopes to initiate the process in other regions and help countries deliver on their action plans.

16	Our work IGN's regional roadmapping		lodine Global Network Annual Report	
Landscape analysis Desk review, stakeholder interviews	→ Challenge & Solution →	Roadmap & action plans	→ Programme support	
Region?	What is included?	Status landscape?	Outcome?	Implementation, status, next steps
East Southern Africa	Regional & 16 (out of 23) countries	Completed	Regional roadmap and country action plans	Support for countries, regional secretariat
South Asia	Regional & 8 (out of 8) countries	August 2021	8 country action plans, regional plan	Adoption of plans, support for countries
South East Asia	1 (out of 13) countries	August 2021	1 country action plan	Tailored support for other countries
West & Central Africa	Regional & 9 (out of 24) countries	August 2021	Regional advocacy agenda and 4-5 country action plan developed	Tailored support for other countries
Eastern Europe & Central Asia	Regional & 17 countries	May 2021	Regional agenda and country situation analysis, desk review	Solidify regional roadmap and country action plans; Identify countries for follow up
South America	5 Andean countries (out of 12) countries	December 2021	Subregional advocacy, country situation desk review	Support Andean countries and extend landscape other countries

## Regional snapshot: a global round-up of IGN's activities

Funding for IGN's regional activities comes from a number of sources. In 2020, UNICEF, with support from USAID, funded a large part of IGN's activities in Eastern and Southern Africa, Western and Central Africa, Eastern Europe and Central Asia, South Asia, and South East Asia and Pacific.

Regional activities, including in regions other than mentioned above, were also supported with funding from GiveWell, The Life You Can Save, Founders Pledge, Effective Altruism, and other funding platforms including CanadaHelps, Benevity, and Charitable Impact.

#### **Global initiatives**

A small core team at IGN oversees and guides a worldwide network of regional and national coordinators, many volunteers. IGN's global team also engages with many partners involved with areas of mutual interest. Seeking to influence global policy and practice, we have worked with broader fortification partners, since salt iodization represents a remarkable success well ahead of other fortification efforts. Much of this work is covered in the Partnerships section of this report.

One significant global activity that continued in 2020 in partnership with UNICEF was the a series of webinars to disseminate UNICEF guidance on the monitoring of salt iodization programs and determination of population iodine status. The webinars targeted iodine program managers and those involved in iodine nutrition monitoring and research such as nutrition managers in Ministries of Health, Government Food Control Department staff, national fortification alliance staff, nutrition institutes, epidemiologists, researchers, organizations supporting iodine nutrition programs or food fortification programs (WHO, USAID, UNICEF, NI, GAIN, CDC, IGN). Three webinars were conducted in 2020, one for a global audience, one for the Central and South American regions, and one for West and Central Africa and the Middle East regions, with a total of more than 200 participants from 80 countries.



Children at the playground of their school in Niamey, the capital of Niger. © UNICEF / UN0439617 / Frank Dejongh

## **Eastern and Southern Africa**

Uniting the region around salt iodization



#### Situation

16 countries have adequate iodine status; five – Angola, Burundi, Madagascar, Mozambique and South Sudan have insufficient status; one country, Uganda, has excessive iodine status, and one country, Comoros does not have data. Eight countries – Botswana, Eritrea, Eswatini, Mauritius, Namibia, Rwanda, South Sudan and Uganda have data older than 10 years.



#### **Progress in 2020**

IGN's Regional Coordinator Festo Kavishe has helped catalyse the creation of a regional multipartner strategic roadmap for 2020-2025. A regional coordinating mechanism has been established, chaired by the Eastern, Central and Southern Africa Health Community (ECSA), to follow up on the actions proposed in the regional roadmap.

Much of the progress has been achieved with funding support from UNICEF, and regional partnerships have been developed with key organizations. Newsletters and policy briefs keep stakeholders engaged and informed about the process. IGN's voluntary National Coordinators are supporting activities in Kenya, Tanzania, and Mozambique. A progress report from Madagascar in partnership with UNICEF showed a doubling of iodized salt from 20% in 2016 to 42% in 2020.

#### What's next

IGN will continue to strengthen coordination, programming and monitoring for universal salt iodization in the region, targeting technical support to high burden countries with insufficient iodine intake as well as those without recent data.





## Western and Central Africa

#### Preparing new action plans



#### Situation

15 countries have adequate iodine status, three have excessive iodine status and four countries have insufficient iodine status. Data for 14 countries is over 10 years old, 6 countries have data that is 5-10 years old, and two countries have no data. In this region, the salt producing countries are Senegal and Ghana, while salt also comes from Brazil and Namibia. A fresh look at stalling countries has started in 2019 with the aim to develop national and regional action plans.



#### **Progress in 2020**

Supported by funding from UNICEF, new IGN Regional Coordinator Amal Tucker Brown has started to manage the roadmapping, with country reports completed for 16 out of 24 countries, as well as beginning a regional review. Two webinars providing guidance on monitoring salt iodization programs and population iodine status reached almost 60 key stakeholders.

#### What's next

In the coming year, IGN will hold national consultations to share the findings of the landscape analysis that will inform the creation and implementation of new action plans. Direct technical support will be provided to Chad, Ghana, Mali and Togo. New National Coordinators are crucial for continuity and these will be recruited in countries across the region. There are plans to reach out to regional organizations and collaborate to harmonize around issues of salt iodization and food fortification.



## Middle East and North Africa

Challenges due to instability and COVID-19



#### Situation

Eight countries have less than 70% iodized salt coverage, among them Sudan, Syria and Yemen. Four have more than 80% iodized salt coverage, while seven countries have high iodized salt coverage but also excessive iodine intake.



#### **Progress in 2020**

There were many problems, some due to instability because of conflict, others due to COVID-19, with stalled production and shortage and price rises in supply of potassium iodate. As a result, government attention to the problem of iodine deficiency was limited and there is poor coordination and national ownership in many countries, including those suffering conflict.

IGN's Regional Coordinator, Izzeldin Hussein, worked with partners in Sudan to strengthen networking, advocacy and focussed attention on production of iodized salt. Support was also provided to Morocco to initiate a national approach to improve iodine status.

#### What's next

Funding is urgently needed for some countries, and there is a need to improve coordination mechanisms. Communication and cooperation between National Coordinators in the region and partners such as WHO, will be strengthened, and support will be provided to Sudan, Egypt, Syria and Morocco.



## **Eastern Europe and Central Asia**

## A focus on iodine in processed foods



#### Situation

Six countries in the region have optimal iodine nutrition, with sustainable iodization, while a further two, have optimal iodine nutrition, although there is insufficient coverage of household salt and in the processed food industry. Iodine deficiency exists in Uzbekistan and Tajikistan, especially in low-income groups, and there is low coverage and quality of iodized household salt. Two countries, Russia and Ukraine, have problems with the adoption of salt iodization legislation and low iodized salt coverage, while the situation in some sub-national regions is largely unknown.



#### **Progress in 2020**

In Russia, new legislation on salt iodization was prepared by the Ministry of Health with the objective of submission to the Parliament, and the public health agency mandated the use of iodized salt in school canteens and catering. Ukraine's legislation is still under discussion and in Moldova, which implemented IGN guidance on the use of iodized salt in processed foods, regulations have been updated to mandate the use of iodized salt in the baking industry and in households, and enforcement has been strengthened.

#### What's next

Regional Coordinator Gregory Gerasimov's focus for the coming year is to document the achievements of the salt iodization program over the past decade, as well as to provide a series of technical guidance notes and webinars to safeguard programs in time of pandemic.



## South Asia



#### Country consultations create momentum for progress



#### Situation

All countries have incorporated salt iodisation into national policies. National production of salt is self-sufficient except in Afghanistan, Bangladesh, Nepal and Maldives, and Iodized salt supply is adequate except in Afghanistan and Bangladesh. All countries have adequate iodine status at national level, but in some countries there are sub-national gaps. Salt iodization rates are generally high, except for Bangladesh, Afghanistan and Pakistan.



#### **Progress in 2020**

Work on the roadmap forged ahead in 2020 despite COVID-19, with a regional landscape analysis report and 8 country reports completed with funding support from UNICEF. Country consultations are planned next where national plans will be formulated. IGN created visual tools and maps to help participants understand the trajectory of national salt iodization programs and to help identify what needs to change to sustain or achieve further progress. In 2020, IGN also commissioned a study on the trade of salt and processed foods in the region and the barriers that exist.

#### What's next

IGN Regional Coordinator, Renuka Jayatissa, with the help of National Coordinators, hopes to focus on creating a regional platform similar to that in Eastern and Southern Africa; to harmonize salt iodization with WHO's salt reduction strategy; to engage the salt industry for better compliance, and to provide technical support for regulatory monitoring.

## South East Asia and Pacific

### Development of ASEAN food fortification guidelines



#### Situation

Salt iodization is mandatory in many countries, and although iodine status for children is adequate in most countries, pregnant women in eight countries have inadequate iodine status. There is a perception that the job is done, and other issues such as obesity and stunting take priority, and this false perception threatens achievements which were made. Furthermore, salt iodization is not perceived or implemented as part of national food fortification or nutrition strategies.



#### **Progress in 2020**

While the COVID-19 pandemic affected IGN's work, major achievements, mostly supported by UNICEF, included a landscape analysis in Timor Leste; a literature review on ways to assess iodine and sodium intake in preparation for salt reduction activities; inclusion of a food fortification section in the Association of South East Asian Nations (ASEAN) regional report on the food and nutrition situation.

#### What's next

A review of implementation, monitoring and enforcement of the use of iodized salt in processed foods will take place in Thailand, Indonesia and the Philippines. Support will be provided to Papua New Guinea to reach isolated population groups with emergency iodine supplements while exploring long term options to provide iodine through processed foods. IGN will support development of the ASEAN guidelines/minimum standards for mandatory food fortification; and other salt iodization activities – including harmonization with salt reduction – will continue.



## East Asia and China

Addressing fears about excess iodine



#### Situation

In China, iodized salt coverage in 8 provinces, including Beijing, dropped to less than 90%, while iodine status of pregnant women was low in six provinces.



#### **Progress in 2020**

The fear of thyroid disease from excess iodine is a problem in China and in the region. IGN developed a communication strategy to address this, which included development of scholarly articles re-examining the of the safety of potassium iodate in edible salt and on the importance of iodine for brain development. Current progress on control of IDD was shared with doctors, officials and medical students in China, and IDD education in provinces with severe deficiency was supported. In Mongolia, a national standard for iodized salt has been approved.

#### What's next

IGN's Regional Coordinator Qian Ming's plans include an expansion of education of medical students on iodine deficiency; helping to promote understanding about the relationship between iodized salt and thyroid diseases and cancer, and harmonization of salt iodization with salt reduction.



## South America

## The need for equity



#### Situation

All but one country in the region has adequate iodine intake, with Colombia having excessive intake status. However, monitoring has decreased or is poor in some countries, and there is increasing availability of non-iodized salt. COVID-19 and political instability in some countries are exacerbating issues.



#### **Progress in 2020**

A review of iodized salt production among small producers in selected Andean regions found that volume is good, but monitoring both by producers and by government is decreasing. Modelling of national food consumption surveys showed that children 4-5 to 10-12 months of age in the region could be at higher risk of not meeting iodine daily requirements. Rural children in this age group appeared to be most at risk. The Colombia Ministry of Health's national team, with support from IGN, has completed an almost two-year process to decrease the fortification level of iodized salt from 50-100ppm to 20-40 ppm, as a measure to correct excess iodine status at national level. The regional roadmap has been updated in priority countries.

#### What's next

IGN's Regional Coordinator Ana Maria Higa will pursue an equity approach for the coming year, advocating for attention to the most vulnerable general population in rural Andean zones in Argentina, Bolivia and Peru, as well as exploring the feasibility of doing so in Venezuela. Research will help deepen knowledge of iodine intake status in pregnant women, infants and children under three years old.



## **Central America and Caribbean**





#### Situation

The situation in most countries is adequate. An excessive situation exists in Honduras and Costa Rica, while there is deficiency in Nicaragua and Haiti.



#### **Progress in 2020**

Based on roadmap guidelines, a database was established to monitor salt in stores and production facilities. Online training took place in Guatemala on the monitoring and surveillance of fortification programs. Research on processed food was completed and IGN provided support in reviewing iodization laws in Guatemala and Mexico.

#### What's next

IGN's Regional Coordinator Ivette Sandino will focus on research on the use of iodized salt in processed food in Belize; webinar training will take place in the America and Caribbean regions, and IGN will continue to work on updating data and implementing activities in partnership with the Institute of Nutrition of Central America and Panama (INCAP). The possibility of expanding the use of iodized salt in Haiti will be explored through collaboration with local partners.





## North America

#### Iodine nutrition now in dietary guidelines for Americans



#### Situation

Canada and the United States remain iodine sufficient. However, mild iodine deficiency has re-emerged among pregnant women in the US over the last decade. No national data are currently available regarding the iodine status of pregnant women in Canada. In Canada salt iodization was mandated in the 1940s, but in the US salt iodization has always been voluntary. In both countries, commercially processed foods typically use non-iodized salt, and iodized salt consumption is relatively low. Dairy foods are likely the primary source of iodine nutrition in both countries, which is of concern because not all of the population ingests dairy foods regularly, and the iodine content of milk is not monitored or well regulated. Awareness of the importance of iodine nutrition is lacking among both healthcare providers and the general public.



#### **Progress in 2020**

Despite prior advocacy, until 2020, iodine nutrition was not mentioned in the Dietary Guidelines for Americans, which serve as the cornerstone for all federal nutrition programs. The 2020-2025 guidelines now include a statement about the importance of iodine nutrition during pregnancy and lactation. Iodine nutrition is included in the national curriculum for endocrine fellows at the American Association of Clinical Endocrinology's Endocrine University program, and a small exploratory study examining the iodine status of pregnant women in Puerto Rico was published, which noted that only 2% of participants were aware that pregnant women need increased iodine intake.

#### What's next

IGN's Regional Coordinator Elizabeth Pearce will continue to raise the visibility of iodine nutrition at national meetings and on trainee curricula, as well as beginning planning for the centennial of US salt iodization in 2023 with Kiwanis and the American Thyroid Association.

## Western and Central Europe

## A major but little-known problem



#### Situation

All countries in Europe have iodine sufficiency among children, but 54% of countries reported low iodine status among the adult population and 64% reported deficiency among pregnant women. Estimates suggest that up to 50% of the region's newborns are at risk of being iodine deficient. There is a lack of recognition of iodine deficiency as a health problem and policymakers seem to disregard the impact of iodine deficiency as well as the cost-efficiency and effectiveness of prevention of iodine disorders through salt iodization.



#### **Progress in 2020**

Efforts to raise awareness in 2020 included the publication of five papers on iodine deficiency, and the presentation to the European Commission of the results of the first European project on iodine deficiency, EUthyroid, an EU-funded research project to evaluate current national efforts aimed at preventing iodine deficiency disorders, which took place in partnership with IGN.

A joint letter by WIA, IGN, EU Salt and Culinaria Europe) was sent to the European Commission DG Health to remind them of the iodine deficiency problem and the need for the use of iodized salt in processed foods, for which free flow between countries is necessary.

#### What's next

IGN's new Regional Coordinator Rodrigo Moreno-Reyes will focus on establishing working relationships with both the Parliament and the Commission to advocate for recognition that iodine is a public health problem, as well as to develop relevant research projects at regional and/or national level.



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

Children attending classes at the primary school of Gado Badzere, in the East of Cameroon. © UNICEF / UN0425428 / Frank Dejongh

## lodized salt in processed foods

People's consumption of processed food – bread, cheese, condiments, noodles, crisps and more – is increasing because of urbanization and rapid industrialization, especially in low and middleincome countries, in some cases replacing food that would previously have been prepared in the home, or because of convenience and/or changing food intake patterns.

Fortifying some of these processed foods with essential vitamins and minerals, has the potential to improve nutritional status, including iodine nutrition. And ensuring that iodized salt is used in baking, meat processing, dairy products, canned foods and condiments also gives us new ways of reaching populations in countries where iodization of table salt has been problematic.

Use of iodized salt in processed food takes us in new directions, circumventing some of the problems such as iodizing salt from small producers or prevention of smuggling of cheaper, non-iodized salt. Whether specifically mentioned or not, legislation in many countries includes the use of iodized salt instead of salt without iodine in processed foods. But is that happening? And how best can we understand where it is used and which populations are reached?



Iodized salt can be used in the production of foods such as bread and instant noodles - Photo by Chris Pua on Unsplash

Recognizing the potential of this intervention, IGN began developing program guidance on the use of iodized salt in processed foods in collaboration with multiple partners. The guidance helps to identify which widely consumed foods contribute to salt (and hence iodine) intake and quantify the amount of iodine these can contribute to the diet.

The guidance was based on pilot studies that were completed in 2020 in the Republic of Moldova, North Macedonia, Kenya, Thailand, and Sri Lanka. The assessment showed that a few food items can have meaningful contribution to iodine intake, for example, bouillon and instant noodles (Kenya), dried fish (Sri Lanka), tomato puree (North Macedonia), bread (Moldova and North Macedonia), and fish sauce (Thailand). Following the pilot studies, the guidance was used in Morocco, and showed that bread and olives contribute greatly to salt intake among the population. It also showed an increasing trend in bread and processed meat consumption in the last 20 years.

Also in 2020, IGN, in collaboration with Helen Keller International (HKI), carried out an assessment on the use of common processed foods in Senegal, Nigeria and Burkina Faso. The wide use of bouillon cubes, bread and instant noodles by the population were identified as key contributors to salt and therefore iodine intake.

In South Asia, IGN, in collaboration with UNICEF, commissioned a review of trade in processed foods, which found a very active regional trade in food products, some of which already contain iodized salt. Food products flow freely between countries, with few barriers and little harmonization in terms of specifications, packaging, and labelling, with labels often not mentioning iodized salt. The review noted a lack of clarity on the standards for iodized salt use in processed food and regulatory monitoring.

These assessments and studies have provided IGN with a wealth of information, providing a basis for discussions with the food industry to convince them to make the shift to using iodized salt if they have not already done so. This fortification can be optimally combined with efforts to reduce salt content to protect the population from cardiovascular disease. IGN believes that we can achieve a workable approach that serves nutrition goals while facilitating production and trade of food products, with programs designed to verify and ultimately ensure that unreached populations can access iodine through processed food. That means that for IGN, processed foods are integral to our work to support iodine nutrition and national action plans – a new playing field and a key strategy as we move forward.

## **Research activities in 2020**

Dr. Maria Andersson Zurich University Children's Hospital

Research activities supported by IGN are focused on scientific questions relevant to iodine programs and aim to form the scientific basis for future WHO/UNICEF/IGN guidelines.

IGN's vision is a world where all people attain optimal iodine nutrition. Iodine adequacy in populations is usually assessed in cross-sectional studies by measuring urinary iodine concentration (UIC) in spot samples. This field friendly biomarker provides a reliable measure of the current iodine intake and effectively identifies gaps of salt iodization programs.

A few limitations to the interpretation of UIC have been identified and are addressed in international research projects led by ETH Zurich (Switzerland) and supported by IGN thanks to funding from USAID/UNICEF. A cross-sectional multicenter study in pregnant women was conducted to define the UIC threshold indicating iodine deficiency in pregnant women by using the thyroid specific protein thyroglobulin. The study used data from pregnant women from all regions of the world. The results suggest that physiological adaptation during pregnancy maintains normal thyroid function over a wide range of iodine intakes. The median UIC recommended to define adequate iodine nutrition in pregnant women is likely too high. Similar analyses are now being planned in school-age children and women of reproductive age.

Hot climate conditions may reduce urine volume, thus overestimate UIC and thereby mask inadequate iodine intake. An observational study investigated the effects of season on UIC in two high temperature climates. UIC was assessed in women of reproductive age in Tanzania and South Africa during cold and hot seasons. The study showed that urine volumes may be lower in hot climates in some populations. In such settings, correcting for seasonal differences in urine volume using urinary creatinine concentration measured in the spot urine samples may be considered for the interpretation of UIC. The research also identified lower iodine intake in the summer compared to the winter in South African women. The reasons for seasonal differences in iodine intakes needs further investigation, but the results suggest that local seasonal differences in iodine intakes may be assessed before planning the timing of iodine status studies.

An ongoing international study is set out to define the optimal standards for salt iodine fortification for different types/qualities of salt. This research aims to improve the quality of data collected from household salt surveys and to redefine guidelines on interpretation of salt data.

All research projects will be published in scientific journals and translated into program guidance.

# Our partners and supporters



## **Partnerships**

As a convening and catalysing organization to achieve progress in improving iodine nutrition, partnerships are at the heart of everything we do at IGN.

We work with partners to improve the effectiveness and impact of our work, as well as to provide the funding we need to fulfil our mission. Partnerships help drive progress on our roadmaps to ensure that salt is iodized forever. They expand technical knowledge and expertise around iodine nutrition and salt iodization. Together with our partners, we advocate for action on iodine nutrition and across the broad fortification agenda.

#### **Our collaboration with UNICEF**

UNICEF has been involved with IGN since its inception. Currently, IGN has program cooperation agreement with UNICEF, funded by USAID, that covers activities from 2018 to August 2021, to strengthen universal salt iodization, improve global knowledge about iodine deficiency, and provide technical guidance and support to ensure the sustainability of iodine nutrition programs. The agreement states that IGN's work helps to "facilitate and align the critical scientific, policy and programmatic actions of all stakeholders, including national governments, academia, development agencies and the salt industry. Critical lessons have been learned which help to inform the nature of support that is required for countries and to provide guidance on what needs to be done for countries with persistent iodine deficiency as well as for countries which have achieved optimal iodine status and need to sustain the achievement into the future."

Activities under this partnership globally and across five regions are covered in our global round-up. They include:

- Identifying countries that are lagging, identifying program weaknesses and providing recommendations for improvement with a focus on strategic innovation
- Helping countries understand the contribution of processed foods to salt intake and iodine content, including the development and testing of guidance to this process and supporting legislation that includes use of iodized salt in processed foods

- Advocating and communicating globally, regionally and nationally about the importance of iodine nutrition
- Facilitating critical operational research to establish optimal UI standards for pregnant women and improve metrics to estimate population IDD prevalence
- Coordinating partner efforts to improve the situation concerning small producers, the quality of their salt and iodization process, and consolidation to ensure more consistent salt iodization
- Working at regional level to help harmonize standards and facilitate import/export standards being consistently followed
- Supporting countries with monitoring issues and developing innovate ways to monitor USI programs

IGN has helped facilitate and align the critical scientific, policy and programmatic actions of all stakeholders, including national governments, academia, development agencies and the salt industry. Critical lessons have been learned which help to inform the nature of support that is required for countries and to provide guidance on what works and what doesn't.

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#### **The Bill & Melinda Gates Foundation**

Funding from the Bill & Melinda Gates Foundation supports key activities around food fortification, complements UNICEF funding by exploring areas of mutual interest, and supports partnerships with other organizations.

#### The Global Fortification Data Exchange (GFDx)

IGN, the Food Fortification Initiative (FFI) and the Global Alliance for Improved Nutrition (GAIN), have been working in partnership to improve the quality and quantity of fortification data to make it more actionable for programming and advocacy purposes. The result is a comprehensive food fortification database that includes legislation status, fortification standards, food intake and availability, industrialized processing, quality and compliance, import and export monitoring protocols and more.

#### fortificationdata.org

## Guidance on the use of iodized salt in processed foods

Industrially processed foods and have the potential to contribute to improved population iodine status, as well as addressing issues of salt reduction, but there is much to learn and consider for country programs in terms of including it in a national fortification strategy. With funding from BMGF and program support from UNICEF, the newly developed guidance is being used in countries in several regions, including South Asia, Eastern Europe and Central Asia, and South East Asia and Pacific.

#### **Double Fortified Salt**

The potential to fortify salt, a universally used condiment, with other micronutrients has been discussed and even implemented in some countries, with mixed results. Double fortifying salt with iron and iodine is one intervention perceived to have potential to improve both iodine and iron population status, and in 2018, BMGF asked IGN to convene a consultation to review experiences to date with double-fortified salt. A steering group of experts from multiple disciplines and organizations developed background papers which were published in the Journal of Nutrition in February 2021. A technical brief was developed to set out key considerations for policymakers on this issue.

ign.org/cm\_data/2021-03-02-Iodized-Saltas-a-Vehicle-for-Iron-Fortification.pdf

academic.oup.com/jn/issue/151/Supplement\_1

nutrition.org/double-salt-fortification

#### Our donors - giving what they can

While these major partners support a large part of our work, they don't encompass all regions or all of the issues IGN wants to tackle. Filling that gap is a dedicated group of supporters who donate what they can on a monthly or yearly basis to support IGN's work.

Many individuals and organizations donate to us through GiveWell, a non-profit effective altruism and non-profit charity assessment organization. IGN is one of a small group of organizations that GiveWell has designated as stand-out charities. We are also listed as one of The Life You Can Save's best charities, which have been rigorously evaluated to help donors make the best impact per dollar. The Centre for Effective Altruism, which looks at how we can use resources to help others the most, also supports IGN, as does Founders Pledge, a global community of entrepreneurs. The importance of salt iodization to improve children's IQ and learning ability, the cost-effectiveness of the evidence-based approach, and the global scale of the issue addressed, as well as important role of the private sector are all factors which are considered by these private donors

In addition to these, donors support us through many other fundraising platforms, including CanadaHelps, Benevity and Charitable Impact. A couple of communications from donors resonated with us over the past year. Mirte Gosker, of the Vanderes Foundation, explained why they supported IGN and just one other organization in 2020:

They are not the people with the gripping stories of happy children receiving their support. These organizations basically pave the road for others to implement these interventions in the best possible way.

And we were encouraged by a young Canadian donor who told us:

I'm an 18-year-old Canadian male
who lives with his parents while working full time for \$15 an hour. That may be considered poverty in Canadian standards, but in worldwide and historic standards, I am a millionaire. The Life You Can Save brought me here. You all have come a long way, keep it up and finish the mission! IGN would like to thank the following partners for their support to us:

The Bill & Melinda Gates Foundation

The Centre for Effective Altruism

Founders Pledge

The Giselle Foundation

The Hadley Family Foundation

Kiwanis International

The Open Philanthropy Project

The Ottawa Community Foundation's Sam Ludmer Fund

UNICEF

USAID

A big thank you to our donors: Benevity, CanadaHelps, Charitable Impact, GiveWell, The Life You Can Save, and those who contributed directly to IGN.

## A partnership with the World Iodine Association (WIA)

**66** With very few exceptions such as Iceland, Europe is an iodine-deficient continent. Adults living in iodine deficient regions carry a high risk of goiter, thyroid nodules and hyperthyroidism. Sub-clinical hyperthyroidism, as a common and frequently undiagnosed IDD, is tightly associated with an increased risk of mortality and coronary heart disease. Moreover, iodine deficiency during pregnancy and breast-feeding is widespread in Europe and adversely affects the development of the child. Even mild or moderate iodine deficiency of the mother affects the synthesis of thyroid hormones and may impair brain development, neurocognitive function and reduces offspring IQ. During pregnancy, women have a sharply increased need for iodine, which is frequently not covered by food sources and iodine supplements. Due to a lack of valid data, we are uncertain about the scale of the problem but estimates suggest that up to 50% of newborns in Europe are exposed to iodine deficiency.<sup>1</sup>

These words, from the EUthyroid Consortium's **Krakow Declaration on Iodine** in 2018, paint a disturbing picture of the situation with regard to iodine deficiency in Europe. The Consortium was set up in June 2015 with funding from the European Union's Horizon 2020 research and innovation program to look at the situation with regard to iodine status. Since then, IGN, together with EUThyroid, the WIA, the European Medical Association (EMA), the Global Alliance for Improved Nutrition (GAIN), the International Thyroid Association and the European Association for Predictive, Preventive and Personalised Medicine (EPMA), have been working to draw attention to the problem in Europe and to pave the way for further action.

For WIA, this is an important issue, despite the fact that just a tiny fraction of its activities involves salt iodization.

 As representative of the iodine value chain – from producers to end-users – the World Iodine Association (WIA) supports the EUthyroid's Krakow Declaration on Iodine (18 April 2018) as a key step towards the sustainable prevention of iodine deficiency in Europe and calls on Member States and the European Union to adopt a harmonised policy framework to ensure optimal iodine intake in the population.

#### Attilio Caligiani, WIA Director General

That work led to two major developments. The first was the drafting of a written Parliamentary Question to Stella Kyriakides, European Commissioner for Health and Food Safety, by the then First Vice President of the Parliament, Mairead McGuinness. The proposed question noted that iodine deficiency could easily be prevented by securing proper iodine content in the daily diet via salt iodization, food and animal feed fortification with iodine, but that there was no harmonisation across Member States regarding the quantity of iodine allowed in salt, as well as the quantity and type of iodized salt allowed in foods. In addition, the level of iodine supplemented in feed was not sufficient to ensure proper amounts of iodine in animal products. It asked how the Commission would ensure proper iodine intake throughout the EU, whether the Commission would consider the application of the mutual recognition principle to address the alarming problem of IDD across the EU, and whether the Commission was considering integrating research on IDD in the context of Horizon Europe, which had supported the first EUThyroid study.

The question was not presented to the Parliament because Mairead McGuinness was appointed European Commissioner for Financial Stability, Financial Services and the Capital Markets Union. But it did spur action towards the second development. Despite the demands of activities to combat COVID-19, high-level members of the Commission attended a webinar on outcomes and next steps on the EUthyroid work in June 2020.



Attilio Calignani, Director General, World Iodine Association, with Alicja Hubalewska-Dydejczyk, IGN National Coordinator for Poland, and former Polish Vice Minister of Health Zbigniew Krol in 2018 at the signing of the Krakow Declaration on Iodine in April 2018

These included recommendations that

- Regulators and policymakers should harmonize the EU regulatory framework to ensure free trade of fortified foodstuffs in Europe. Similarly, iodized animal feed requires regulatory approval to ensure free trade within the EU
- National governments and public health officials should harmonize monitoring and evaluation of fortification programs at regular intervals to ensure optimal iodine supply to the public
- Scientists, together with the medical community, patient organizations and industry, should support measures necessary to ensure that IDD prevention programs are appropriate within a rapidly changing environment and further social awareness about the issue

This in turn led to the opportunities that now exist for Calls for Proposals under Horizon Europe suitable for EUthyroid 2.

For the future, IGN sees WIA as a key partner in its work towards ending iodine deficiency in Europe.

**66** Recent studies show that mild iodine deficiency in Europe mainly affects adolescents and the adult population, including pregnant women. Inadequate iodine intake increases the prevalence of thyroid disease in the European adult population. The societal cost associated with the high prevalence of thyroid disorders can be easily avoided by optimizing iodine intake in Europe. To achieve this goal it is of paramount importance to work with partners, including the WIA.

Rodrigo Moreno-Reyes, IGN Regional Coordinator for Europe

**C** The partnership with IGN is crucial step to further consolidate the multi-stakeholder advocacy strategy which aims to place the problem of IDD in Europe in the EU health policy agenda, as well as to ensure the continuation of the EUthyroid project in the context of the Horizon Europe R&I funding program.

Attilio Caligiani, WIA Director General

**66** It is worrying that iodine deficiency remains a widespread problem in Europe while a highly cost effective and technically simple solution is available. Governments as well as communities may have forgotten about the continuous need to iodize salt or may think other solutions are possible. IGN highly values the joint advocacy and awareness raising efforts and the broader partnership with WIA towards the joint objective of optimal iodine nutrition in Europe.

Werner Schultink, IGN Executive Director

 The Krakow Declaration on Iodine: Tasks and Responsibilities for Prevention Programs Targeting Iodine Deficiency Disorders. Eur Thyroid J 2018;7: 201-204. doi: 10.1159/000490143



In Madagascar, IGN, UNICEF and partners are supporting the salt production sector to meet standards in iodization. © UNICEF / UN0373789 / Abela Ralaivita

## A board member's journey

IGN works with partners in diverse ways to fulfil its vision of a world where all people attain optimal iodine nutrition, and all children can reach their full cognitive potential.

A key partner, not only in terms of supporting our work financially, but in helping us with implementation on the ground, is Kiwanis International, a global community of clubs, members and partners dedicated to improving the lives of children around the world, one community at a time.

Kiwanis became involved with the problem
 of iodine deficiency in 1994. We had become
 interested as an organization after the 1990
 World Summit for Children. Rotary had become
 engaged with the problem of polio and we
 wanted to do something similar, so we
 began exploring what opportunities existed.

That journey led to Kiwanis International's first Global Campaign for Children and its significant role in one of the greatest public health success stories of the past thirty years. In partnership with UNICEF, the entire Kiwanis family joined together to raise funds to help eliminate the problem of iodine deficiency through salt iodization, testing and monitoring, and community outreach and education. They raised more than US\$100 million and leveraged yet more funding to eliminate iodine deficiency disorders. While the campaign formally ended in 2005, the Kiwanis Children's Fund continues to make the elimination of IDD a priority and continues to fund specific projects as well as IGN's quarterly newsletter.

Stan's engagement with the problem of iodine deficiency is inextricably bound up with his role as Executive Director of Kiwanis, but with his long standing as a Board member of IGN, providing advice and support to IGN as it grows and expands its work.

When the organization's work on iodine deficiency began, Stan had been president of a Kiwanis club in his native Dallas.

At that time, I hadn't heard anything about iodine deficiency. We used to have to teach everyone about iodine. And as it turned out, it was the best thing we did.



Kiwanis Executive Director Stan Soderstrom. © Kiwanis

This work led Stan to move from the private sector to join the staff of Kiwanis International to oversee youth activities. He became Executive Director for Kiwanis International and the Kiwanis Children's Fund in 2010 and has guided the organization ever since.

But in addition to leading Kiwanis International, Stan's advice and guidance to IGN as a Board member and as part of IGN's Finance Committee has been crucial to IGN over many years.

IGN's history began in 1986, when the International Council for the Control of Iodine Deficiency Disorders held its inaugural meeting in Nepal, working closely with partners including UNICEF and national governments. In 2002, the Network for the Sustained Elimination of Iodine Deficiency was formally launched at the UN Special Session for Children. The network was a global coalition of public, private, international, and civic organizations that supported universal salt iodization, and in 2012 the ICCIDD Global Network was formed from these two organizations. Stan had been asked to represent Kiwanis on the Network for the Sustained Elimination of Iodine Deficiency Disorders, and was asked to join the board when the two organizations merged. The organization changed its name to Iodine Global Network in 2014.

GIGN is very different from many of the other boards I'm involved with. It's a different type of organization. I am the least technical person in the room – while my education was in geology, I had a lot to learn and I still find the discussions fascinating. I leave the technical discussions to the experts but try to bring my own expertise in strategic planning and board guidance – to the table.

Stan recalls a defining moment in his work with IGN. In 2014, current Board Chair Michael Zimmermann told the Board of IGN's first conversation with GiveWell, a charity assessment and altruism-focused organization which focuses primarily on the costeffectiveness of the organizations that it evaluates. At that time, GiveWell had declined to fund IGN because the organization lacked a proven track record. (IGN later became a GiveWell stand-out charity and is aiming to become a top recommended charity). Stan was determined to ensure that IGN gained that track record – and believes we have.

**66** Science supports what we are doing. If we improve the learning abilities of children everywhere, starting now, if we improve the IQ of the planet, imagine what that means for economic development, for future decision making – this one action could have a huge impact. Stan's belief in the importance of improving children's brain development by ensuring they have adequate iodine in their diet has led Kiwanis to think about refocusing its efforts on iodine nutrition to help make the world's children ready to learn and ready to lead. He believes IGN is the right organization to help guide a renewed and revitalized push to help young children to come to school with the iodine nutrition they need to make the most of their education, and to become the leaders of the future.

What we learned between 1994 and 2005
 was that working with public private partnerships, international organizations, governments, NGOs and non-profits was the best way to achieve progress. So many skill sets at the table – it's a much better way of problem solving at global, regional, national, state and provincial levels.

He points to the need to renew our understanding of the importance of adequate iodine nutrition and the importance of iodized salt, whether in his local grocery store or in a marketplace in Nepal.

Iodine Global Network Annual Report



For Stan, an enduring memory of his work on iodine deficiency occurred in 2014, when he was on a site visit to a Kiwanis-supported project with UNICEF to eliminate neonatal tetanus in Madagascar. On the way, they passed a salt farm, and they drove in to visit. The salt was being brought to an iodization plant that was the result of a Kiwanis investment ten years previously. That, he said, validated its investment and still spurs him on him today. And it truly was a valuable investment – this year saw the release of a review of progress that showed a doubling of iodized salt from 20% in Madagascar in 2016 to 42% in 2020.

66 What motivates us is the critical role that iodine plays in a child being ready to learn. This is going to be the thing that makes the difference all over the world – and not just the developing world. I believe we will have an "aha!" moment about this problem existing in our own back yards... and IGN, in partnership with Kiwanis, is the right organization to help guide actions to address it.



Stan (right) together with Kiwanis International Past President Gunter Gasser (center) and Greg Beard, former Kiwanis International Trustee (left) on the Kiwanis visit to Madagascar. © Kiwanis



# Our team



## The IGN team

There were several changes to the IGN team in 2020, the most major being the departure of Executive Director Jonathan Gorstein to a new role at the Bill & Melinda Gates Foundation. Jonathan had led IGN for almost seven years, growing the organization to its position today as the leading advocate and convener for improving global iodine nutrition.

New Executive Director Werner Schultink joined us at the beginning of 2021, bringing to IGN his broad experience in nutrition, public health, development and humanitarian program implementation. He was UNICEF Chief of Nutrition from 2007 to 2016, providing leadership, guidance and strategic direction for UNICEF nutrition programs worldwide. He has also served as Chief of Nutrition and Early Child development for UNICEF India from February 2003-2007. Most recently, he has been UNICEF Country Representative in Somalia, and before that he worked as Country Representative in Kenya from 2016-2019, leading the implementation of UNICEF's programs in these countries. As Senior Advisor for Micronutrients at UNICEF from 1999 to 2003, he helped improve micronutrient nutrition worldwide, including iodine nutrition.

With a scientific background focussed on nutrition, epidemiology and public health, he has provided guidance and leadership on strategic program implementation and capacity building for countries around the world. He has a doctorate degree in Nutrition from Wageningen University and lives in Canada.

Other additions to the team in 2020 included new Regional Coordinators who are already adding tremendous value to the organization: Rodrigo Moreno-Reyes for Western and Central Europe; Amal Tucker-Brown for Western and Central Africa; and Renuka Jayatissa for South Asia. Joyce Greene joined the management team as Senior Advisor, with advocacy, fundraising and communications in her portfolio. She is based in Ireland. Jude Louis was appointed as Manager, Finance and Administration in early 2020, and lives in Canada.

Our Management Council Meeting, scheduled to take place in Peru in October 2020, was postponed due to the COVID-19 pandemic and subsequently the search for and appointment of the new Executive Director. It took place virtually in April 2021, and was highly successful, discussing ways to address COVID-19 and other challenges and charting the course for the coming year and beyond.

We look forward to working together and with our partners over the coming year.



Our MC meeting took place in Lima, Peru in February 2020, but our plans for the year were impacted by the pandemic. Our 2021 meeting took place virtually in April 2021, and was highly successful, discussing ways to address COVID-19 and other challenges and charting the course for the coming year and beyond.





## **Regional coordinators**

#### Western & Central Europe (new)

**Rodrigo Moreno-Reyes** *Belgium* 

A specialist in endocrinology and nuclear medicine, with more than 20 years of experience on iodine nutrition and thyroid diseases, who has worked in Sudan, Tibet, Chile and Belgium.

#### **North America**

**Elizabeth N. Pearce** USA

#### Central America & Caribbean

**Ivette Sandino** *Nicaragua* 

#### **South America**

**Ana Maria Higa Yamashiro** *Peru* 

#### West and Central Africa (new)

#### Amal Tucker Brown

Morocco

A public health nutritionist with more than 15 years of international experience in development and emergency contexts. She has previously worked for UNICEF for 10 years in Ethiopia, Madagascar, South Sudan, Somalia and Malawi and for NGOs in DRC, Niger and Rwanda.

#### **Eastern & Southern Africa**

**Festo Kavishe** *Tanzania* 

#### Eastern Europe & Central Asia

**Gregory Gerasimov** USA

#### **Middle East & North Africa**

**Izzeldin Hussein** *Oman* 

#### South Asia (new)

**Renuka Jayatissa** Sri Lanka

Head of Nutrition at Sri Lanka's Medical Research Institute who has profoundly impacted the field of iodine nutrition in Sri Lanka. She has also worked for UNICEF on nutrition issues.

#### **China & East Asia**

**Ming Qian** China

#### **China & East Asia**

**Ming Qian** China

## South East Asia & Pacific (outgoing)

Karen Codling Namibia

## **Board of Directors**

#### **Executive Director**

**Werner Schultink** *Canada* 

#### **Senior Advisors**

#### **Robin Houston** Technical assistance, strategy and fundraising *USA*

Arnold Timmer Technical assistance and program strategy *Switzerland* 

Joyce Greene Global advocacy, fundraising and communications *Ireland* 

#### Manager, Finance and Administration

**Jude Louis** Ottawa

#### **IGN's Board of Directors**

2020 also saw some changes to IGN's Board of Directors – here's the new line-up.

#### Chair

**Michael B. Zimmermann** ETH Zürich Zürich, Switzerland

#### **Treasurer (new)**

**Sophia Weber** Montfort Hospital *Ottawa, Canada* 

#### **Board of Directors**

Maria Andersson Zurich University Children's Hospital Zürich, Switzerland

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## Finance Committee of the Board

Sophia Weber (Chair) Michael Zimmermann Maria Andersson Daniel Levac (observer) Stan Soderstrom Jan Werner Schultink Jude Louis



# Financial statements

For the year ended December 31, 2020

(all figures in USD)

## **Explanation of financials**

The reduction in revenues in 2020 is largely explained by the ending of the grant cycle with the Bill & Melinda Gates Foundation. It should also be noted that expenditures were lower than expected in 2020 as many activities had to be postponed or cancelled due to the COVID-19 pandemic.

Project activity costs and regional support are the major component of IGN's expenditures. Beyond specific grants under the heading "Project activity costs", the activities of IGN's network of Regional Coordinators are reflected under the heading "Regional support" and are funded by GiveWell, Founders Pledge, Effective Altruism, The Live You Can Save, CanadaHelps and other donors who allow broad use of their contributions.

The line item "Secretariats" includes the salaries of key members of the core team who are providing technical and operational support to regions. Administrative costs are low as we do not maintain a physical headquarters, and largely relate to finance and administration.



A student in an empty school in Panama City, Panama, on 16 Sept 2020. © UNICEF / UN0359849

## Statement of operations

Revenue         87,841         697,841 <th< th=""><th></th><th>2020</th><th>2019</th></th<>		2020	2019
Revenue         Strikt         String         String         String			
UNICEF       871,841       697,821         GiveWell       356,442       646,142         Bill & Melinda Gates Foundation       213,351       846,342         Donations       88,217       96,968         Kiwanis International       67,232       99,088         Helen Keller International       67,232       99,088         Projects       -       38,544         Interest and other       667       36,074         1,643,217       2,461,000       24,610,000	Revenue		
GiveWell       356,442       646,13         Bill & Melinda Gates Foundation       213,351       846,34         Donations       88,217       96,98         Kiwanis International       67,232       99,08         Helen Keller International       67,232       99,08         Projects        38,54         Interest and other       667       36,00	UNICEF	871,841	697,892
Bill & Melinda Gates Foundation213,351846,34Donations88,21796,98Kiwanis International67,23299,08Helen Keller International67,23299,08Projects-38,54Interest and other66736,01Lot Let Let Let Let Let Let Let Let Let Le	GiveWell	356,442	646,138
Donations       88,217       96,92         Kiwanis International       67,232       99,08         Helen Keller International       45,467       7         Projects       -       38,54         Interest and other       667       36,01         Lyber State       -       1,643,217         Lyber State       -       1,643,217	Bill & Melinda Gates Foundation	213,351	846,342
Kiwanis International       67,232       99,08         Helen Keller International       45,467       45,467         Projects       -       38,54         Interest and other       667       36,01         Local	Donations	88,217	96,988
Helen Keller International       45,467         Projects       -       38,54         Interest and other       667       36,01         1,643,217       2,461,00       2,461,00	Kiwanis International	67,232	99,080
Projects         -         38,54           Interest and other         667         36,01           1,643,217         2,461,00         2,461,00	Helen Keller International	45,467	-
Interest and other       667       36,01         1,643,217       2,461,00	Projects	-	38,547
1,643,217 2,461,00	Interest and other	667	36,019
		1,643,217	2,461,006

2020	2019
Operating expenses	
Project activity costs 849,852	1,575,179
Regional support 301,168	367,818
Secretariats 264,480	209,449
Newsletter and website 67,232	99,080
Annual conference 37,515	25,525
Board meeting 1,202	11,563
Senior advisor 15,275	21,350
Board insurance 2,115	2,271
Foreign currency translation (945)	662
Audit and legal9,850	9,569
Bank charges 6,588	5,532
1,554,332	2,327,998
Excess of revenue over expenses 88,885	133,008

![](_page_51_Picture_0.jpeg)

Annual Report 2020

#### www.ign.org info@ign.org

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