

# MAWQATMUTI'KW



# OUR CONNECTION

*"PRISTINE HABITATS REQUIRE RESPECT"*

*Look deep into nature, and then you will  
understand everything better.*

*– Albert Einstein*



*Photo Credit: Chelsey Whalen. Portapique River, within Colchester County in one of the five watershed project areas.*

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Mawqatmuti'kw is also produced to feature articles and information about MAARS work to promote knowledge about aquatic resources, ocean management, communal commercial fisheries, collaborative partnerships and governance.

## **Publisher**

IKANAWTIKET Environmental Incorporated and Maritime Aboriginal Aquatic Resources Secretariate (MAARS)

## **Editorial Committee**

Roger Hunka, Anna Nibby-Woods, Rebecca Hunka, Shelly Woods, Joshua McNeely.

## **Address**

IKANAWTIKET

PO Box 1515

Truro, NS

B2N 5V2

Tel: 902 895-2982

Fax: 902 895-3844

E-mail: [contact@ikanawtiket.ca](mailto:contact@ikanawtiket.ca)

Web: [www.ikanawtiket.ca](http://www.ikanawtiket.ca)



MAARS

172 Truro Heights Road

Truro Heights, NS

B6L 1X1

Tel: 902 895-2982

Fax: 902 895-3844

E-mail: [frontdesk@mapcorg.ca](mailto:frontdesk@mapcorg.ca)

Web: [www.mapcmaars.ca](http://www.mapcmaars.ca)

## **Layout & Design**

Nibby Graphics

[annamnibbywoods@gmail.com](mailto:annamnibbywoods@gmail.com)

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*Photo Credit: Marg Robins. Just behind Ralph's Fish Shack off Hwy 102 at Exit 11 is Main Street, West. Stroll down the wooden boardwalk to the end and stand on the bank of the river overlooking the confluence of the Stewiacke and Shubenacadie Rivers watching the tide come in as the eagles fly overhead foraging for food across the river from the community of Fort Ellis a historic landmark itself.*

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# GUEST WRITER

## GOODBYE TO **FRANK THOMAS** by JOHN SYLLIBOY

On Saturday, August 3rd 2019, we said goodbye to a dear friend of ours, War Chief Frank Thomas. We scattered his ashes at Cape Clear. We sang for our old friend in Mikmaw and I drummed a Warrior song and sang Sundance song, kniskam.

Days before then, my old friend Frank came to me and told me that he wanted to do one last good deed on this earthly realm. It was to have someone like me drum for him and the other spirits whose loved ones had also scattered their ashes there. The spirits will not move on to the other side (spirit world) unless someone drums for them in their ancestral language. I did, and we smudged and drummed and laid tobacco for him and the other spirits.

I explained to my friends the importance of speaking and knowing our Mikmaw language. We don't just use it to speak to each other, but

to also listen and understand our ancestors.

Unfortunately today the importance of our language is slowly dying. Every single ceremony that our ancestors pass down to us must be in our Mikmaw language, just like each time we pray. The English language does not belong in our ceremonies. A person can not say or call a ceremony a Mikmaw ceremony if it's performed in English, French, or even Gaelic.

A Mikmaw ceremony must be performed in the Mikmaw language so the ancestors we're asking for guidance and directions will understand our prayers, and the person saying or performing the ceremony will understand our ancestors. For example, if a person goes to a sweat, for one reason or another, they're going there hoping to find answers. If they do not speak the language at least the person conducting the ceremony should.



In any ceremony it's important for the person conducting the ceremony to speak the language. The person attending it should at least say their spirit name in Mikmaw to identify themselves to the spirits. The sad part is, as far as I know, I'm one of very few who conduct ceremonies in Mikmaw.

Every other person that I have seen or heard of conducting ceremonies speaks or understands only English. Unfortunately, the majority of ceremonies performed in Mikmaki are not Mikmaw. They are mostly Souix, Ojibwa, or who knows what.

When I first started, I was lucky enough to be taught by my

*John Joseph Sylliboy was born in Boston, June 8th 1966 to Alexandria Sylliboy and Clarence Arthur Patles and raised by his grandparents, Mr. and Mrs. William and Janet Sylliboy. His Grandmother, Kiju(Janet), spoke only Mikmaw, not a word of English. Being born in Boston, John only spoke English with a Boston accent and had to learn the Mikmaw language after going to live with his grandparents at age five. His grandmother also taught the majority of the Elders within that community. John credits his grandmother with teaching him about small game hunting, including using snares, and as he grew older, a .22 (rifle), and other valuable skills such as how to chop wood and kindling, and most importantly she taught respect for traditional food and medicine, as well as for the language. He remembers she would get up around 3 am each morning to go to the pool with a lantern to spear trout and other fish for breakfast for her family.*

*John's grandfather also taught him the Mikmaw language, as well as the importance of hard work and respect for the language, land, and the animals, fish, and birds. He also taught John about the seasons: hunting, fishing, and gathering January to December was the time to either hunt, fish or gather only what was needed for the immediate family and neighbours. Once that was done, it was time to let it rest till the following year. Both grandparents taught John how to be passionate about traditional ways and the environment.*

*In his 30's, John was reunited with his father, Clarence Patles, who by then was a well-respected Elder in the Mikmaw communities. They spoke multiple times a week about the importance of their culture and language, teaching and learning from one another. Clarence taught John about spirituality, and John taught him about the Mikmaw language the way he had been taught by his Grandparents.*

*John went on his first fast with his father. A fast is an aboriginal peoples ceremony where one has no food or water for 96 hours. One learns something with each fast. The first fast one acknowledges their ancestors, second and third fast one begins asking for guidance and direction. After the fourth fast one earns their ceremonial pipe, and the fifth fast for sweat.*

*After John earned his pipe and sweat, he was introduced to the sundance by Dan Ward of Burnt Church. For one year he was a helper, then a dancer for the following five years. John discovered the sundance was not 100% Mikmaw and decided to find and learn about traditional Mikmaw ways. It was then he learned the importance of drumming for the dead so that they could pass on to the spirit world. John is one of a very few Mikmaw persons who conducts Mikmaw ceremonies in Mikmaw.*

father/Elder. He didn't raise me but taught me about our spiritual ways. I went on 4 fasts, no food or water for 4 days and 4 nights. Each fast for a different reason. First fast to acknowledge who you are, same as the next 3 fasts. The fourth fast was to earn a ceremonial pipe for my people, the Mikmaw. The 5th fast was to earn the right to conduct a sweat lodge ceremony. All in all, it took me 18 months and in between we talked about the importance of our Mikmaw language, and also about Mikmaw spirituality.

Today's sweat lodges that keep popping up aren't done respectfully. What gives a person or even an Indian act chief the right to put up a sweat lodge and call it Mikmaw or even spiritual when they never earned the right in the first place?

Just to go to or attend a sweat lodge ceremony takes at least 4-5 steps. One pay your tobacco and ask for guidance and directions to find out where to go and to see if the spirits pull you to that person. Once you've done that and feel that's the person to see, you then get a pouch of tobacco smudge it and offer it to the person who will conduct the ceremony. Whether it's a tea ceremony, pipe ceremony, or a sweat lodge ceremony, it starts

with a tea ceremony where you explain to him or her what you are looking for. For example, someone passed on, or maybe your planning on going hunting or plan on having a death feast for that loved one. No matter what it is, steps and respect must be taken in order for it to be a proper ceremony.

Unfortunately, today's Mikmaw have forgotten about respect - respect for our language, Elders, hunting, fishing and our medicinal plants. People forget about who they are and where they came from.

Just by looking at how they so call hunt and fish, speak Mikmaw (miclish), and how they treat each other.

My grandparents taught me a lot, but most of all they taught me to respect our surroundings, our environment, our culture, and most of all, our Ancestors. Even though they firmly belived in the Catholic Church, in their own way they taught me about our old Mikmaw ways, which is why after I started to find my way back as a Mikmaw, it came natural for me to learn about our Mikmaw spirituality where it takes a lot of patience and a lot of respect, especially for our Mikmaw language. I'm 53 years old today and I haven't spoken to anyone about Mikmaw spirituality since my father/

Elder passed, in Mikmaw or in English, as much as he and I spoke about it.

In order to truly understand the Mikmaw language, one must understand hard work, the outdoors, and most of all respect. I hear of people wanting to learn the language but only certain words and only if it's done in a sterile environment. I.e. University's (western education) where everything is broken down to its atoms. They must understand that if a person wants to truly learn their language and learn to speak it the proper way, they must be willing to get their hands dirty. Learn by working hard. For example, learn everything about baskets from the cutting of the tree, finding the tree first, splitting the wood, then the finish work of making the basket and finally either giving it away or selling it.

In my community there were only two of us left who could speak the language. We both moved out for personal reasons. We were the only two who could sit down and talk in Mikmaw about hunting, trapping, fishing, or working in the woods. The sad part is we might have 20 years left in us, which is a blink of an eye really. Then all that'll be left is the western style of learning. The true Mikmaw speaker's words flow so effortlessly, unlike



someone who has learned from a western education institute (a sterile environment).

The Indian act chief talks about the importance of our language, yet only respects a person who was taught in the western education style. Talks about the importance of our culture but will never ask someone like me about our Mikmaw spirituality and culture.

The day we were sending our friend home I was asked if it would be okay if my drumming and chanting could be recorded. Normally I would have said no, but hours before he asked me the spirits said that I was going to be asked and that I should allow it. I asked why because normally it wasn't allowed. The spirits answered the people must and need to know and learn.

About seven years ago my neighbour at the time, who was also the community Elder, asked me to chauffeur for him to Eskasoni. I agreed and he told me that the meeting was about trees and medicinal plants, and that he had never learned or paid attention when he was young. He said after he finished school he moved to Boston and when he returned, he did not bother learning about it. He remembered me and knew my grandmother taught me and the majority of the Elders in Unamaki.

When we arrived, there were roughly 40 Elders, a retired botanist who had worked for Parks Canada for 42 years, and a young man on the computer taking notes and looking for pictures of plants and trees for the group.

I immediately approached him out of curiosity to see what was identified in my area, which wasn't much. I started telling him where I pick and find the plants. After a while one Elder told me that I had a big mouth and to keep quiet. I stood up and asked why we were there in the first place. That's when it was explained to me that the Elders were asked to come in to identify and name plants. The Elders were there to talk about the plants and say it in Mikmaw, and the botanist was there to say it in Latin. The young man was there to find the plant online and find the common name for it and record it.

We were assured that what was said there would only be used for educational purposes, and will only be given to schools to teach. After learning this, I felt I had to defend my so-called big mouth. I told the Elders the importance of it being recorded because most of the Elders' kids and grandkids didn't know or didn't want to learn, and that we might only have 20 years to collect as much

data as possible. One Elder stood up for me and spoke on my behalf, saying who my grandparents were, specifically my grandmother. That was the day I learned that almost all the Elders in that room had been taught by my grandmother. That day we sat down and identified 50 plants and roots in Mikmaw, Latin, and their common names.

I spoke to the young man earlier this year and he mentioned that day. He said maybe half of the Elders have since passed on and that it was good that I was there to convince them to speak up. In the past, each person or family had their spot to pick medicinal plants and roots and it was kept in the family for generations. The biggest worry was a non-native coming in and learning about our ways to profit, which has unfortunately happened. Instead of learning from getting their hands dirty people learn from social media and google. The key things missing are respect for the Elders, the plants, and the seasons, and most importantly the Mikmaw word and the proper pronunciation for the Mikmaw word. On that day I also learned how important it was to know and learn our language, and that the best way to learn was to get your hands dirty.

# EDUCATION

## SUSTAINABLE USE OF WILD SPECIES IS KEY TO ACHIEVING SUSTAINABILITY

by  
DR. MARLA EMERY,  
DR. JEAN-MARC FROMENTIN,  
PROF. JOHN DONALDSON

### STORY HIGHLIGHTS

- *Wild species provide half of the world's seafood, a significant proportion of timber and energy, and remain a major source of protein, fiber and medicines for many communities in both developing and developed countries.*
- *Policies and decisions relating to the use of wild species will have consequences for people depending on them and affect their progress towards the SDGs.*
- *The IPBES is undertaking a comprehensive and ambitious intergovernmental assessment on the sustainable use of wild species that aims to address the challenges faced by policymakers.*
- *Developed by 87 experts from 45 countries, the assessment will be published 2022.*

IIED: SDG November 2019 - In our increasingly developed, tech-focused and industrialized world, it may be a surprise to learn that billions of people globally still rely on wild species for their nutrition, health and well-being. Wild species provide half of the world's seafood and a significant proportion of timber and energy, particularly in developing countries. They remain a major source of protein and provide fiber and medicines for many communities in both developing and developed countries. Use of wild species is particularly important to vulnerable people – both on a daily basis and in times of crisis. In a world that is striving to achieve the Sustainable Development Goals, poor and vulnerable groups are also most likely to benefit from sustainable forms of use that can be used as pathways to development.

At the same time, the 2019 Global Assessment of the Intergovernmental Science-Policy Platform



*PHOTO BY Authors*

on Biodiversity and Ecosystem Services (IPBES) identified over-exploitation of wild species as one of the main drivers of current biodiversity loss. It is thus essential to protect wild species from the types of use that drive extinction and decline. This conundrum should focus our attention on important questions related to the use of wild species: can we stop the use of wild species and how would this affect the species in question and the people who currently use them? Are there other ways to achieve improved outcomes for people and wild species and how can the sustainable use of wild species contribute to these outcomes? What can we learn from past successes and failures involving the use of wild species?

For many Indigenous Peoples and Local Communities, the use of wild species is inextricably entwined in culture and identity. Even

more broadly in society, the use of wild species provides non-material contributions, by enriching people's physical and psychological experiences, including their religious and ceremonial lives. This means that the use of wild species fulfills many different human needs and that policies and decisions relating to such use will have consequences affecting health, food security, poverty alleviation and general well-being.

Human uses of wild species are not always destructive and there are many examples where wild species have depended on human use for their survival. This is becoming more apparent as we recognize that landscapes have been managed by people over thousands of years, even in areas we sometime perceive as wilderness. A good example is the decline of camas bulbs (*Camassia* spp) in North America after the ending of indigenous uses. There are also

noteworthy examples of successes in maintaining and restoring populations for long-term use, as well as instances where the use of wild species has prevented their habitats from being destroyed. For instance, women in Madagascar who depend for their household's livelihood on collecting oysters and cockles, are also the most directly concerned with the preservation of the mangroves in which these resources are grown. For a long time, they conserved certain sites and developed customary rules that have maintained sustainable use of mangroves, such as the implementation of harvesting seasons and the delimitation of zones shared between lineages and neighborhoods and sacred places that are prohibited for use.

These examples highlight that human societies have grappled with the use of wild species for millennia and many customs and practices still ensure sustainable use of key resources. However, the world is changing and these changes to the environment, society and economy may require novel responses and approaches.

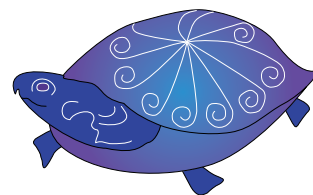
The complex social and environmental issues related to the use of wild species won't be solved by implementing simple and often ineffective policies. There have been numerous attempts to find policy and management solutions for the use of wild species at local, national and global scales. These range from local taboos to international agreements on whales, fisheries, timber, and endangered species as well as more general principles for sustainable use adopted by the Convention on Biological Diversity (CBD).

*At its core, the new IPBES assessment aims to provide a solution- and policy option- oriented approach to the sustainable use of wild species.*

The ongoing IPBES assessment on the sustainable use of wild species is a comprehensive and ambitious intergovernmental assessment that aims to build on previous assessments and to address the challenges faced by policymakers. The 'Sustainable Use of Wild Species Assessment' will assess status and trends in the use of wild species and their consequences for nature and nature's contributions to people; the main drivers of change; examine scenarios for the future; and critically evaluate the effectiveness of policies, governance systems and institutions for managing the sustainable use of wild species. At its core, the new IPBES assessment aims to provide a solution- and policy option- oriented approach to the sustainable use of wild species.

The IPBES 'Sustainable Use of Wild Species Assessment' will be published in 2022. The assessment currently comprises 87 experts from 45 countries, with backgrounds in the natural and social sciences and humanities. The first version of the report has already been the subject of online peer review and has received more than 3,000 comments from experts in all regions of the world. [IPBES Homepage] [Global Assessment Report on Biodiversity and Ecosystem Services (Assessment Report)] [Information on Deliverable 3(b)(iii) thematic assessment of the sustainable use of wild species]

Contact: [media@IPBES.net](mailto:media@IPBES.net)



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# INTERNATIONAL DAY OF THE WORLD'S INDIGENOUS PEOPLES 2019

By IPS World Desk - Rome, Aug 7 2019 - There are an estimated 370 million indigenous people in the world, living across 90 countries. They live in all geographic regions and represent 5000 different cultures. These people are inheritors and practitioners of unique cultures and ways of relating to others yet are being forced to give up their ways of life.

In Latin America, for example, 40% of all indigenous peoples now live in urban areas – they account for 80% of those populations in some countries. Globally, they represent 5% of the world's population, yet account for 15% of all of those in poverty.

Indigenous people speak an overwhelming majority of the world's 7000 languages. These languages are extensive and complex systems of knowledge that are central to their identity, their cultures, worldviews and expressions of self-determination.



Tragically, many indigenous languages are under threat, as we lose one of these languages every two weeks. According to UNESCO's Atlas Of The World's Languages In Danger, 230 languages went extinct between 1950 and 2010. Today, a third of the world's languages have fewer than 1,000 speakers left.

The 9th of August commemorates the International Day Of The World's Indigenous Peoples. This year's theme will focus on the current situation of indigenous languages around the world, aiming to highlight the critical need to revitalize, preserve and promote indigenous languages to safeguard the life of indigenous cultures for future generations.

# THREATENED

## DESERTIFICATION MORE DANGEROUS AND INSIDIOUS THAN WAR

by **DESMOND BROWN**

ANKARA, Jun 18 2019 (IPS) - Businesses are being encouraged to follow the lead of the youth to halt desertification, reduce degradation, improve agricultural sustainability and restore damaged lands.

“The youth is a very particular case. The youth give me a lot of hope because I see their passion, and I see their vision,” head of the United Nations Convention to Combat Desertification (UNCCD) Ibrahim Thiaw told IPS.

“For the youth it’s basically ‘I care for the planet, this is our future.’”

Each minute, 23 hectares of productive land and soil is lost to desertification, land degradation and drought, according to U.N. Environment.

Thiaw said when this happens young people are forced to leave their homeland, and most never return.

He said restoring land will help in reducing risks of irregular migration – a major component of population change in some countries.

According to a new U.N. Department of Economic and Social Affairs’ Population Division report launched on Monday, Jun. 17, between 2010 and 2020, 14 countries or areas will see a net inflow of more than one million migrants, while 10 countries will see a net outflow of similar magnitude.

“What is left for the young girl or young gentleman of Haiti if 98 percent of their forest have been degraded and they have barren hills that cannot generate food anymore? What is left for them to do but to flee?” Thiaw questioned.

“Therefore, restoring land would reduce migration, it will keep people on the ground, help them generate their own income and



*Grenada has been spearheading the fight against desertification at local, regional and global levels. Credit: Desmond Brown/IPS*

live their own lives. They don't want to leave their families. They migrate because they have no choice. So, restoring land is also bringing stability in our countries."

Like Haiti, Grenada – another Caribbean Community (CARICOM) member state – has seen its share of land degradation.

As countries observed World Day to Combat Desertification and Drought (WDCDD) on Monday, Jun. 17, Grenada's Minister of Agriculture and Lands Yolande Bain-Horsford said while soils and land continue to play an integral role in the economic shift the island nation is experiencing today, these resources are under threat.

"The agricultural sector is a major contributor

to national development through the provision of employment, household income, food and government revenues," Bain-Horsford told IPS.

"As we boast of the importance of this sector to our economies, unfortunately we must face the harsh reality of the challenges facing the sector, which include land degradation, lack of sustainable farming practices, climatic variations and droughts."

Bain-Horsford said Grenada has been spearheading the fight against desertification at local, regional and global levels.

Locally, the island nation has set ambitious targets to ensure it addresses and, in some cases, reverse the impacts of negative agricultural, construction, and other actions

which lead to desertification.

Some of the actions taken include the Cabinet approving Grenada's Voluntary Land Degradation Neutrality targets that should be achieved by 2030.

To achieve the targets, Grenada has agreed to;

- increase the fertility and productivity of 580 hectares of cropland by 2030,
- transform 800 hectares of abandoned cropland into agroforestry by 2030,
- implement soil conservation measures on 120 hectares of land by 2030,
- the rehabilitation of 383 hectares of degraded land at Bellevue South in Carriacou by 2030,
- the rehabilitation of 100 hectares of degraded forests in Grenada and Carriacou by 2030, and
- increase forest carbon stocks by 10 percent by 2030.

The island also completed and submitted its 2018 National Report on the state of land degradation, nationally linking it to gender and the Sustainable Development Goals 2030.

But Thiaw said land restoration cannot be left in the hands of governments alone, explaining that it will not be sufficient.

With two billion hectares of land in need of restoration, the UNCCD head said the best solution would be for the governments to not only mobilise communities, but to mobilise private investments.

"As long as business does not see that investing on land and restoring land is a good business case, it will not happen," Thiaw said.

"Governments will have to review some of the land tenure systems that they have. It may be just a concession saying if you restore this land, I will give you the concession over the

land for the next 50 years or for the next 60 years. Then they can harvest and they will leave the land restored rather than leaving it barren."

The government of Turkey is hosting three days of activities in observance of the 25th anniversary of the UNCCD and the WDCDD.

Turkey's Agriculture and Forestry Minister Bekir Pakdemirli said countries are facing a silent danger that constantly grows and threatens the planet.

"This danger is indeed more dangerous and more insidious than wars," he said. "This danger that takes our lands away, makes them unusable and risks our future is nothing but desertification."

Pakdemirli said just as desertification is a disaster that threatens the entire world regardless of national borders, degraded and destroyed lands pose a direct threat to the lives of people living on land-based activities.

He said these social problems sometimes force people to migrate, especially in countries such as Africa that are most affected by the consequences of desertification.

"Nobody wants to leave the land where they were born, grew up, and felt belonging to. Migration is a way to addressing the most desperate and needy situations," Pakdemirli said.

"In such cases, children and women are viewed as the most vulnerable category of victims. Therefore, before it is too late, we should take necessary measures before lands lose their productivity and become completely uninhabitable.

"While taking these measures, we must act in unison and adopt the principle that all lands around the world should be protected," Pakdemirli added.





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# SUSTAINABILITY

## UN'S DEVELOPMENT GOALS REMAIN LARGELY ELUSIVE

by THALIF DEEN

UNITED NATIONS, Jun 18 2019 (IPS) - The United Nations, in a new report to be released next month, has warned “there is no escaping the fact that the global landscape for the implementation of the 17 Sustainable Development Goals (SDGs) has generally deteriorated since 2015, hindering the efforts of governments and other partners”

And the commitment to multilateral cooperation, so central to implementing major global agreements, is now under pressure, says the 35-page report, due to be released ahead of the upcoming high-level political forum (HLPF) of the Economic and Social Council (ECOSOC), July 9-18.

The reasons for the roadblocks include a spreading economic recession, a decline in development aid, the diversion of funds into humanitarian emergencies, the widespread military conflicts, the growing economic losses from natural disasters, the downsizing of operations by cash-strapped UN agencies,

the rise of right-wing governments and the increasing challenge to multilateralism, among others.

The study says “it is cause for great concern that the extreme poverty rate is projected to be 6 percent in 2030, missing the global target to eradicate extreme poverty while hunger is on the rise for the third consecutive year.”

At the same time, biodiversity is being lost at an alarming rate with around one million species already facing extinction, many within decades while green-house gas emissions continue to increase.

Additionally, the required level of sustainable development financing and other means of implementation are not yet coming on stream and institutions are not strong or effective enough to respond adequately to these massive inter-related and cross-border challenges.

On gender empowerment, it says women represent less than 40 percent of those employed, occupy only about a quarter of



managerial positions in the world, and (in a limited set of countries with available data) face a gender pay gap of 12 percent.

About a fifth of those aged 15 to 49 experienced physical or sexual-partner violence in the last 12 months.

“There is simply no way that we can achieve the 17 SDGs without achieving gender equality and empowering women and girls,” the study declares.

Asked for his reaction, Jens Martens, director of the Global Policy Forum and coordinator of the Civil Society Reflection Group on the 2030 Agenda, told IPS: “The new UN report is a wake- up call to governments—and it clearly shows that most governments have failed to turn the proclaimed transformational vision of the

2030 Agenda into real policies”.

“We agree with the assessment that the commitment to multilateral cooperation is now under pressure. Even worse, national chauvinism and authoritarianism are on the rise in a growing number of countries,” he added.

But despite these gloomy perspectives, there are signs of change, said Martens.

In response to the failure or inaction of governments, world-wide social movements have recently emerged, mainly with young people and women in the lead.

The UN report clearly shows, that structural transformation is more needed than ever before. It requires strengthening bottom-up governance and governance coherence.

At global level, he said, the upcoming review

of the High-Level Political Forum next month should be used to overcoming the weakness of this body and transform it to a Sustainable Development Council.

Martens said enhancing governance coherence requires to give those institutions which are responsible for the implementation of the 2030 Agenda and the SDGs, the necessary financial resources and effective political and legal instruments.

At global level this requires to changing the recent course of relying on non-binding instruments and corporate voluntarism.

The SDG Summit, scheduled to take place at the United Nations September 24-25, and equally important, the 75th anniversary of the United Nations in 2020, will provide important opportunities to translate the calls of the emerging global movements for social and environmental justice into political steps towards a new democratic multilateralism, he added.

Chee Yoke Ling, Director of the Third World Network, told IPS the world is very far from meeting the sustainable development commitments, including the targets set under the Convention on Biological Diversity for the period 2011 to 2020, the Aichi Targets, that are integral to the SDGs.

There are promises of implementation, especially new and additional funding, that is a legal obligation of developed countries in various multilateral treaties, she added.

“The global cooperation forged in the 1992 Rio treaties on biodiversity, climate and combatting desertification were rooted in the principle of equity and common but differentiated responsibilities between developing and developed countries.”

She said 27 years later, multilateralism is under attack, with an erosion of all these principles and commitments.

“The Trump Administration is pushing the world into economic protectionism, while the resources of developing countries are now facing a new level of siphoning through digitalization,” she added.

From personal data to gene sequence information, a handful of transnational corporations once again seek aggressively to claim private property rights for profit, she warned.

Meanwhile, on relatively positive note, the report points out that progress is being made and some favorable trends on SDG implementation are evident.

Extreme poverty and child mortality rates continue to fall. Progress is being made against diseases such as hepatitis, where the incidence of new chronic HBV infections has been reduced considerably.

Certain targets regarding gender equality are seeing progress such as implementing gender responsive budgeting. Electricity access in the poorest countries has begun to increase.

Globally, labour productivity has increased and unemployment is back to pre-financial crisis levels. The proportion of the urban population living in slums is falling.

Still progress has been slow on many SDGs, “that the most vulnerable people and countries continue to suffer the most, and that the global response thus far has not been ambitious enough.”

Roberto Bissio, coordinator of Social Watch, told IPS the UN report does not mention that, according to its estimates, poverty is actually increasing in Sub-Saharan Africa, where nine out of ten people in extreme poverty will be living in 2030.

A closer look at the income growth of the bottom 40 and the national average, shows that for more than one third of the countries with data, the difference was of less than 0.5 percent, which rounds up to zero, considering the margin error of these measures.

Further, in one third of the countries, income of the bottom 40 actually decreased, making the poor poorer. In many of them the national average decreased even more, said Bissio.

“Is it fair to count those countries where the income of the poor was reduced less than the national average as meeting the promise of

- GOAL 1**    **END POVERTY**
- GOAL 2**    **END HUNGER**
- GOAL 3**    **WELL-BEING**
- GOAL 4**    **QUALITY EDUCATION**
- GOAL 5**    **GENDER EQUALITY**
- GOAL 6**    **WATER AND SANITATION FOR ALL**
- GOAL 7**    **AFFORDABLE AND SUSTAINABLE ENERGY**
- GOAL 8**    **DECENT WORK FOR ALL**
- GOAL 9**    **TECHNOLOGY TO BENEFIT ALL**
- GOAL 10**    **REDUCE INEQUALITY**
- GOAL 11**    **SAFE CITIES AND COMMUNITIES**
- GOAL 12**    **RESPONSIBLE CONSUMPTION BY ALL**
- GOAL 13**    **STOP CLIMATE CHANGE**
- GOAL 14**    **PROTECT THE OCEAN**
- GOAL 15**    **TAKE CARE OF THE EARTH**
- GOAL 16**    **LIVE IN PEACE**
- GOAL 17**    **MECHANISMS AND PARTNERSHIPS TO REACH THE GOALS**



target 10.1 to “progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average”?, he asked.

“While the UN Secretariat is to be commended for looking at the issues that really matter (like the scandalous growth of the income of the top 1 percent), the UN bodies that form the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) should take due note and re-formulate the framework they concocted in a way that is actually useful”.

The 2030 Agenda is explicit in mentioning that all countries should take action towards sustainable consumption and production (SDG 12), “with developed countries taking the lead”.

The Progress Report quotes UNEP’s “Global

Resources Outlook 2019” per capita average global figure of 12 tons of resources extracted per person in 2015 (up from 8 tonnes in 1990), but it fails to mention what the Outlook says in the following paragraph: “High-income countries consume 27 tons of materials (per capita) on average, which is 60 per cent higher than the upper-middle countries and more than thirteen times the level of the low-income group (at two tons per capita).”

By only providing global average figures, the Progress Report hides the responsibility of developed countries in current global unsustainability instead of encouraging them to take the lead.

The writer can be contacted at [thalifdeen@ips.org](mailto:thalifdeen@ips.org)

# CLIMATE CHANGE

## LOOKING TO THE LAND IN THE **CLIMATE CHANGE RACE** by YAKUPITIYAGE

UNITED NATIONS, Jun 26 2019 (IPS) - The international community still has a long way to go to chart a new, sustainable course for humanity. But the upcoming climate change meetings provide a renewed opportunity to tackle climate change head on.

Ahead of the United Nations Climate Action Summit in September, governments are gearing up to convene in Abu Dhabi for a preparatory meeting Jun 30 to Jul 1. The meeting is expected to have the highest official international participation since the Paris Agreement in 2015.

“This summit is a unique opportunity to make sure that climate is not perceived as an environmental issue... the summit allows us to bring climate into the overall agenda of development of a country,” said Special Envoy of the Secretary-General on the Climate Summit, Luis Alfonso de Alba.

“I think that’s the only solution for the climate. As long as we keep climate as an environmental issue, we will never achieve the level of transformation that is needed to deal with the problem and particularly to move to a different way in which we

consume and produce as a society,” he added.

During the Abu Dhabi climate meeting, governments will make concrete proposals for initiatives on various climate change related issues from finance to energy. An agenda, recommendations, and draft resolutions will then be presented and adopted during the September summit.

In recent years, the climate change debate has been largely focused on energy, particularly the use of fossil fuels. Most recently, European Union (EU) leaders failed to reach a consensus on how



*As the world's soils store more carbon than the planet's atmosphere, the restoration of soil and degraded land is therefore essential in the fight against climate change with a potential to store up to 3 million tons of carbon annually. Pictured here is a 2012 reclamation project of desertified, sandified land on either side of the Sudu desert road in Wengniute County, China. Credit: Manipadma Jena/IPS*

to make the EU carbon neutral by 2050 as coal-reliant countries rejected the proposal. This sparked protests across the continent, including a 40,000-strong rally at a German coal mine.

U.N. Secretary-General António Guterres also called for an end to new coal plants after 2020 as well as fossil fuel subsidies.

While such moves are essential to reduce greenhouse gas emissions, sustainable land management is another crucial aspect that is often overlooked.

According to the U.N. Convention to Combat Desertification (UNCCD), the land use sector represents almost 25 percent of total

global emissions. As the world's soils store more carbon than the planet's atmosphere, the restoration of soil and degraded land is therefore essential in the fight against climate change with a potential to store up to three million tons of carbon annually.

Agroforestry could be an essential tool to address land degradation and help communities to mitigate and adapt to climate change.

A land management system where trees and shrubs are grown together with crops and pasture, agroforestry has been found to provide numerous benefits including improved soil and water quality, increased

biodiversity, high crop yields and thus incomes, reduced greenhouse gas emissions, and increased carbon sequestration.

In Niger, agroforestry has helped restore five million hectares of land through the planting of 200 million trees. This has resulted in an additional half a million tons of grain production each year, improving climate change resilience and food security of an estimated 2.5 million people.

Such sustainable land management is therefore a potential low-hanging fruit for achieving nationally determined contributions (NDCs) under the Paris Agreement.

Already, 40 percent of developing countries propose agroforestry as a measure in their NDCs, including 70 percent of African countries.

However, current commitments for long-term climate action remain insufficient as it covers only one-third of emissions reductions required by 2030.

In fact, U.N. Special Rapporteur on extreme poverty and human rights Philip Alston that even if current targets are met, the world is still at risk of a

“climate apartheid” where the wealthy are able to pay to escape heat and hunger while the rest is left to suffer.

“Maintaining the current course is a recipe for economic catastrophe,” the U.N. expert said.

“States have marched past every scientific warning and threshold, and what was once considered catastrophic warming now seems like a best-case scenario. Even today, too many countries are taking short-sighted steps in the wrong direction,” Alston added.

De Alba echoed similar sentiments regarding the uneven commitment to climate action, stating: “If we are dealing and trying to improve the transition of energy, if we are concerned about land degradation and the protection of the forests, if we are all looking into innovation—I think we are all working for climate change whether we label it that way or not.”

Countries must therefore not only scale up their commitments, but also address and close existing gaps.

For instance, the Consultative Group on International Agricultural

Research (CGIAR) found that agroforestry is not included in countries’ measurement, reporting, and verification (MRV) systems, including the U.N. Framework Convention on Climate Change’s (UNFCCC) own systems.

If agroforestry remains excluded from MRV, its contributions to national and international climate objectives will remain invisible.

“If agroforestry trees aren’t counted in MRV systems, then in many ways they don’t count. Only if agroforestry resources are measured, reported and verified will countries gain access to the financial and other support they need to effectively include agroforestry in climate change adaptation and mitigation,” CGIAR said in a study, recommending the creation of guidelines for agroforestry reporting.

De Alba stressed the need for the international community to act quickly.

“Fighting climate change is compatible with growth, compatible with the fight against poverty...it is important that we continue the work from Abu Dhabi into the summit to get the best results.”



# POLICY

DFO: Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act

DFO are pleased to announce that the *“Policy for Applying Measures to Offset Adverse Effects on Fish and Fish Habitat Under the Fisheries Act”* (the Offsetting Policy) is now available on Fisheries and Oceans Canada’s (DFO’s) Projects near Water website. This Offsetting Policy reflects the most recent changes to the *Fisheries Act*, which came into force on August 28, 2019, as well as the *Fish and Fish Habitat Protection Policy Statement* (August 2019). It replaces the *“Fisheries Productivity Investment Policy: A Proponent’s Guide to Offsetting”*, which was used by our Fisheries Protection Program between 2013 and 2019 under the 2013 Fisheries Act.

The Offsetting Policy will help guide project proponents and their consultants in developing offsetting plans, as prescribed under the *Authorizations Concerning Fish and Fish Habitat Protection Regulations*, to counterbalance the adverse effects of projects impacting fish and fish habitat.

DFO will be working on the further modernization of the Offsetting Policy over the next year and will engage broadly as it does so. For more information, please contact us through our national Fish and Fish Habitat Protection Program email inbox.

Thank you!

Director General, Ecosystems Management  
Fisheries and Oceans Canada/ Government of Canada



Talking Stick by Anna Nibby-Woods

# MONITORING

## Global Geodetic Framework Helps Monitor Natural Disasters & **RISING SEA LEVELS**

by DE VASS GUNAWARDENA

UNITED NATIONS, Aug 9 2019 (IPS) - There are several initiatives in place to foster sustainable development– and the Global Geodetic Reference governance frame is one that has proved effective.

“This proposed governance framework, the establishment of a Global Geodetic Centre of Excellence (GGCE), will strengthen all Member States – as global geodesy is fundamental to sustainable development,” Anne Jørgensen, Senior Strategic Communications Advisor for the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM), told IPS.

“Global warming is the defining issue of our time,” Anne Gueguen, Deputy Permanent Representative of France to the United Nations said at a panel discussion August 6 organized by the UN-GGIM and the Subcommittee on Geodesy.

“We are in a race against time for the survival of human life on the planet as we know it, and that this global challenge can only be met by universal global efforts.”

Since its inception, the UN-GGIM has recognized the growing demand for more precise positioning services, the economic importance of a global geodetic reference frame and the need to improve the global cooperation within geodesy, according to its website.

UN-GGIM created a Working Group for a Global Geodetic Reference Frame (GGRF), which formulated and facilitated a draft resolution for a Global Geodetic Reference Frame (GGRF), adopted by UN-GGIM in July 2014 and the UN Economic and Social Council (ECOSOC) in November 2014.

On 26 February 2015, the UN General Assembly adopted a resolution on Global



*IPS PHOTO*

Geodetic Reference Frame for Sustainable Development that was led by the Republic of Fiji.

The Global Geodetic Reference Frame (GGRF) is a generic term describing the framework which allows users to precisely determine and express locations on the Earth, as well as to quantify changes of the Earth in space and time

Data from the National Aeronautics and Space Administration (NASA) Gravity Recovery and Climate revealed that Greenland alone lost an average of 286 billion tons of ice per year between the years 1993 and 2016, while Antarctica lost about 127 billion tons of ice per year during the same time frame, and that the

rate of Antarctica ice mass loss has tripled in the last decade.

Record high temperatures, mass rainfall, and rising sea levels are occurring at unparalleled rates as well.

The Geodetic framework seeks to support the increasing demand for positioning, navigation, timing, mapping, and geoscience applications, and thus is an irreplaceable asset for reliable information on changes on Earth such as natural disaster management, rising sea levels, climate change, and information for decision-makers.

The UN- GGIM hopes to establish a Global Geodetic Centre of Excellence as well, in order

to support the frame and cites that it will “act as a GGRF operational hub” that will support the objectives of the UN- GGIM – to enhance global cooperation, provide technical assistance and capacity building.

However, there are challenges surrounding the framework itself, such as degradation, a lack of open data sharing, and halted development and maintenance due to a lack of global coordination.

“Open data sharing is fundamental to science applications and also alignment to the global reference frame,” Zuheir Altamimi, Researcher at the Institut National de l’Information Géographique et

Forestière (IGN) said during the panel discussion, pointing to a map that highlighted data gaps in Africa, East and South East Asia, and South America.

“It means that data is not shared,” Altamimi noted, concluding “we need to share data in order to maintain the global geodetic framework.”

“Global geodesy lacks global coordination.” Laila Løvhøiden, Deputy Director at Kartverket added. To tackle this, the UN GGIM and Subcommittee has proposed solutions, including a revised position paper and the Geodetic Centre.

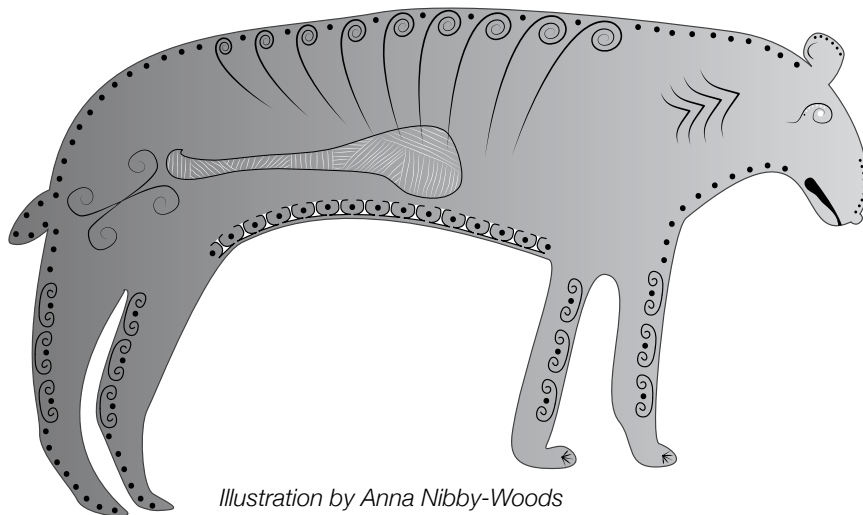
“The Global Geodetic Centre of Excellence would provide the coordinating role that is key to creating synergy,” Francisco

Javier Medina Parra, Director of the Geodetic Framework at National Institute of Statistics and Geography (INEGI) added.

People at home can also help sustain the framework. “There’s also a need for the broader community to communicate to policymakers and the political class how much we actually rely on these things in our day to day lives,”

Gary Johnston, Co- Chair of the UN- GGIM Subcommittee on Geodesy told IPS, that no one country can do this alone, and that we need all countries and member states to contribute “in any way that they can, and concluded that everyone has a role and everyone can benefit from it.”

Story Credit: by Lakshi De Vass Gunawardena, United Nations, August 2019, Inter Press Service News Agency - ipsnews.net



# GEF



The Global Environment Facility (GEF) is a unique international partnership of governments, international institutions, civil society organizations (CSOs), Indigenous Peoples, and the private sector that supports actions to protect the global environment.

The GEF finances activities that developing countries undertake to address drivers of global environmental degradation and to fulfill their commitments under several global environmental conventions, including the United Nations (UN) Convention on Biological Diversity (CBD), the UN Framework Convention on Climate Change (UNFCCC), the Stockholm Convention on Persistent Organic Pollutants (POPs), the UN Convention to Combat Desertification (UNCCD), and the Minamata Convention on Mercury.

Indigenous Peoples' traditional knowledge and ecosystem management practices are recognized by the GEF as highly relevant for protection of the global environmental commons, environmental management, sustainable development, and increased resilience.

The GEF sees Indigenous Peoples as distinct communities whose identity and culture are inextricably linked to the land, territories and natural resources they depend upon.

Through its operations and policies, the GEF supports the realization of the provisions of the United Nations Declaration on the Rights of Indigenous Peoples.

# NUCLEAR TESTING

## Close the Door **ON NUCLEAR TESTING**

by DARYL G. KIMBALL

WASHINGTON DC, Aug 28 2019 (IPS) - Everybody knows that nuclear weapons have been used twice in wartime and with terrible consequences. Often overlooked, however, is the large-scale, postwar use of nuclear weapons:

At least eight countries have conducted 2,056 nuclear test explosions, most of which were far larger than the bombs that leveled Hiroshima and Nagasaki. The United States alone has detonated more than 1,030 nuclear explosions in the atmosphere, underwater, and underground.

Hundreds of thousands of people have died and millions more have suffered from radiation-related illnesses directly caused by the fallout from nuclear testing. The global scale of suffering took too long to come to light.

Secrecy ruled over safety from the start, such as 70 years ago, on Aug. 29, 1949, when the

Soviet Union conducted its first nuclear test in eastern Kazakhstan near the secret town of Semipalatinsk-21.

Authorities understood that the test would expose the local population to harmful radioactive fallout, but they pushed ahead in the name of national security, only acknowledging the damage after information leaks in the late-1980s revealed that far more people were exposed to radiation, with more harmful effects, than the Kremlin had previously admitted.

Today, the Kazakh government estimates that Soviet-era testing harmed about 1.5 million people in Kazakhstan alone. A 2008 study by Kazakh and Japanese doctors estimated that the population in areas adjacent to the Semipalatinsk Test Site received an effective dose of 2,000 millisieverts of radiation during the years of testing.

In some hot spots, people were exposed



*Daryl Kimball, Executive Director of the Arms Control Association, outside the P-1 area at the Semipalatinsk Test Site in Eastern Kazakhstan, August 2018.*

to even higher levels. By comparison, the average American is exposed to about 3 millisieverts of radiation each year. The rate of cancer for people living in eastern Kazakhstan is 25 to 30 percent higher than elsewhere in the country.

By 1989, growing concerns about the health impacts of nuclear testing led ordinary Kazakh citizens to rise up and demand a test moratorium. They formed the Nevada-

Semipalatinsk anti-nuclear organization.

The grassroots movement grew, and popular pressure against testing surged, prompting the Kazakh political establishment, including then-president of Soviet Kazakhstan, Nursultan Nazarbayev, to finally shut down all nuclear testing at Semipalatinsk on Aug. 29, 1991.

On Oct. 5, 1991, Soviet President Mikhail Gorbachev

announced a one-year nuclear test moratorium, which led a bipartisan U.S. congressional coalition to introduce legislation to match the Soviet test halt. In 1992 the bill became law over the protestations of President George H.W. Bush.

The following year, under pressure from civil society leaders and Congress, President Bill Clinton decided to extend the moratorium and launch talks on the global, verifiable Comprehensive Test

Ban Treaty (CTBT), which were concluded in 1996.

The CTBT has established a powerful taboo against nuclear testing. Global support for the treaty, which now has 184 state signatories, is strong, and the treaty's International Monitoring System is fully operational and more capable than originally envisioned.

Today, for the first time since 1945, no nuclear-armed state has an active nuclear testing program.

Yet, the door to further nuclear testing remains ajar. Although the treaty has been signed by 184 states, its entry into force is being held up by eight states, most notably the United States, China, and North Korea, which have refused to ratify the pact.

Making matters worse, the Trump administration has accused Russia of cheating on the CTBT without providing evidence, has falsely asserted there is a lack of clarity about what the CTBT prohibits, and has refused to express support for bringing the CTBT into force.

Given their existing nuclear test moratoria and signatures on the treaty, Washington and Beijing already bear most

CTBT-related responsibilities. But their failure to ratify has denied them and others the full security benefits of the treaty, including short-notice, on-site inspections to better detect and deter clandestine nuclear testing.

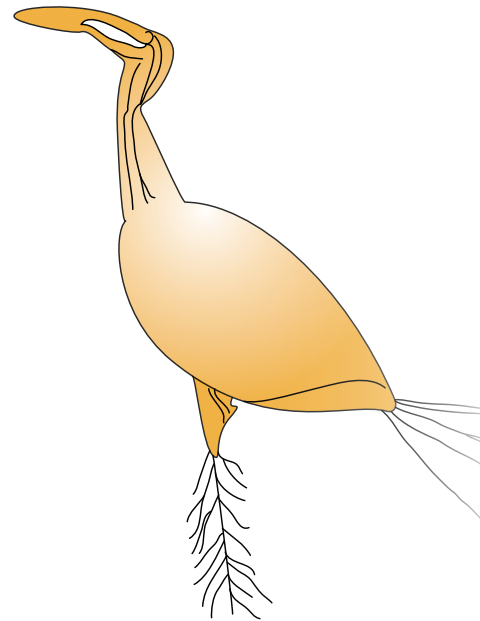
The treaty's entry into force also would prevent further health injury from nuclear testing and allow responsible states to better address the dangerous legacy of nuclear testing. In Kazakhstan, for example, access to the vast former test site remains restricted. Many areas will remain unusable until and unless the radioactive contamination can be remediated.

In the Marshall Islands, where the United States detonated massive aboveground nuclear tests in the 1940s and 1950s, several atolls are still heavily contaminated, indigenous populations have been displaced, and some buried radioactive waste could soon leak into the ocean.

The U.S. Congress should act to include the downwinders affected by the first U.S. test in 1945 in the health monitoring program established through the Radiation Exposure

Compensation Act of 1990.

For the safety and security of future generations and out of respect for the people harmed by nuclear testing, our generation must act. It is time to close and lock the door on nuclear testing by pushing the CTBT holdout states to ratify the treaty and address more comprehensively the devastating human and environmental damage of the nuclear weapons era.



*Illustration by Anna Nibby-Woods*



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# PROTECTING

## What Would It Really Take to Plant a **TRILLION TREES?** by TIM CHRISTOPHERSEN

Tim Christophersen is Head of the Freshwater, Land and Climate Branch at UNEP and Chair of the Global Partnership on Forest and Landscape Restoration - Aug 26 2019 (IPS) - Tree planting is capturing the minds of those who look for fast climate action. Earlier this month, the Ethiopian Government announced a new world record: thousands of volunteers planted 353 million trees in one single day. This came shortly after a team of scientists identified suitable places in the world where up to 1 trillion new trees could be planted. Such a massive effort could absorb about 20 years' worth of global greenhouse gas emissions. And on 8 August 2019, the Intergovernmental Panel on Climate Change launched a Special Report on the importance of land use for the climate. About 23 per cent of all emissions come from the agriculture, land use and forest sector. The Intergovernmental Panel on

Climate Change outlines land management opportunities with benefits for food security, biodiversity, and the climate, such as agroforestry.

The growing enthusiasm for forests and trees is a good thing. Ecosystem restoration will be critical in turning the tide against climate change, and achieving the Sustainable Development Goals. But we need to be mindful of some pitfalls lurking along the way. We have learned valuable lessons over the past decades in afforestation and other restoration projects across dozens of countries. A few basic principles outlined by the Global Partnership on Forest and Landscape Restoration can help us to reduce costs and minimize future risk as the world embraces the need to plant more trees.



Photo by Unsplash

## **STOP THE BLEEDING**

The first rule for ecosystem restoration is to stop the further destruction of forests, wetlands, and other critical ‘green infrastructure’. Conserving natural habitats is always cheaper than restoring it later.

## **MOST NEW TREES DO NOT NEED TO BE PLANTED**

Most ecosystems in the

world have remnant seeds in the soil and natural regrowth can be cheaper and more successful than tree planting. The most cost-effective type of restoration is to work with the forces of nature. For example, across the Sahel, a successful and fast landscape restoration technique is called ‘farmer-managed natural regeneration’. It uses the existence of remnant root stocks below the surface,

where the trees above ground have disappeared long ago. Farmers nurture those roots and trees back to life. The results are stunning—within a few years, large trees dot the surface of the once barren and dry savannah, bringing back water, productivity and life.

## **WE DON'T NEED TO REINVENT THE WHEEL**

There is already an

impressive body of knowledge on which trees to plant, when and where. Under the Bonn Challenge, a global restoration goal initiated by the International Union for Conservation of Nature and the Government of Germany, 59 governments, private associations and other entities have pledged to bring 170 million hectares into restoration by 2020, and 350 million by 2030. Dozens of countries have already detailed maps of where the best restoration opportunities can be found, and how to restore forests and landscapes. Usually, indigenous tree species are preferable, but in a rapidly changing climate, we need to keep in mind that the natural ranges of trees are shifting.

### **SOCIAL INCLUSION IS ESSENTIAL**

Forest and landscape restoration is mostly about social transformation, rather than technological solutions. However, this transformation is hard work and requires patience. It is tempting to just stick a few tree seedlings in the ground and hope for the best, but real restoration across an entire landscape

is the work of years or even decades. Large-scale restoration successes such as the Shinyanga landscape in Tanzania or the Loess Plateau in China have shown that results of well-planned restoration can yield very high returns for society over a long time.

### **WE MUST REMOVE THE BOTTLENECKS**

Some ingredients for success are essential, and their availability varies across countries. The most important one is political will. Fortunately, political will is now growing as protests for more climate action are spreading. Another major ingredient is clarity over ownership and management rights. The estimated 1 billion smallholder farmers in the world will be key. We need to empower them, and give them access to the tools and the finance for improved farming, such as agroforestry. A third key ingredient is availability of a variety of high-quality tree seedlings, in particular for planting trees on farms.

Finally, perhaps the most critical ingredient are massive public and private investments

into land restoration. We need to achieve a similar trajectory for a shift in agriculture and forestry as is happening in renewable energy. And just like the shift in renewables, it will take a massive push from both public and private actors to establish restoration as a new financial asset class. It is estimated that every dollar invested in ecosystem restoration can yield more than US\$10 in return through ecosystem services. Fortunately, we see growing interest from the finance industry to invest in ecosystem restoration and regenerative agriculture.

Ecosystem restoration and other nature-based climate solutions will be highlighted at the UN Climate Action Summit on 23 September. And the UN General Assembly has just proclaimed a UN Decade on Ecosystem Restoration from 2021 to 2030. With the right approach, we can make the conservation and restoration of ecosystems, including the planting of billions of new trees, a major step in building the sustainable future we all want.



World-renowned musicians release a song to inspire actions to reverse the failing health of the land

The official release of the song and video will take place on World Soil Day as a reminder that soil is a vital part of the land that is the basis for human health and livelihoods, and our economic, cultural and spiritual well-being.

Today, more than a quarter of previously productive land, globally, is degraded, and most of this degradation has occurred over the last 50 years. Although countries affected by land degradation are taking actions to reverse these trends, the active engagement of the global public is lagging.

Video link: [https://unccd-my.sharepoint.com/:v/g/person/pcamara\\_unccd\\_int/EYNSZ5cgbLBCh6fbThLL\\_C8BmWGCllrAkqgQl01gbzUNJQ?e=xULZSe](https://unccd-my.sharepoint.com/:v/g/person/pcamara_unccd_int/EYNSZ5cgbLBCh6fbThLL_C8BmWGCllrAkqgQl01gbzUNJQ?e=xULZSe)

#### CONTACT:

For information about distribution of the song contact: [hkarsten@unccd.int](mailto:hkarsten@unccd.int)

For information about the Land Ambassadors contact: [yhori@unccd.int](mailto:yhori@unccd.int)

For any media inquiries contact: [press@unccd.int](mailto:press@unccd.int)

#### About UNCCD

The UNCCD is an international agreement on good land stewardship. It helps people, communities and countries to create wealth, grow economies and secure enough food and water and energy, by ensuring land users have an enabling environment for sustainable land management. Through partnerships, the Convention's 197 Parties set up robust systems to manage drought promptly and effectively. Good land stewardship based on a sound policy and science helps integrate and accelerate the achievement of the Sustainable Development Goals, builds resilience to climate change and prevents biodiversity loss.

# CAUTION

## The Arctic: EARTH'S LAST FRONTIER

by LUNDIUS

STOCKHOLM / ROME, Aug 29 2019 (IPS)  
- The last frontier for utilizing and maybe even exhausting Earth's natural resources is opening up in the Arctic and some of the world's wealthiest nations are trying to secure their piece of the cake. Some act openly, others are more secretive – recently one of the competitors entered the game in a remarkably unwieldy manner.

Lysekil is a picturesque town by Skagerak, a strait between Sweden, Denmark and Norway, opening up to the North Sea. For many years its main income came from salted herring and train oil, while it during the 19th century developed into a popular spa and bathing resort. Most Swedes know Lysekil as the birthplace of Kalle's Caviar a popular sandwich spread of creamed smoked roe produced by Abba Seafood, a

brand that provided the name for a Swedish pop group of world renown.

Many Swedes were astonished when Gunter Gao Jingde, chairman of a Hong Kong private investment company, Sunbase International (Holdings) Ltd., gave the city council of Lysekil an offer they did not refuse. Sunbase was established in 1991 and is active in property investment, transport, infrastructure and technology. It was in late November 2017 that Sunbase's long-running and secretive negotiations with members of Lysekil's city council were revealed. At this tiny community of 7,500 inhabitants Gunter Gao Jingde's representatives proposed the construction of Scandinavia's largest port. Town officials accepted the offer without any public consultation. Under Swedish law, the power to approve such projects



IPS PHOTO

is entirely in the hands of the local municipalities and cannot be challenged from above. Lysekil's city council was tempted by a generous offer that did not only include an expansion of the town harbour, making it deep enough to receive huge vessels from all over the world. On top of that, Sunbase promised to expand the road net and railway system reaching Lysekil, bridging the nearby

fjord of Gullmarn and invest in schools, hospitals and care for the elderly.

It was a reportage aired on Swedish national radio that alerted the people of Lysekil. Several of them declared that their elected representatives had taken them for a ride. The chairman of the City Council vented his anger over these "exaggerated protests". After all, he and his colleagues had negotiated a deal

with a foreign, private firm promising a bright future for Lysekil and he pointed out that VOLVO, the Swedish prestigious car manufacture in neighbouring Gothenburg, was a subsidiary of the Chinese motor company Geely. However, local protests became even more vociferous when it was revealed that Gao Jingde was not only a member of the small-circle Election Committee which selects the Chief Executive of the Hong

Kong Special Administration Region Government of the People's Republic of China and since 1993 also a member of the Chinese People's Political Advisory Conference a legislative advisory body of the People's Republic of China. Furthermore, Sunbase is closely connected with the Chinese military establishment, among other things it owns the 18 Hong Kong land areas occupied by military installations and Gao Jingde has personally financed the publication of various books about China's military forces.

Local opponents to the sale of Lysekil's harbour became particularly upset when they could not be provided with any concrete guarantees that the planned port would not serve any Chinese military interests. Petitions signed by a long list of opponents to the Chinese deal was submitted to Lysekil's city council and while facing negative publicity and local anger Sunbase finally called off the entire venture. 1

Why would China be interested in purchasing a port from a small, Swedish town and turn it into a huge state-of-the-art seaport structure? Most

commentators agree that the initiative was probably related to the Chinese Government's global strategy of infrastructure development and worldwide investment – The Belt and Road Initiative. The Lysekil port would become one link in what has been referred to as the Polar Silk Road, which through Chinese controlled ports and industrial hubs would be connected with a Pan-Asian Silk Road. From a transport point of view such an Arctic thoroughfare makes sense since sailing a container ship from China to northern Europe via the Arctic Sea north of Russia would shorten the alternative journey time via the Suez canal by 10 days.

However, this is probably not the only reason for China's interest in the Arctic realms. Climate change and global warming are currently opening up access to Arctic riches, wetting the appetite of nations bordering the Arctic sea, and not only them – China has demonstrated a great interest in the untapped resources that have laid frozen and inaccessible in the distant north. The Arctic conceals huge deposits of minerals as well as an estimated 13 percent of the

world's oil reserves and 30 percent of the natural gas reserves.

Into this sensitive web of delicate, diplomatic maneuvers and carefully constructed plans for future exploitation of the Arctic U.S. President Donald J. Trump now has entered like an elephant in a porcelain shop, or as the Danish Newspaper Berlingske described his appearance – a clown stumbling into a circus ring. While the Danes were preparing for a state visit of the American President he suddenly offered to buy Greenland from them, declaring:

Essentially it's a large real estate deal. A lot of things can be done. Ownership of Greenland is hurting Denmark very badly because they're losing almost \$700 million a year carrying it. 2

The Danish Government was flabbergasted, the Royal Court scandalized and the Greenlanders horrified, one of them, Else Mathiesen told local media:

You can't just buy an island or a people. This sounds like something from the era of slavery and colonial power. 3

The Danish Prime Minister stated:



Greenland is not for sale. Greenland is not Danish. Greenland belongs to Greenland. I strongly hope that this is not meant seriously. 4

An undeterred Trump replicated:

Denmark essentially owns it [Greenland]. We're very good allies with Denmark, we protect Denmark like we protect large portions of the world. So the concept came up and I said "Certainly I'd be strategically interested," and we'd be interested, but we'll talk to them a little bit." It's not No1 on the burner, I can tell you that. 5

After the debacle a deeply hurt Trump canceled his visit to Denmark, declaring:

I thought the prime minister's statement that it was an absurd idea was nasty.

It was not a nice way of doing it. She could have just said, "No, we'd rather not do it." She's not talking to me, she's talking to the United States of America. They can't say: "How absurd." 6

Trump's ungainly

behaviour has ripped open a sensitive scare. Greenland was until 1953 a Danish colony. In 1979, the Danish government granted home rule to the vast territory and in 2008 agreed to allow Kalaallit Nunaat, as it is called in Inuit, to gradually assume responsibility for policing, jurisdiction, mining and border control, while the Danish government retains its control of foreign affairs and defense. However, an increasing confidence fuelled by prospects of controlling the vast natural resources of the Arctic Sea make many of Greenland's 55,000 inhabitants, the majority of them Inuit, favouring full independence from Denmark and Trump's lack of diplomatic skills and ignorance of people's rights have reignited the debate.

Like during the late 19th century's "scramble for Africa", world powers are now in for a race to control riches that actually belong to others. A competition incited by greed and recklessness that may prove harmful to indigenous peoples, the environment and even world peace, in particular if

stakeholders express dated opinions and behave with the blatant brutality of the current U.S. President.

1 Olsson, Jojje (2017) "Sanningen bakom Kinas miljardinvestering i Lysekil." Fokus, December 29. Sunbase closed the negotiations on the 30th of January 2018: "Ingen kinesisk hamn i Lysekil", Göteborgsposten, 30 January, 2018.

2 Pengelly, Martin (2019) "Trump confirms he is considering attempt to buy Greenland," The Guardian, 18 August.

3 Ibid.

4 Ibid.

5 Tisdall, Simon (2019) "Trump's bid to buy Greenland shows that the 'scramble for the Arctic' is truly upon us," The Guardian, 24 August.

6 Ibid.

Jan Lundius holds a PhD. on History of Religion from Lund University and has served as a development expert, researcher and advisor at SIDA, UNESCO, FAO and other international organisations.

## The IPCC's Special Report on Oceans and Cryosphere – What it means for Africa's **COASTAL CITIES**

by KATE STRACHAN

Kate Strachan, Professional Officer for Climate Change and Coastal Management at ICLEI Africa, reflects on what the IPCC's latest Special Report means for Africa's low-lying coastal cities. Oct 15 2019 (IPS) - The latest Intergovernmental Panel on Climate Change (IPCC) Special Report on Oceans and Cryosphere in a Changing Climate highlights the urgency of prioritising ambitious and coordinated actions to address the unprecedented and continuing changes that are taking place in the ocean and cryosphere (Earth's frozen lands).

The Special Report highlights the importance and associated benefits of limiting global warming to the lowest possible level, by meeting the 1.5oC temperature goal that governments set themselves in the 2015 Paris Agreement.

Reducing greenhouse gas emissions will limit the scale of changes that the ocean and cryosphere will experience. In a 1.5oC future, the consequences for ecosystems and the communities that depend on them will still be challenging, but potentially more manageable – compared to higher levels of warming. Global average surface temperatures have already risen by 1oC since preindustrial times.

*For African coastal cities, sea level rise and increasing storm frequency and intensity pose serious threats to residents, and their transportation, water, housing, energy, and infrastructure requirements. Cities face difficult choices under changing climate patterns and highly constrained public financing*

The report talks about the benefits of ambitious and effective adaptation for sustainable development and, on the contrary,



*A coastal city, Sierra Leone's capital, Freetown, is an area where people have relied on the ocean for food and employment for as long as they have lived there. Credit: Travis Lupick/IPS*

the risks of delayed action.

Globally, sea level rose approximately 15 cm during the 20th century. Currently, it is rising more than twice that fast (3.6 mm per year), and accelerating. As I think of the work we do at ICLEI Africa, I ask: what does this mean for African coastal cities?

### **AFRICAN CITIES FACE WIDESPREAD EXPOSURE TO SEA LEVEL RISE**

The reality is that the West, Central, East and Mediterranean coastal zones in Africa are very low-lying. Within these low-lying coastal zones are many of Africa's largest cities:

Dakar, Abidjan, Accra, Lagos, Dar es Salaam, Alexandria, Tripoli, and Cape Town.

These coastal cities are characterised by large populations, significant economic activity, dense transportation networks, as well as being places that support extensive coastal tourism.

Unfortunately a number of socio-economic impacts need to be taken into consideration, these include potentially being forced to move settlements, shifting ports and navigational facilities, the loss of infrastructure and disturbance to coastal fishery and tourism operations.

The associated impacts could impose unbearable pressure on Africa's already hard-pressed economies. The report outlines additional climate-related risks and challenges that people around the world are exposed to today and that future generations will face.

Furthermore, the report calls for the establishment of city coastal management policies and plans that include phased disengagement from the coast, where practicable, and the enforcement of setback lines. City networks like ICLEI have a vital role to play in advocating for cities to reduce greenhouse gas emissions, protect and restore their coastal ecosystems, carefully manage the use of natural resources, limit climate related risks to livelihoods, and to look for opportunities that support adaptation to future changes that also offer societal co-benefits for example through our Coastal City Adaptation training programme.

In addition, ICLEI works with its partners to explore important nature-based solutions for tackling associated challenges (find out more via the UNA Coasts website).

The IPCC's Special Report on Oceans and Cryosphere highlights the importance of education and provides evidence of the benefits of combining scientific knowledge with local/indigenous knowledge to develop appropriate management actions for climate change risks and enhanced resilience.

We all have a role to play in ensuring both national and local government decision-makers are equipped with the necessary tools that can be used to mainstream, or integrate, adaptation into existing decision-making and appraisal processes, and have access to the science needed to support these decisions.

Mainstreaming the concepts of adaptation and resilience into city decision making

processes and, thus, extending beyond the usual urban governance practices is difficult. In order for local government officials to make sound decisions in the face of uncertainty will require new and dynamic decision-making approaches and planning processes.

## **CLIMATE CHANGE ADAPTATION SHOULD BE MORE CENTRAL IN DEVELOPMENT PROCESSES**

Actions used by national and local governments to address climate change and development need to be complementary and reinforce one another. Furthermore, in order for adaptation strategies to be applicable to current and future challenges, they need to be seen as learning and adaptive processes.

Adaptation cannot be seen as a once off intervention, but rather a continuous process that evolves as new information becomes available and conditions change.

The IPCC Special Report presents a number of options to adapt to changes that are unavoidable, discussed how to manage associated risks and build resilience for a sustainable future. The assessment highlights that adaptation depends on the capacity of individuals and communities and the availability of resources.

## **EXTREME WEATHER EVENTS ARE ON THE RISE, AND LOW-LYING COASTAL CITIES ARE HIGHLY EXPOSED**

Cities and their surrounding areas serve as engines of regional and national economic growth, but they also amplify climate-related risk by virtue of their population density, concentration of critical infrastructure, and other high-value economic assets. More people and more assets are exposed to climate hazards.

The ocean drives our climate and weather and a warmer ocean means an increase in

frequency and intensity of extreme events such as cyclones, wind and rainfall, which in turn increases coastal erosion and flooding impacts. The recent cyclones experienced in Mozambique highlight such devastating effects.

Warmer oceans impact negatively on coral reefs, important for tourism and job creation. It is predicted that an increase of 1.5 degrees could cause coral reefs to decline by 70 to 90 percent.

For African coastal cities, sea level rise and increasing storm frequency and intensity pose serious threats to residents, and their transportation, water, housing, energy, and infrastructure requirements. Cities face difficult choices under changing climate patterns and highly constrained public financing.

### **DIVERSE, RELIABLE SOURCES OF FUNDING ARE NEEDED TO HELP CITIES BRACE FOR CLIMATE CHANGE**

Accessing finance remains a critical challenge for the implementation of policies and plans that enable climate change adaptation.

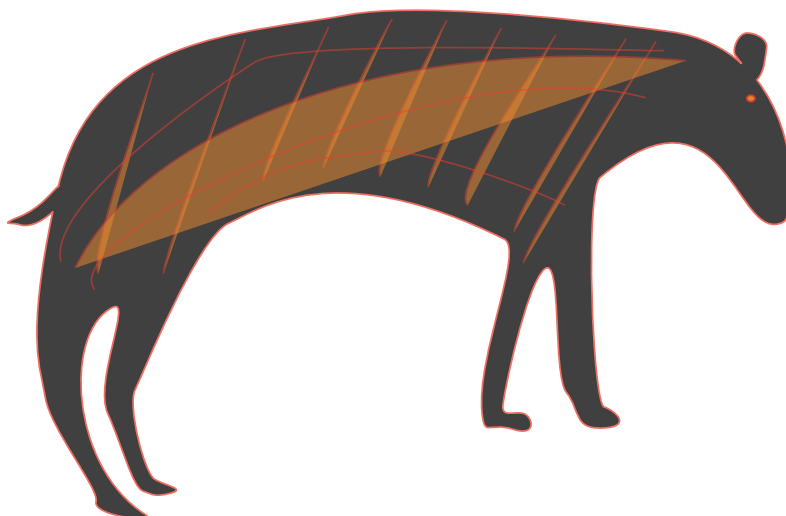
The required financial flows for the implementation of adaptation plans and their enabling policies can and should be sought from a variety of sources, spanning local, national and international resources, as well as private, public and philanthropic facilities.

Another critical role is therefore to support government authorities to explore innovative ways in which they could secure financial resources for adaptation. An avenue to secure investment to fund coastal adaptation may be to demonstrate and promote the value of the coastal zone and more specifically coastal natural assets in supporting public priorities such as poverty alleviation, economic development and job creation.

The predicted impacts in this report are serious and relate to all aspects of life. Whether you reside near or far from the ocean, consume seafood or not, this report reiterates the need for a healthy ocean to survive. We need to act now to ensure our and our children's future.

*This opinion editorial was originally published by The Climate and Development Knowledge Network*

Story Credit: by Kate Strachan, Oct 15 2019, Inter Press Service News Agency - ipsnews.net



# GOVERNANCE

## UN's 75th Anniversary Shadowed by Right-Wing Nationalism, Widespread Authoritarianism & BUDGETARY CUTS

by THALIF DEEN

UNITED NATIONS, Oct 17 2019 (IPS) - When the six much-ballyhooed high-level UN meetings concluded late September, there were mixed feelings about the final outcomes.

And civil society organizations (CSOs), who were mostly disappointed with the results, are now gearing themselves for two upcoming key climate summit meetings: COP25 in Santiago, Chile in December and COP26 in Glasgow, UK in late 2020, along with the 25th anniversary of the Beijing Women's Conference scheduled to take place in September 2020 in New York.

But perhaps the most politically-significant event in 2020 will be the 75th anniversary of the United Nations which will take place amidst continued threats against multilateral institutions, rising right-wing nationalism, growing authoritarianism and widespread disinformation.

The anniversary will also take place in the shadow of one of the worst financial crises facing the world body – as Secretary-General Antonio Guterres warned that “the situation remains dire. And without immediate action, I can no longer guarantee the smooth functioning of the Organization.”

“I urge you to help put the United Nations on a solid financial footing,” he pleaded last month before the 134 members of the Group of 77 developing countries, plus China.

Sesheeni Joud Selvaratnam, Sustainable Development Goals and Agenda 2030 lead at ActionAid, told IPS the United Nations is marking its 75th anniversary next year against a backdrop of rising global hunger, the climate crisis and an unravelling of progress towards social justice and equality.

“It's not too late to get the Sustainable



*Antonio Guterres*

Development Goals back on track, but the 2020 global summits must see political will and leadership that translates into real action on the ground.

“States turning up and making commitments at the High-Level Political Forum and UN General Assembly isn’t enough. Governments must be held accountable to their citizens on implementing and delivering on their promises by 2030, and ensuring the most vulnerable are not left behind,” said Selvaratnam.

Jens Martens, executive director of Global Policy Forum (New York/Bonn), told IPS the summits have put the UN back at the centre of the global debates on future justice.

At least, many Heads of State and Government have recognized the climate emergency and the importance of sustainable development by participating in the summits.

“They have launched countless new initiatives to implement the SDGs. This is of course better than the destructive policies of Trump, Brazil’s Bolsonaro & Co,” he noted.

But, being present at the summits, making nice speeches, dating Greta Thunberg, and expressing understanding for the concerns of young people is not enough, he added.

“As long as governments do not change fundamentally the framework conditions of

sustainable development, this will remain symbolic policy and sometimes pure activism.”

The summits were once again summits of announced actions. But the world does not need more hypocritical promises and announcements, he pointed out.

“It needs political decisions that make fiscal policies fairer, bring global economic and monetary policy into line with SDGs and human rights, and rapidly accelerate the exit from the fossil fuel economy”, said Martens, who has coordinated the international Civil Society Reflection Group on the 2030 Agenda for Sustainable Development.

In an op-ed piece for IPS last week, Kul Gautam, a former UN Assistant Secretary-General said: Everybody says UN needs reforms. But the kind of reforms that are proposed by Member States are often timid and inadequate, and in the case of those proposed by some, e.g. the Trump administration, they are actually harmful and contrary to the multilateral ethos of the United Nations.

Such proposals are unlikely to command broad-based support, he warned.

It is time for the Secretary-General himself to take the initiative and commission a high-level panel to propose a more predictable and sustainable funding of the UN, said Gautam.

The 75th anniversary of the UN in 2020 is a perfect occasion for the S-G to present a bold proposal for a more sustainable funding mechanism for the UN in keeping with the ambitious Sustainable Development Agenda for 2030 that the UN has championed so boldly, he declared.

Teresa Anderson, climate policy coordinator at ActionAid, told IPS 2019 has seen an unprecedented uprising of ordinary citizens

around the world, inspired by young people, taking to the streets to demand action on the climate crisis.

“They have exposed the failure of the richest polluting countries at the UN climate action summit to respond with the ambition needed to address the scale of the climate emergency.

“Ahead of the climate summit in Santiago this December, we’re demanding meaningful financial support to address the injustice of climate change. Important proposals to support countries dealing with climate-induced ‘loss and damage’ are on the table”, she added.

It’s critical that the world does not turn its back on the vulnerable countries left to pick up the pieces after climate disasters, Anderson declared.

The September summits covered several issues on the UN agenda, including Sustainable Development Goals (SDGs), Climate Action, Universal Health Care, Financing for Development (FfD), Nuclear Disarmament and Small Island Developing States (SIDS).

Still, what is particularly annoying, Martens told IPS, is that the UN provided an exposed stage at the summits for billionaire Bill Gates and numerous representatives of transnational corporations.

The last few decades have shown that the market-based solutions these corporate actors have propagated have not solved the global crises, but rather aggravated them, he noted.

Martens said the more than 300 representatives of civil society organizations (CSOs) which met parallel to the SDG Summit at the People’s Assembly have rightly stated in their declaration: “We are saddened by the persisting lack of political will and leadership to even begin to address these issues. This is not



good enough. This is failure.”

Jesse Griffiths, Head of Programme, Development Strategy and Finance Overseas Development Institute, told IPS “I did a blog for our website on the Dialogue – available here.”

“My main concern would be that while it was important that the level of attention to the issue was raised – this was a high-level event with heads of state involved – the event itself had been structured so that no concrete outcomes could be made.

This has been a problem of the FfD process itself – the FfD Forums that are held every year could in theory agree what needs to be done to put us on track to finance the SDGs, “but in practice they merely take stock of where we are, and have so far produced no real concrete outcomes”, he added.

“I fear this state of paralysis will continue until we have another high-level summit to follow up from Addis Ababa in 2015,” said Griffiths.

According to Guterres, the summit did produce several positive initiatives. “Let me be specific about just a few”, he told at the conclusion of the meeting.

He said 77 countries – many in the industrialized world – had committed to net zero carbon emissions by 2050. And they were joined by 10 regions and more than 100 cities – including several of the world’s largest.

He also pointed out that 70 countries announced they will boost their National Determined Contributions by 2020, while well over 100 leaders in the private sector committed to accelerating their move into the green economy.

More than 2,000 cities committed to putting

climate risk at the centre of decision-making, creating 1,000 bankable, climate-smart urban projects.

UN spokesperson Stephane Dujarric provided the final figures: a total of 195 speakers participated, including the Holy See, the State of Palestine and the European Union. Uzbekistan was the only country that did not speak.

Among the speakers – 82 Heads of State and 43 [Heads of Government].

There were 16 women speakers, which was 8.2 per cent only of all the speakers, and that is slightly lower than last year, when there were 19 women speakers or about 9.8 per cent.

To put matters into perspective, on the first day of the General Debate, he said, there were two female Heads of State and one Head of Government, compared to 29 male Heads of State and five male Heads of Government.

The longest speech at the General Debate was 50 minutes [from Pakistan] and the shortest speech from the President of Rwanda, Mr. [Paul] Kagame.

“We also had the Climate Action Summit and six other major meetings at the UN during the time of the General Debate.”

In addition, from 23 through 30 September, 1,674 bilateral meetings were held at the UN. And, as of 30 September, 566 other meetings, including those of regional groups [and] UN system entities, were held during the high level debate.

And, for our part, said Dujarric, “we issued 137 readouts from the Secretary General’s bilateral meetings.”

The writer can be contacted at thalifdeen@ips.org

# BUNKERING

## British Columbia to Set up Ship-to-Ship LNG BUNKERING

WORLD MARITIME NEWS

The British Columbia government is joining the Vancouver Fraser Port Authority and FortisBC in establishing the first ship-to-ship LNG marine bunkering service on the west coast of North America.

The parties opted for the move in order to address the increased need for LNG in the maritime sector.

“We are confident in B.C.’s ability to join the global network of ports that deliver clean-

burning LNG direct to the ships of the future,” said Premier John Horgan.

“It is expected that LNG-powered ships — specifically container, car carrier and cruise vessels — could begin calling in Vancouver as early as 2020, and global demand is expected to exceed nine million tonnes (23 million cubic metres) of LNG annually by 2025. B.C. should be ready to get some of that business,” Bruce Ralston,



*Illustration; Image Courtesy: STX/Wartsila*

Minister of Jobs, Trade and Technology, said.

According to the most recent forecasts from Wood Mackenzie, global demand for LNG bunkering is expected to increase at an accelerating rate over the coming years. In 2018,

the marketplace was small, totalling just 170,000 tonnes of LNG. By 2025, global demand is expected to exceed nine million tonnes per year, and by 2035, global demand is projected to be over 35 million tonnes per year.

Story Credit: [worldmaritimenews.com](http://worldmaritimenews.com)

# MIGRATION

## BEYOND THE HEADLINES: THE DEVELOPMENT STORY BEHIND IRREGULAR MIGRATION

by Steiner

UNITED NATIONS, Oct 28 2019 (IPS) - Last week, a too-familiar human tragedy captured news headlines. 39 people were found dead inside a shipping container on an industrial estate in Essex in Southeast England; 31 men and 8 women whose individual identities, for now, remain anonymous, as authorities begin to investigate one of Europe's worst people-trafficking cases.

While I hope I am wrong, we may never know the stories of those 39 people; why they left their friends and communities to make a perilous, hidden journey to the United Kingdom.

And they are not alone. Just like the 71 migrants found dead inside an abandoned truck in Austria in 2015, or the thousands of men, women and children

who have died attempting to cross the Mediterranean Sea from Africa to Europe — over 1,000 already in 2019 — we may never see or remember all their faces.

After the headlines, interest usually moves on, with those who died at risk of becoming 39 statistics, numbers that drive the debate on the strain and stigma of irregular migration.

Achim Steiner. Credit: UNDP

Except, people are not statistics. Every individual on that truck had a unique story that now may not be told.

All the more important, then, to hear from others of their diverse motivations, hopes and fears as they risk their lives to make it to Europe through irregular means, to remind us of the very real people behind the headlines.



*Migrant settlement in Lepe, Spain. Credit: UNDP*

This is one of the reasons why the United Nations Development Programme (UNDP) embarked on a new study called Scaling Fences, launched last week: to give voice to irregular African migrants to Europe, a subset of migrants of whom many assumptions and judgements are made but about whom, in fact, we have little primary data.

Featuring analysis of interviews with 1,970

migrants from 39 African countries in 13 European nations, all of whom declared that they arrived in Europe through irregular means and not for asylum or protection-related reasons, the report seeks to better understand the age-old relationship between human mobility and human development.

It reaches some counter-intuitive conclusions.

First, it finds that getting a job was not the only

motivation to move, that not all the irregular migrants were 'poor' in Africa, nor had lower education levels. 58 per cent were either employed or in school at the time of their departure, with the majority of those working earning competitive wages at home. The average age of respondents when they arrived in Europe was 24.

They are of the 'springboard generation' – beneficiaries of two



Achim Steiner. Credit: UNDP

decades of remarkable development progress in Africa. Still, some 50 per cent of those working said they were not earning enough.

Mahamadou Sankareh, from Gambia, lives in Rome. He works at the Joel Nafuma Refugee Center. Credit: UNDP/Lena Mucha

Second, it finds that barriers to opportunity, or ‘choice-lessness’, were critical factors informing the calculation of those surveyed; that in spite of development progress at home, 77 percent felt that their voice was unheard or that their country’s political system provided no opportunity through

which to exert influence on government.

Third, despite the danger and risks of the fraught journey from Africa to Europe, only 2 per cent of all those people surveyed said that greater awareness of the risks would have caused them to stay at home.

In fact, 41 percent of respondents said ‘nothing’ would have changed their decision to migrate to Europe.

The findings of Scaling Fences confirm some truths that need to be better understood: that migration is really a story of development; that in an unequal world, human

mobility both drives and is driven by development progress, albeit progress that is uneven and not fast enough to meet people’s aspirations.

It confirms that people will move in the pursuit of larger freedoms and opportunities, including through irregular means if they believe they must, to create a space for themselves and their families in the kind of world the 17 Sustainable Development Goals are designed to help us all attain.

That they travel through irregular rather than regular migration channels does not diminish the importance of their stories. Rather, it highlights the need to both expand safe, legal pathways for migration, in line with the 2018 Global Compact for Safe Orderly and Regular Migration, and to continue investment in a future-focused Africa of socio-economic and political choice and opportunity.

Although migration in all its forms is sometimes painted as an emergency – a ‘lose-lose’ situation for everyone – it is actually a long-term development trend: one that started long



*Mahamadou Sankareh, from Gambia, lives in Rome. He works at the Joel Nafuma Refugee Center. Credit: UNDP/Lena Mucha*

before there were legal frameworks or sovereign borders to cross and one that will continue long into the future, accelerated in today's globalized, hyper-connected societies.

Understanding how

to harness the potential of human mobility to accelerate human development – in the countries that migrants move from and move to – starts by understanding the determination that drives people to scale

metaphorical and physical fences towards a better life.

If we can work together to do that, then perhaps it will be one very small step towards preventing such tragedies as we saw unfold last week.

Story Credit: by Achim Steiner, United Nations, Oct 28 2019, Inter Press Service News Agency - ipsnews.net

# THREATENED

## RED ALERT FOR BLUE PLANET AND SMALL ISLAND STATES

by Rahman

Farhana Haque Rahman is Senior Vice President of IPS Inter Press Service; a journalist and communications expert, she is a former senior official of the United Nations Food and Agriculture Organization and the International Fund for Agricultural Development. ROME, Oct 31 2019 (IPS) - Barely a week passes without alarming news of the most recent scientific research into the global climate crisis compounding a growing sense of urgency, particularly the impact on small island states from rising sea levels and extreme weather.

Latest findings suggest that several hundred million more people than previously thought are at risk of coastal flooding due to climate change. Climate Central, a non-profit research and news organisation, found data used in past calculations overstated the elevation of many low-lying coastal communities.

And for the people of the Bahamas who

had just endured Hurricane Dorian, the most intense tropical cyclone on record to hit their islands, it came as little surprise when the UN Intergovernmental Panel on Climate Change (IPCC) soon after released its landmark special report on the planet's oceans and frozen regions, warning of "multiple climate-related hazards" for coastal regions.

"The ocean is warmer, more acidic and less productive," the IPCC report stated.

The "Blue Pacific" concept sees the island states establishing themselves as "large ocean states" and guardians of the region rather than "small island states"

Oceans are absorbing heat twice as fast as just two decades ago, with hundreds of billions of tonnes of melting ice raising sea levels at an average rate of 3.6 millimetres a year, more than twice as fast as during the last century.

If greenhouse gas emissions "continue to





*The Pacific island of Kiribati is one of the countries worst affected by sea-level rise. Credit: UNICEF*

increase strongly”, the IPCC report said, then levels could rise more than a metre by 2100.

Some island states in the Pacific face becoming uninhabitable. As UN Secretary-General Antonio Guterres noted while visiting Tuvalu, the sea level rise in some Pacific countries is four times greater than the world average, posing “an existential threat” to several island states.

Against this background the UN COP25 climate change summit scheduled to be held in Santiago in December had been dubbed the Blue COP, with expectations of a focus on the oceans and

commitments of aid to poorer nations most at risk. So it comes as a serious blow that President Sebastian Pinera has just announced that Chile is calling off its hosting of COP25 because of mass anti-government protests rocking the country.

While the UN anxiously



*Farhana Haque Rahman*

looks for an alternative venue (and Santiago had been the second choice after Brazil’s newly elected president, Jair Bolsonaro, pulled out of hosting it), the small island states of the Pacific will be making their voices heard as they seek to confirm themselves in the role of custodians of the world’s largest region.

It is an existential struggle but it is not a blame game however.

As Micronesia’s President David Panuelo declared last week in *The Diplomat*: “Rather than point fingers, we must all point the way toward solutions.”

“No single country created this problem, and certainly a small country like ours is bearing far greater responsibility for the solution than we ever contributed to the crisis in the first place. But we sit shoulder to shoulder in a coalition which has set a goal of growing economies while achieving 30 percent marine protection globally,” he wrote in a plea for action to save the oceans.

“Everyone must do more when garbage patches larger than entire countries float in the Pacific, and rising carbon dioxide levels increase ocean acidity and devastate coral reefs and marine life.”

The Pacific Community, the principal scientific and technical organisation in the region and founded as the SPC in 1947, counts 22 Pacific island countries and territories among its members who see themselves as the “tip of the spear” in terms of the impacts of climate change and their efforts to adapt.

SPC has recently established the Pacific Community Centre for Ocean Science (PCCOS) to provide the framework to “focus its scientific and technical assistance on providing solutions that will build, sustain, and drive blue

economies in Pacific Island countries and territories” and support SDG 14 of conserving and sustainably using oceans and marine resources.

The SPC’s new and growing Pacific Data Hub is a public resource of data and publications on the Pacific across key sectors, from education and human rights to oceans and geoscience.

Such initiatives reflect how Pacific Island states have grown more assertive in their diplomacy, becoming more active in global multilateral forums and using their voices and votes for increased leverage rather than the old reliance on support from Australia and New Zealand.

The “Blue Pacific” concept sees the island states establishing themselves as “large ocean states” and guardians of the region rather than “small island states”. As stewards of the Pacific with their cultural identity shaped by the ocean, the Blue Pacific framework seeks to establish leadership on issues, with smart policies backed by scientific expertise and data.

As Micronesia’s president has reminded us, the climate crisis is neither abstract nor “tomorrow’s faraway challenge”. It is happening

now and as the IPCC’s special report on the oceans and cryosphere warned in September the crisis is gathering speed, as seen in the recent acceleration of sea level rise.

In Antarctica the rate of ice loss tripled in the decade 2007-2016. May and August in 2019 were the warmest on record for the Arctic while this year saw the summer minimum extent of sea ice reaching a joint-second lowest in 40 years of satellite records.

As summarised by Carbon Brief, the IPCC warns that this accelerating ice loss, and the more rapid sea level rises it causes, will continue to gather pace over this century regardless of whether greenhouse gas emissions are reduced. The “likely” maximum rise of 1.1 metres by 2100 is some 10cm above the top-end estimate from its previous estimate, while a rise of 2 metres cannot be ruled out.

Such warnings were intended to provide input at COP25 for world leaders who face mounting calls to adopt more ambitious goals for carbon emission cuts. Those negotiations will not be happening in December in Santiago after all. An alternative must be found urgently.



## A global search for local nature-based solutions for sustainable development

The Equator Initiative announces a global call for nominations for the Equator Prize 2020. The prize will be awarded to outstanding local community and indigenous peoples' initiatives that advance nature-based solutions for sustainable development. The winners will join a prestigious network of 245 leading community-based organizations from 81 countries that have been awarded the Equator Prize since 2002. Each Equator Prize winner will receive USD 10,000 and will be supported to participate in a series of policy dialogues and special events during the IUCN World Conservation Congress in Marseille, France, in June 2020.

The Equator Prize 2020 nomination process will offer community-based initiatives the opportunity to share their work on the Equator Initiative's [web portal of local nature-based solutions for sustainable development](#). The platform connects communities around the world and shares local solutions that work for people and planet. Participation in this platform is optional when submitting nominations for the Equator Prize.

# EQUATOR PRIZE 2020 CALL FOR NOMINATIONS

## NATURE FOR LIFE

This year's Equator Prize will recognize innovative initiatives from local communities and indigenous peoples that demonstrate exceptional achievements in the area of nature-based solutions for local sustainable development. Winning initiatives will be honored for their successes in protecting, restoring and/or sustainably managing biodiversity for positive development outcomes.

Thematic priorities include:

- **Nature for Prosperity**  
Protection, restoration and/or sustainable management of terrestrial or marine ecosystems, biodiversity, and/or wildlife that enables sustainable and green livelihoods, enterprises and jobs; including indigenous economies.
- **Nature for Water**  
Protection, restoration and/or sustainable management of ecosystems for water security
- **Nature for Climate**  
Protection, restoration and/or sustainable management of ecosystems that help mitigate greenhouse gas emissions, and/or help communities adapt to the impacts of climate change.

Special consideration will be given to nominees working on ecosystem intactness and integrity, advocacy for land and water rights, social and environmental justice, and gender equality. In addition, the activities of successful nominees should deliver on several Sustainable Development Goals simultaneously.

Local communities from rural areas in 146 countries are eligible for nomination. Nominations are open to indigenous peoples' groups from any country, operating in rural areas. For full eligibility requirements and selection criteria, please click [here](#).

## Submit nominations for the Equator Prize 2020

To access the online nomination system, please visit [prize.equatorinitiative.org](http://prize.equatorinitiative.org). Nominations may be submitted in Arabic, Chinese, English, French, Indonesian, Portuguese, Russian, or Spanish.

Nominations must be submitted by **9 January 2020**.

**Equator Initiative**  
United Nations Development Programme (UNDP)  
304 East 45<sup>th</sup> Street, 15<sup>th</sup> Floor  
New York, NY 10017  
Tel: +1 646 781-4072  
Email: [prize@equatorinitiative.org](mailto:prize@equatorinitiative.org)  
[www.equatorinitiative.org](http://www.equatorinitiative.org)



Diego Pérez R,  
ECA Amarakeri, Peru

# PLASTIC & CLIMATE

## THE HIDDEN COSTS OF A PLASTIC PLANET

### Executive Summary Plastic Proliferation Threatens the Climate on a Global Scale

The plastic pollution crisis that overwhelms our oceans is also a significant and growing threat to the Earth's climate. At current levels, greenhouse gas emissions from the plastic lifecycle threaten the ability of the global community to keep global temperature rise below 1.5°C. With the petrochemical and plastic industries planning a massive expansion in production, the problem is on track to get much worse.

If plastic production and use grow as currently planned, by 2030, these emissions could reach 1.34 gigatons

per year—equivalent to the emissions released by more than 295 new 500-megawatt coal-fired power plants. By 2050, the cumulation of these greenhouse gas emissions from plastic could reach over 56 gigatons—10–13 percent of the entire remaining carbon budget.

Nearly every piece of plastic begins as a fossil fuel, and greenhouse gases are emitted at each of each stage of the plastic lifecycle: 1) fossil fuel extraction and transport, 2) plastic refining and manufacture, 3) managing plastic waste, and 4) its ongoing impact in our oceans, waterways, and landscape.

*At current levels, greenhouse gas*



*Plastic & climate • The Hidden Costs of a Plastic Planet*



emissions estimates against global carbon budgets and emissions commitments, and it considers how current trends and projections will impact our ability to reach agreed emissions targets. This report compiles data, such as downstream emissions and future growth rates, that have not previously been accounted for in widely used climate models. This accounting paints a grim picture: plastic proliferation threatens our planet and the climate at a global scale.

Due to limitations in the availability and accuracy of certain data, estimates in this report should be considered conservative; the greenhouse gas emissions from the plastic lifecycle are almost certainly higher than those calculated here. Despite these uncertainties, the data reveal that the climate impacts of plastic are real, significant, and require urgent attention and action to maintain a survivable climate.



*emissions from the plastic lifecycle threaten the ability of the global community to keep global temperature rise below 1.5°C degrees. By 2050, the greenhouse gas emissions from plastic could reach over 56 gigatons—10-13 percent of the entire remaining carbon budget.*

This report examines each of these stages of the plastic lifecycle to identify the major sources of greenhouse gas emissions, sources of uncounted emissions, and uncertainties that likely lead to underestimation of plastic's climate impacts. The report compares greenhouse gas

The report includes recommendations for policymakers, governments, nonprofits, funders, and other stakeholders to help stop the expanding carbon emissions of plastic production. The most effective recommendation is simple: immediately reduce the production and use of plastic. Stopping the expansion of petrochemical and plastic production and keeping fossil fuels in the ground is a critical element to address the climate crisis.

Amidst growing concern about the

impacts of plastic on the oceans, ecosystems, and human health, there's another largely hidden dimension of the plastic crisis: plastic's contribution to global greenhouse gas emissions and climate change. This report examines each of these stages of the plastic lifecycle to identify the major sources of greenhouse gas emissions, sources of uncounted emissions, and uncertainties that likely lead to underestimation of plastic's climate impacts. The report compares greenhouse gas emissions estimates

against global carbon budgets and emissions commitments, and it considers how current trends and projections will impact our ability to reach agreed emissions targets. It also compiles data, such as downstream emissions and future growth rates, that have not previously been accounted for in widely used climate models. This accounting paints a grim picture: plastic proliferation threatens our planet and the climate at a global scale.

Read the full report: <https://www.ciel.org/plasticandclimate/>

Story Credit: Plastic & Climate: The Hidden Costs of a Plastic Planet - Executive Summary



## ROCK GLACIERS SUPPLY WATER TO HIGHLANDS COMMUNITIES IN ARGENTINA

by Daniel Gutman

EL CÓNDOR, Argentina, Nov 14 2019 (IPS) - In Argentina's Puna region, at 4,000 metres above sea level, the color green is rare in the arid landscape, which is dominated by different shades of brown and yellow. In this inhospitable environment, daily life has improved thanks to a system of piping water downhill from rock glaciers to local communities.

"When I was a girl we would walk an hour or two to fetch water from the hills. Since we didn't have jerry cans or buckets, we carried it in sheepskin bags," Viviana Gerónimo, a 50-year-old Kolla indigenous woman, tells IPS.

"We also built dams, to retain rainwater. We used it for ourselves and for our animals," she adds. Gerónimo, a married mother of five, lives in Hornaditas de la Cordillera, an

indigenous hamlet of just 15 families in the province of Jujuy in northwest Argentina, a few kilometres from the Bolivian border.

The Puna highlands region is a desert where only a few shrubs grow to less than half a metre in height and where it hardly ever rains – the average is around 200 millimetres a year, almost all of which falls in the southern hemisphere summer: December to March.

These high plateaus located above 3,000 metres altitude in the Andes mountains cover not only northwest Argentina but also northern Chile and southern Bolivia and Peru.

Local inhabitants in the Puna region depend mainly on livestock, although they cannot raise cows due to the poor quality of the pastures.

Gerónimo's family has 80 llamas and 120 sheep – the domestic species that best adapt





*Long months of community work to install pipes to bring water from rock glaciers to indigenous villages in the Puna region in northwest Argentina served to strengthen collective organisation and community ties in an inhospitable ecoregion, where solidarity and joint efforts are essential to daily survival. Credit: Courtesy of Julio Sardina*

to the climate of the Puna, although the profit margins are slim. In fact, the local indigenous people rarely shear them anymore because the wool fetches such low prices. They raise them for their own consumption and to sell the surplus meat.

The Kolla are the largest of the dozen or so indigenous peoples in Jujuy, where 7.8 percent of the population was recognised as native in

the last national census in 2010 – more than three times the national figure of only 2.4 percent. Officially, there are 27,631 members of the Kolla people, although the real number is probably much higher, as there are more than 100 Kolla communities in the Puna.

Water brings change

The water collection system benefits the indigenous communities of Hornaditas

de la Cordillera, Escobar Tres Cerritos and Cholacor, and the town of El Condor, the municipal seat, which has a primary and secondary school and first aid clinic.

El Cónдор is an hour's drive from La Quiaca, the main Argentine city on the border with Bolivia. It has about 400 inhabitants, while the communities of the rest of the municipality number less than 100 people in all.



*Viviana Gerónimo adds color to the yellow and brown arid landscape of Hornaditas de la Cordillera, one of the Kolla indigenous communities that now have water for the consumption of the 15 local families and for their sheep, llamas and vicuñas, as well as subsistence crops, in this Andean highlands region in the northwest Argentine province of Jujuy. Credit: Daniel Gutman/IPS*



*Long months of community work to install pipes to bring water from rock glaciers to indigenous villages in the Puna region in northwest Argentina served to strengthen collective organisation and community ties in an inhospitable ecoregion, where solidarity and joint efforts are essential to daily survival. Credit: Courtesy of Julio Sardina*

Climate change also seems to be playing its part in exacerbating the scarcity of water. “Although the biggest problem here has always been water, our grandparents said it used to rain more,” says 53-year-old Ricardo Tolaba, another resident of Hornaditas.

“In the past, the ponds, where underground water comes to the surface, dried up in June or July, after the

summer rains. Now they dry up in March or April,” he told IPS.

The most important resource are the so-called rock glaciers: moving ice in the mountains covered in rocks and debris which keep them from melting; invisible but strategic water reserves.

The province of Jujuy has 255 rock glaciers, according to the National Glacier Inventory published by the

Argentine government in 2018.

With government support, the local communities built a system of underground pipes that run down the slopes for 33 kilometres, using the force of gravity to pipe water to different villages.

“Back in 2007 we began to talk to the communities about how we could build a solution to the lack of water,” says agronomist Julio

Sardina, a technician with the Secretariat of Family Agriculture who has worked with the indigenous settlements of Jujuy for more than 20 years.

“The problem was that people in the lower-lying areas didn’t have water for their animals. And some wanted to plant crops but couldn’t because of the lack of water,” he adds during his tour with IPS through the different communities participating in the project, which are precariously connected by dirt roads in poor condition.

Sardina explains that the Secretariat of Family Agriculture provided the materials to build the system, thanks to funding from the Socioeconomic Inclusion in Rural Areas Project (Pisear), a national government programme.

From the outset, it was stipulated that the work had to be carried out by the members of the beneficiary communities.

“The project, besides bringing water to the villages, helped the communities organise and forge closer ties, since the families were isolated from each other,” says Sardina.

The system benefits some 600 people in an area where families are often nomadic, moving around to find the best pastures. Many Kolla Indians have communal land titles, which is not common among native peoples in Argentina.

When it reaches the communities, the water is stored in a tank. It is also piped to some of the houses and to water troughs for livestock.

But the greatest impact of the project was on agriculture, which has always been limited in the Puna region by the lack of water.

David Quiquinte, also from Hornaditas, proudly relates that “a 40-centimetre-deep ditch was dug, where the pipe was buried

to prevent freezing,” since in the wintertime temperatures in the Puna region can drop to 25 degrees Celsius below zero.

“For nearly six months, the entire community threw its effort into this work... except for one or two people,” the 40-year-old local resident told IPS, without concealing his irritation with those who didn’t help out.

During meetings with technicians from the Secretariat of Family Agriculture, the indigenous communities in Jujuy’s Puna region raised their concern about the growth of the population of vicuñas, a wild South American camelid native to the Andean highlands.

The vicuña came close to extinction in the 1960s, but recovered thanks to protection measures agreed by the countries of the Puna ecoregion.

“We needed water, especially because there wasn’t enough for the animals. And in the meetings about the water system project, many people complained that the vicuñas were eating the grass needed by the llamas and sheep,” Luis Gerónimo, 30, who lives in the community of Escobar Tres Cerritos, told IPS.

That is how the idea arose for training for the “chaccu”, an ancestral practice that the Kolla Indians have taken up again, as have other indigenous communities in Bolivia and Peru, which consists of capturing, shearing and releasing wild vicuñas.

“We’ve been practicing the chaccu for five years and people no longer see vicuñas as a problem. Today they are taken care of. The llamas and sheep graze in the lowlands and the hills are left to the vicuñas,” says Luis Gerónimo.

The chaccu and the water project pursue the same ultimate goal: to enable people



*In the high Andean plateau of the Puna, in northwest Argentina, the biggest need was always water, says Ricardo Tolaba. People walked for hours to find it and carry it back in small containers, for human and animal consumption. With the new community-built system that pipes it from rock glaciers, “things began to change,” he adds. Credit: Daniel Gutman/IPS*

from the communities to stay in Jujuy’s Puna region instead of migrating to the cities.

“I am one of the people who went to work in different parts of Argentina and came back. And I’m convinced that we have the resources to keep young people in the Puna,” says Tolaba.

He points out that “the main need in the Puna has always been water. Walking for hours to fetch water or to take the animals to drink are things we’ve been used to since we were kids here.”

But “with this project, things have begun to change,” he adds.

Story Credit: by Daniel Gutman, Argentina, November 2019, Inter Press Service News Agency - [ipsnews.net](http://ipsnews.net)

# IMPACTS

## TUFTS COVE GENERATING STATION

by WIKI

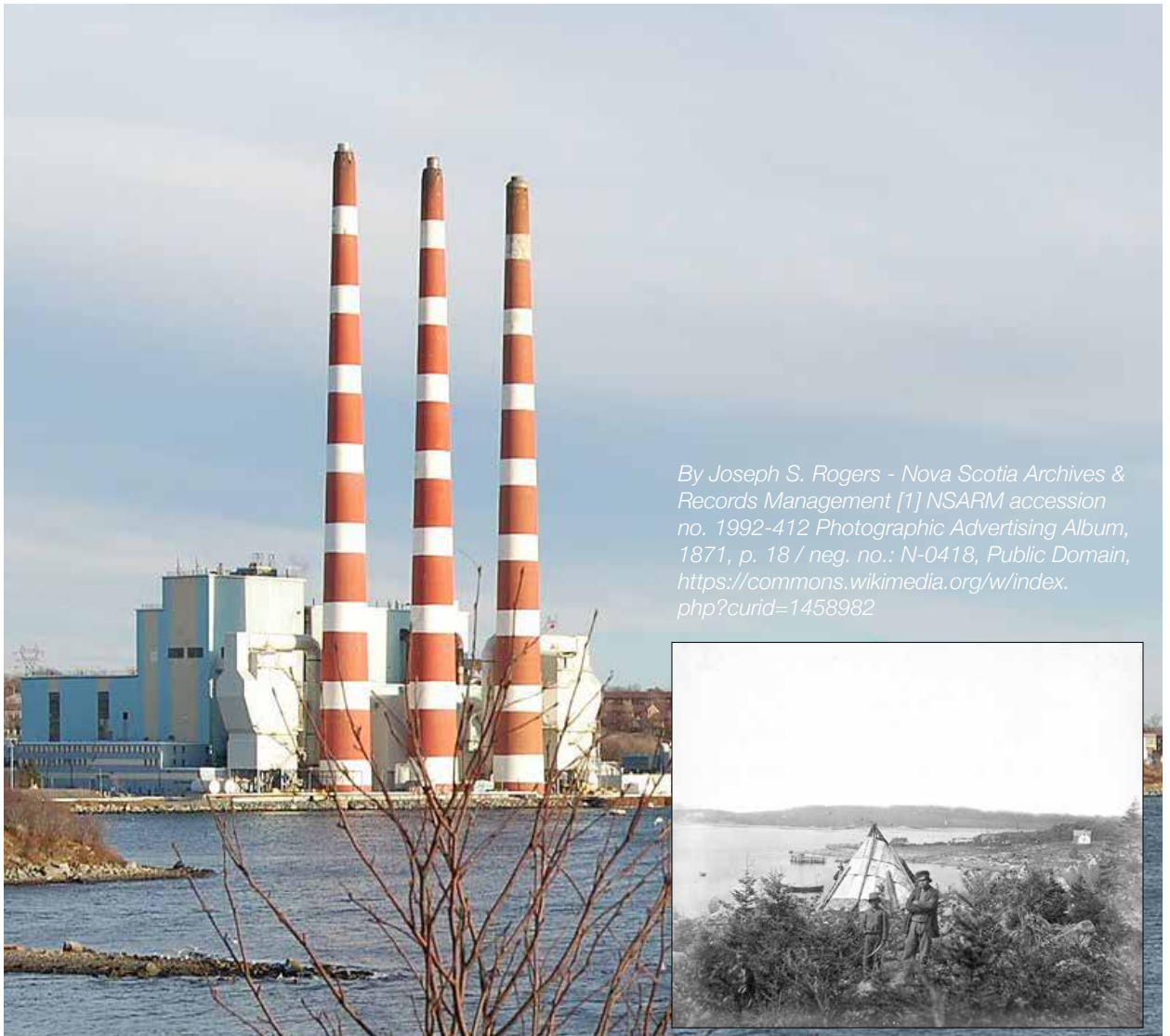
Tufts Cove Generating Station is a Canadian electrical generating station located in the Dartmouth neighbourhood of Tufts Cove in Nova Scotia's Halifax Regional Municipality. A thermal generating station, Tufts Cove was constructed in 1965 by Nova Scotia Light and Power Company, Limited, requiring the demolition of part of this historic neighbourhood to locate the facility on the eastern shore of Halifax Harbour. The plant replaced the Water Street Generating Station that had been opened by the Halifax Electric Tramway in 1902.[1]

Now operated by Nova Scotia Power, a subsidiary of Emera Incorporated, the Tufts Cove Generating Station has a generating capacity of 415 megawatts. Tufts Cove #1 was installed in 1965 with dual fuel capability to burn "Bunker C" heavy fuel oil and coal mined by the Cape Breton Development Corporation. In 1972 Tufts Cove #1 was converted to fire only oil at the same time as Tufts Cove #2 (oil only) was commissioned.

Tufts Cove #3 (also oil only) was commissioned in 1976. The sole reliance on fuel oil proved to be an unfortunate decision in the light of the record increase in oil prices throughout the 1970s. The plant property occupies almost 1,000 m (3,300 ft) of shoreline. A docking facility was constructed in 1976-1977 as well as a storage tank. The plant features three distinctive 152 m (500 ft) chimneys,[2] one for each boiler. In 2000, the Tufts Cove plant was re-fitted to burn either oil or natural gas.

Emissions from the station in the form of particulates are a frequent source of pollution complaints in the neighbourhood and region, and in the 1990s, NSPI funded a \$32 million project to install filters to limit the escape of pollutants.

In 2003 and 2004, two 47.3 MW simple cycle natural gas fueled combustion turbine plants were commissioned. Due to low prices in recent years, the entire plant has run largely on natural gas, which has dramatically decreased



*By Joseph S. Rogers - Nova Scotia Archives & Records Management [1] NSARM accession no. 1992-412 Photographic Advertising Album, 1871, p. 18 / neg. no.: N-0418, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=1458982>*

its emissions profile. A sixth generating unit, known as a combined-cycle generator was completed in 2011. It uses the heat exhaust of the plant's two combustion turbines and additional natural gas duct firing to generate 50 MW of electricity.

The Halifax lateral of the Maritimes and Northeast Pipeline terminates on the property.

Tufts Cove is an urban neighbourhood in the Dartmouth area of Halifax, Nova Scotia, Canada. It is situated on the eastern shore of Halifax Harbour in the North End of Dartmouth. The neighbourhood boundaries of Tufts Cove are approximately from Albro Lake Road in the south to Highway 111 in the north, and from Victoria Road in the east with the harbour to the west. The area was named after

the prominent Tufts family of Boston[vague]. Gershom Tufts came to Dartmouth in 1749. The land was also the site of a small Mi'kmaq settlement known as Turtle Grove. The settlement dated at least to the late 18th century. A painting from the 1790s shows a Mi'kmaq family at the cove and an oil painting c. 1837 by William Eager shows a Mi'kmaq encampment at Tufts Cove. The entrance to the cove was



crossed by a railway trestle in the 1880s connecting to the short-lived railway bridge across the Narrows. The tracks were relocated to the head of the cove in the 1890s when the bridge collapsed.

The village was destroyed in the Halifax Explosion on December 6, 1917. One of the Mi'kmaq families that were living at Tufts Cove during the explosion was Jeremiah (Bartlett) Lonecloud's, who lost two daughters and one of his eyes. The survivors were recorded in

Lonecloud's journal. The Turtle Grove settlement was never rebuilt after the explosion. The survivors were settled in other Nova Scotian reserves.

The dominant feature of Tufts Cove is the Tufts Cove Generating Station, whose smokestacks tower over the area. The construction of the plant required the purchase and subsequent destruction of a large number of the neighbourhood's homes by the Nova Scotia Light and Power Company, Limited in 1964. The

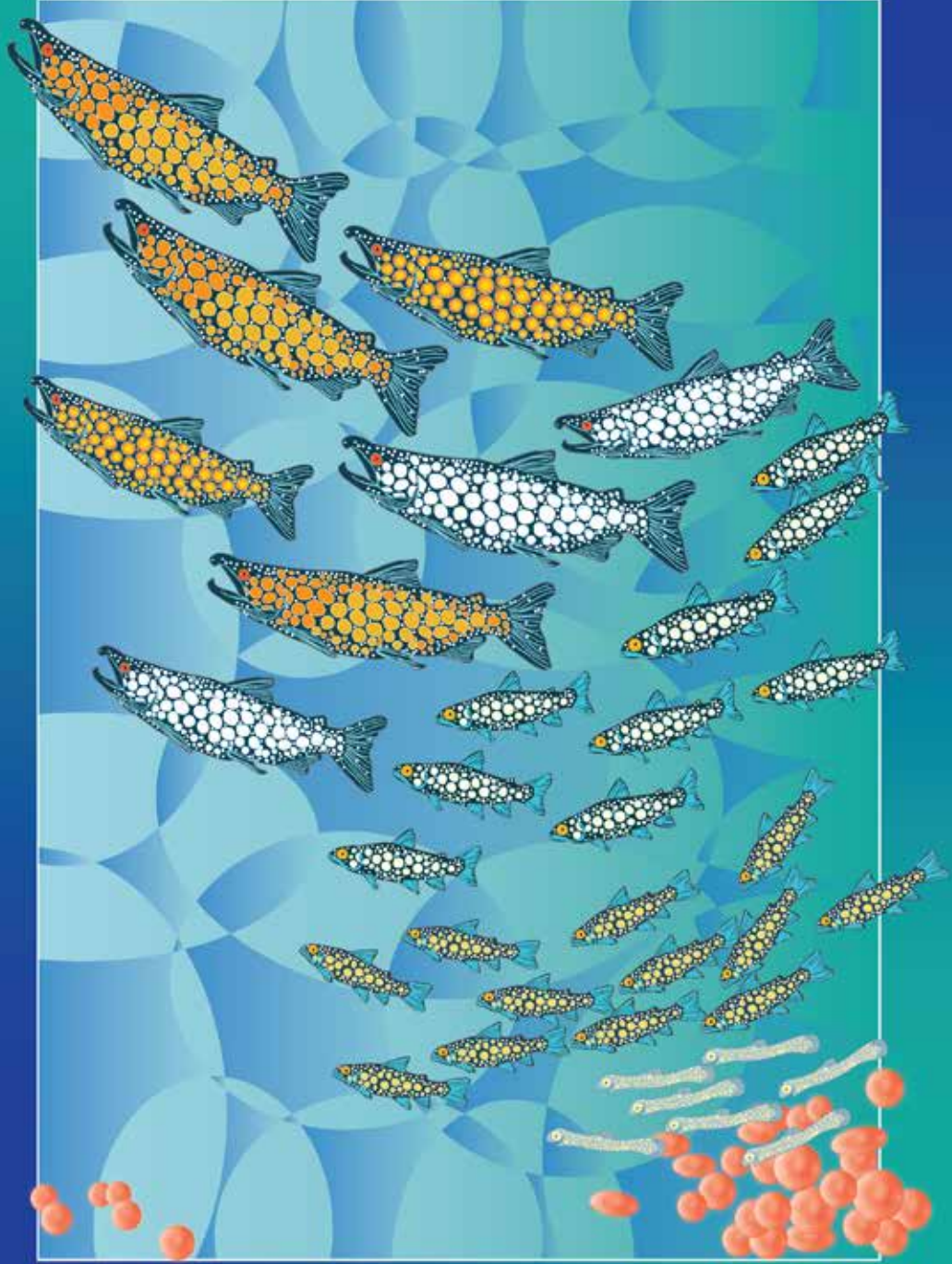
plant is now operated by Nova Scotia Power Inc., a subsidiary of Emera Inc.

Shannon Park, a large military housing complex was built beside the cove in the 1950s. It closed in 2004. Disposal of the land is being planned by the Government of Canada's Canada Lands Company. Mi'kmaq from the Millbrook Reserve near Truro have applied for a portion of the former Shannon Park military housing development beside the cove.

Story Credit: [wikipedia.org](https://www.wikipedia.org)



# NEWS FROM



# MAARS & MAPC

# INVADING SPECIES

## Pink Salmon **IN THE ATLANTIC** by BLAKE McNEELY



Pink salmon (*Oncorhynchus gorbuscha*), commonly called humpback salmon, humpies, or pinks are an anadromous species of Pacific salmon that can be found as far south as California and

as far north as the Arctic, all along the west coast of North America. These salmon are the smallest of the five salmon species in the Pacific and have the shortest average life span of approximately two years. This short life span results in alternating, genetically distinct populations of Pink salmon split into

what's called "even and odd year broodlines". Pinks from 2017 will be genetically different than Pinks from 2018, for example, as they reach spawning age at different years. Until recently, these Pinks were found exclusively in the Pacific Ocean. However, a stocking program in northern Russia has introduced millions of these salmon into the Atlantic Ocean where they are spreading further into other countries.

Salmon are a keystone species, and many species of animals, such as grizzly bears and coastal wolves, rely on salmon as a major food source. If the salmon were to disappear, so would many of the species that feed on them. Salmon not only feed other animals, but the surrounding forests benefit from these species of salmon due to decomposition. In British Columbia, old growth forests will reach incredible heights



*Obtained from: en.wikipedia.org*

due to the nutrients transported from the ocean to land by Pacific salmon. Roughly 80% of nitrogen found in coastal forests can be traced back to the Pacific Ocean. Like all Pacific salmon, Pinks die of natural causes a few weeks after they spawn and it is through this mass die off that the nutrients gathered in the ocean can be spread to the land. Nitrogen is carried in the bodies of salmon, and once preyed upon, salmon are scattered throughout the forests by predatory animals and left to decompose at the base of the trees. It is thought that between their time in the ocean, and the rivers in which they spawn, Pacific salmon feed more species than any other animal on earth.

Between Pacific and Atlantic salmon (*Salmo salar*), out-migration to the ocean is very different. Just after hatching, a life stage known as 'alevin', Pink salmon will stay under the gravel and feed off their yolk sac until it is absorbed and they are ready to emerge. What was thought to distinguish Pinks from the other species of salmon is that once the alevin emerge from the gravel, they almost immediately begin their journey to the estuaries (areas where fresh water mixes with the salty ocean water). Mostly all other species of salmon can spend several years in the rivers in which they're born (exact length of time differs slightly with each species), feeding on small aquatic insects in larval



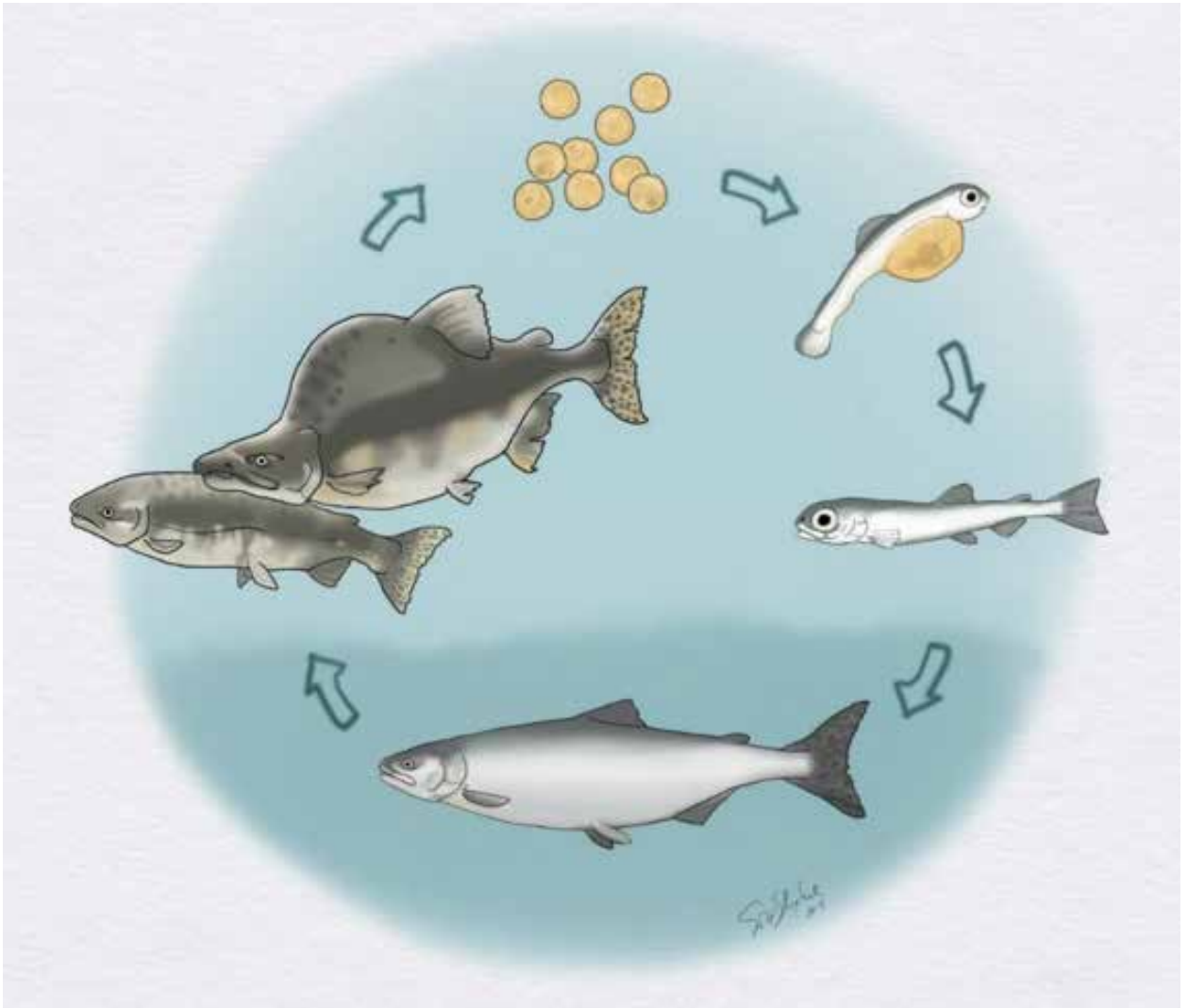
*Obtained from: [bbc.co.uk](http://bbc.co.uk)*

stages, called macroinvertebrates. As they grow, the Pinks will begin to feed on other smaller fish.

Once they leave the freshwater, schools of Pink Salmon fry remain in the estuaries along the coast where they start to feed on things like plankton, smaller ocean fish, and the occasional aquatic insect. The red crustaceans the Pinks feed on is what gives them their colour and name sake. After roughly a year in the estuaries, Pink salmon migrate out to the open ocean where they spend the remaining year of their lives before returning to the rivers they hatched in to repeat the process over again.

In the late 1950s, local hatcheries in northern Russia started a salmon stocking program along the White Sea to establish a self-sustaining population of Pink Salmon. These hatcheries raised Pinks from fertilized eggs until they had hatched and absorbed their yolk sacks. These salmon fry were then released by the millions into the local rivers.

For many decades, it seemed as if the project would fail, as none of the stocks developed into self-sustaining populations. The salmon stocks of cohorts 1985, 1989 and 1998 were the first to see major returns of Pinks to the rivers. Between 1989 and 2009, the number of returns each year fluctuated between 60,000 and 700,000 salmon. In present day Russia, the populations of Pink salmon are thriving. They have started migrating west into Norway, Iceland, Europe, and even as far as Eastern Canada. Through reports from anglers, by-catch from aquaculture escapee collection, snorkel surveys, and video cameras, Norway saw a few hundred Pinks in 2012, 2015, 2016 in a handful of rivers, and in 2017 over 11,000 were counted throughout 263 rivers. This raised the concern that this number of invasive salmon could develop a sustaining population within Norway. This has the potential to negatively affect the native salmonids in the area. Given that these salmon spawn in odd years, it is



Obtained from: [forbes.com](http://forbes.com)

expected that the return this year will be even larger.

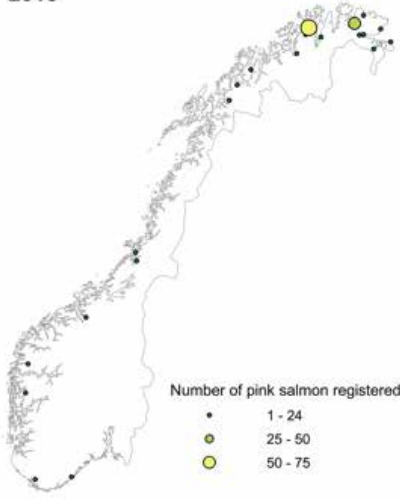
In 2017, the same year that 11,000 Pinks were caught in Norway, two pink pacific salmon were found in Newfoundland and Labrador. According to Steve Sutton, of the Atlantic Salmon Federation (ASF), it is very likely that these two Pink salmon originated from the Russian stocking program. He stated that the only other way that these fish could have shown up was from Newfoundland's own Pink Salmon stocking program. Given that the NL stocking program

was in 1960, lasted only one year, and no returning Pinks were caught, Sutton does not believe that the lineage of these salmon could be traced back to that program. It is widely accepted amongst marine biologists that having Pinks in the same rivers as the struggling Atlantic Salmon has the potential to be detrimental, just as any invasive/native species relationship. Because Pinks leave for the estuaries so young, there would be little competition for food in the freshwater systems between the two species. Again, given the debate surrounding the time

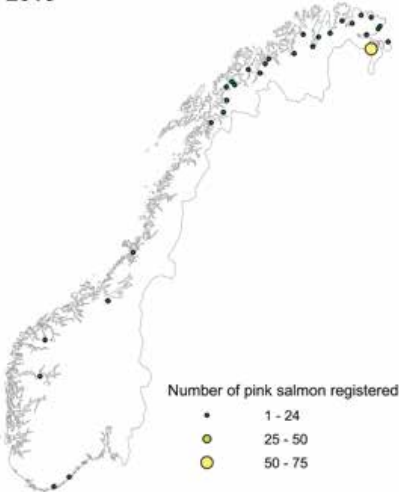
Up to 2012



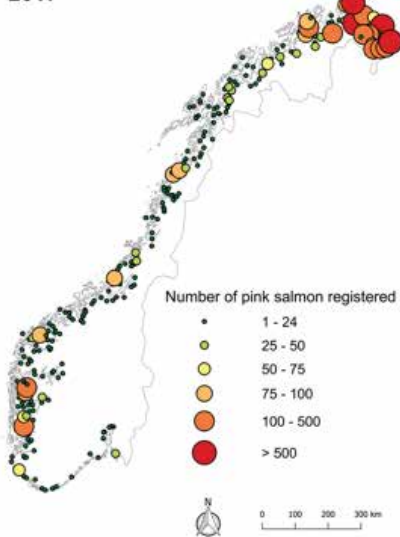
2015



2016



2017



journey back to the ocean; it depends on how much energy they spend spawning and how far upriver they have travelled. Similar to the Pink Salmon, Atlantic Salmon alevin stay below the gravel until their yolk sack is absorbed. Once they emerge from the gravel, they may travel up to 200m downstream of where they hatch. Following their emergence, Atlantic salmon will position themselves upstream to catch macroinvertebrates as they float downstream, making few attempts at hunting for prey. As they grow, they begin to hunt for prey including large benthic invertebrates and smaller fish.

The relationship between Pink Salmon and Atlantic Salmon is not well studied. There is some evidence of spawning Pinks attacking Atlantic Salmon in the freshwater environment, forcing them to relocate to a less optimal spawning habitat. After the Pinks spawn and die, their rotting carcasses can have either a positive or negative impact on Atlantic salmon. On one hand, the decomposing carcass can lower the amount of dissolved oxygen available for Atlantic Salmon and their eggs in the river. Conversely, the carcass could provide nutrients for

Obtained from: [link.springer.com](http://link.springer.com)

at which Pink salmon fry depart for the estuaries, this relationship is not yet fully known. More studies need to be completed surrounding the Pink and Atlantic Salmon for us to fully understand this complex relationship.

Atlantic Salmon are very different from their Pacific

Salmon cousins. While all Pacific salmon die after spawning, their Atlantic counterpart often return to the ocean and can spawn several times. After they spawn, Atlantic Salmon may spend the winter in a deep pool along the river or immediately begin their

macroinvertebrates, in turn providing more available food for fry and parr. Pink salmon fry and eggs could also be potential prey for other Salmonids like brook (*Salvelinus fontinalis*) and brown trout (*Salmo trutta*).

Transmission of disease and parasites is also a potential concern should these populations of Pink Salmon continue to expand. Between Norway's northern border with Russia, and the southern border with Sweden, there are over 400 rivers that are home to anadromous Atlantic salmon, over 1000 rivers with anadromous brown trout, and more than 100 rivers containing anadromous Arctic Char (*Salvelinus alpinus*). Atlantic salmon are already under stress, and with their numbers declining, the introduction of a new disease or parasite could present an additional risk to the species. Thus far, of all Pink Salmon caught and tested for common viruses found in farmed Salmon, none have been found. There were 35 Pink Salmon that were also tested for common parasites found in native Atlantic Salmon, but none were found. This suggests that Atlantic Salmon and Pink Salmon may have different diets at-sea. If their ocean



*Obtained from: lakseelver.no*

diets were similar, it is likely that these common parasites would have been found in the Pinks.

There are no official 2019 counts for the number of Pink Salmon in any of the Atlantic Countries at this time. However, a summary of the overall health of the Lakselva River in Norway was published on the town of Lakselva's website in September which stated: 'Other rivers were more affected [than] ours, [but] we saw way more pink salmon in 2019, than what we have ever before'. It also states that aggressive behaviour from the Pinks towards native species was observed. The Pinks were caught by rod and net, but it is stated that parts of the river are inaccessible.

While we still do not have a hard count of Pinks found in the impacted Atlantic countries, further research

needs to be done on how these Pacific salmon will affect the native salmonids in the rivers they are invading. Given their recent numbers it is easy to predict that the populations will continue to grow and compete with native species for food and spawning habitat. A stocking program may have been an attractive option to introduce a self-sustaining population of Pinks for recreation and commercial fisheries, but the impact of these Pinks migrating to other countries has the potential to disturb the native populations. Atlantic Salmon are a very sensitive species, and with the introduction of another, more aggressive species, it is possible to see a reduction in their population. This situation ought to be monitored more closely to fully grasp the potential consequences that may occur in the coming years.

# SLAVERY

## SLAVERY REBRANDED

by **ABBY MACLEOD**



It is now common knowledge that slavery did not begin at the dawn of colonialism nor did it end with the collapse of the transatlantic slave trade. Unfortunately, neither did the imperialist mindset

that shifted colonialism into a softer, more palatable, but no less dangerous neocolonialism. The term neocolonialism, was coined by Kwame Nkrumah, former president of Ghana; Africa's largest producer of Gold. The African subcontinent has long been exploited for its natural resources

through the extraction of minerals like gold, copper, steel, and more recently, precious metals such as yttrium, terbium and dysprosium that are used to make our smartphones and other Western luxuries. Lesser known, is that many African nations, along with other countries in the southern hemisphere participate in the slave trade on a much larger scale than in the 18th Century. The resource that holds greater economic value than precious metals is, in fact, people. You likely cannot get through a single day without using products and goods that have been tainted by human exploitation somewhere along the supply chain.

Human trafficking, child labour, and debt bondage are all terms used to elucidate the modern and widespread reality of slavery. Africa has recorded the highest instances





of modern day slavery with 9.2 million Africans living in servitude. Slavery may seem like a foreign issue, with foreign implications, but with increasing industrialization and globalization comes increasing demand for goods and products with very few regulations in place to prevent the exploitation of workers in the Global South. According to an article published in the Economist, the G20 accounts for three-quarters of global trade, but only seven of its members have measures

in place to regulate goods and reduce forced labour. The same article cites a survey conducted by the Chartered Institute of Procurement and Supply, which found that “only 6% of managers at British firms were certain their supply chains are untainted by modern slavery”. One would also be naïve to assume that manual labour practices such as mining and factory production are the only ways that modern slavery manifests. The Global Slavery Index estimates that there

are currently 17,000 modern day slaves in Canada and 403,000 in the United States; many of whom have found themselves victims of forced marriage and domestic servitude. However, a vast number of slaves today are being exploited exclusively to meet the demands of western consumerism in the manufacturing of goods.

The North South Gap can be defined as the economic disparity between imperialist nations of the Global North and the second and Third World countries of the Global

South. Former colonizing nations still hold much of the world's wealth, while many colonized nations still live in economic destitution. This is not only due to the historical exhaustion of resources but also the exploitation of humans in the form of free labor – allowing slave-trading nations a significant economic advantage that still persists today. It is this advantage that enabled the accelerated development of the New World, and the resulting prosperity of what was once a smattering of coastal colonies and settlements. This economic advantage, paired with a race to industrialization and hunger for abundance, resulted in a materialistic and consumerist culture. In the last 50 years, the average North American home size has tripled, with homes housing an average of 300,000 items per family. A whopping 86% of private consumption is done by 20% of people living in the developed world.

The effects of economic disparity is felt in the Global South not only through poverty, famine, and lack of infrastructure, but also through the scarcity of gainful employment, causing individuals and children to work in unsafe

conditions for low or no wages. The International Labor Organization released a disturbing statistic that, “As many as 1 in 5 African children are victims of child slavery or bonded labour”.

Many of us have been fed a narrative of a wealthy and benevolent North, providing aid for a destitute Global South. Although the economic inequality within that narrative is very real – the story of substantial aid flowing to Third World countries is effectively a myth. In fact, it is not the North developing the South, but the Global South growing first world economies. The Global Financial Integrity and the Centre for Applied Research at the Norwegian School of Economics, produced the most comprehensive body of research on international resource transfers ever conducted. The organizations quantified the inflow and outflow of economic resources by measuring aid, foreign investment and trade flow, in addition to debt cancellation, unrequited transfers and unrecorded capital flight. In other words, private companies exploit cheap Southern labour and natural resource extraction, exclusively benefitting the

economy in their nation of origin. Think of BP profiting off the cheap extraction of Nigerian crude oil, or any one of the 10,000 Chinese firms operating in Africa today. The study determined that for every dollar in aid that developing countries receive, they lose an average of \$24 in net outflows. When Western nations, along with the Global North, have grown accustomed to cheaply manufactured goods from a highly competitive global market, it is nearly impossible to maintain ethical business practice standards. These cheaply produced goods come from increasingly long supply chains, and in the vast majority of cases, there is no guarantee that the goods have not come into contact with slavery or bonded labour either during the acquisition of raw materials, throughout the many refinement and manufacturing processes, or during assembly.

When exploring solutions to the problem of global economic disparity and modern day slavery, one might believe that a desired outcome can be achieved through diplomacy and increased transparency. Simply forcing the Global South to abolish bonded labour practices has proven

more than once to further deteriorate the quality of life of the most vulnerable citizens, especially children. In December of 2018, a Liberal MP by the name of John McKay introduced Bill C-423 to the House of Commons, which would allow the prohibition of any imported products with slavery anywhere throughout the supply chain. However, child labour falls under the umbrella definition of slavery – as most would agree that it should, until further examination of the economic issues facing children and minors in much of the Third World. Between child labour and inevitable starvation, the lesser evil is child labour. We saw the effects that an immediate and sweeping child labour ban could have on exploited children, when in 1993, Senator Tom Harkin introduced the Child Labour deterrence act, causing sweat shops in Bangladesh to fire 50,000 child workers. Paul Krugman, a prominent liberal economist told the New York Times that the act had a negative impact on the children it was intended to protect. “But did the children go back to school? Did they return to happy homes? Not according to Oxfam, which

found that the displaced child workers ended up in even worse jobs, or on the streets — and that a significant number were forced into prostitution.” This is exactly why legislation that has significant impact on the supply chain and the lives of Third World workers must be tabled with the utmost caution, so as not to do more harm.

Actions that carry the potential to mollify neocolonialism and modern day slavery include; making conscious consumer decisions, buying ethically manufactured goods, and supporting fair trade initiatives. One can also help by pressuring corporations to closely examine their supply chain and provide further transparency on their manufacturing processes. Other ways to improve the lives of those in the Global South

include petitioning your government to increase aid in the form of locally

implemented development initiatives, establishing an improved regulatory system for corporate oversight, and demanding ethical foreign business practices.

Neocolonialism and human exploitation have a silent but menacing presence in our globalized World. These are injustices that most of us actively and blindly participate in, due in part to consumerism and a lack of corporate responsibility. It is imperative that any actions taken which will affect the Global South, must be done through consultation, mutual understanding and solidarity. To once again quote Kwame Nkrumah, “Action without thought is empty, thought without action is blind”.

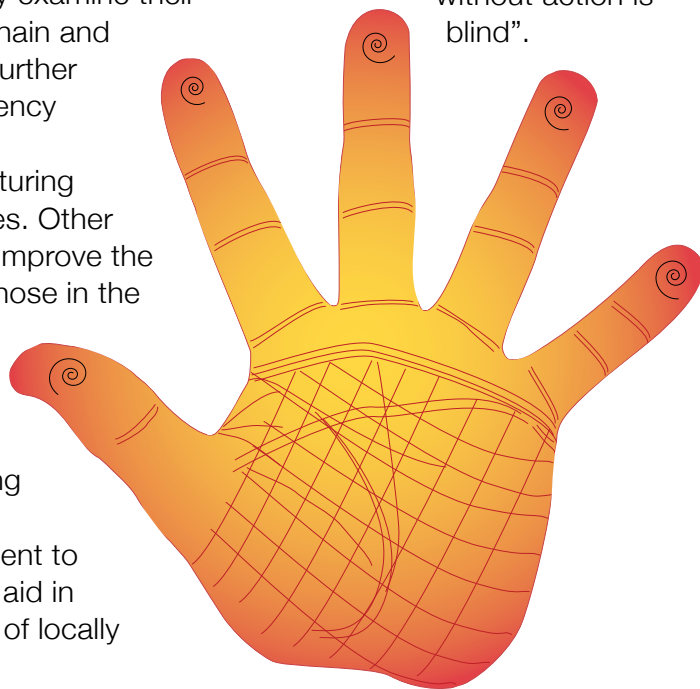


Illustration by Anna Nibby-Woods

# HELPING

## ATLANTIC SALMON IN-SITU EGG INCUBATION

by KATHRYN TOWNSEND



In May, the Project Manager (Kathryn Townsend) and Lead Field Technician (Zachary Burrows) with the inner Bay of Fundy (iBoF) Atlantic Salmon In-situ Egg Incubation Project began looking for suitable iBoF Atlantic salmon

habitat in the Chiganois and Portapique Rivers and Staples Brook (a tributary off the Chiganois River) located in the Northern Minas Basin of Cobequid Bay to plant egg incubation baskets (EIB). Through visual assessments, several sites were identified and monitored

weekly. Visual assessments included looking for a riffle-run-pool habitat sequence, undercut banks, varying substrate including adequate cobble and minimal fines, water velocity, and in-stream shade and canopy cover. Once a visual assessment showed suitable habitat, the project team recorded weekly water quality measurements (pH, water temperature, dissolved oxygen, total dissolved solids, and conductivity) using a YSI Pro-DSS multi-meter. If these measurements were suitable (compared to literature), the team gave the site a code and continued weekly monitoring.

In addition to water quality measurements, the team recorded weekly channel measurements (bankfull width, bankfull height, wetted width, and wetted depth) to determine the fluctuation of water abundance throughout the year. Bankfull width is defined as the elevation the stream will reach on a



*Photo Credit: Kathryn Townsend*

floodplain with a 2 year recurrence interval. It is generally only measured once at the sample site and requires measuring across the stream where the permanent vegetation begins, a slope inflection point occurs, or there is a change in bank substrate material. Bankfull height is defined as the elevation where the water begins to flow into the floodplain. It is measured as the vertical distance from water's surface to the top of the bank. Wetted width is the portion of the channel covered in water, measured across the stream from the point of the water's edge. Wetted depths are taken along the cross-section at distances of 1/4, 1/2, and 3/4 for streams 5 meters or less, and 1/6, 2/6, 3/6, 4/6, and 5/6 for streams greater than 5 meters. Bankfull height, wetted width,

and wetted depth fluctuate with hydrologic changes. Taking channel measurements is imperative as it tracks water level fluctuations throughout the year.

Ten potential sites on each river were identified and monitored. As water levels lowered throughout the summer, the hidden substrate was easier revealed and a handful of sites were removed from the study as the substrate was not variable enough or deemed not suitable spawning habitat (too many fines, boulders, or bedrock). Some sites were also removed from the study as the team was concerned that the distance to the site and the trek through the woods might increase the mortality of eggs before they are planted. Once the team narrowed down the total potential egg incubation sites

on each river to 3 or 4 sites, they conducted substrate analysis to determine the percent fines at each site. To do this, the team identified an area within the site with variable substrate. A plastic pipe 6 inches in diameter was inserted into the substrate and dug down 20-30cm. The substrate was removed from the site and dried. Total weight of the sample was taken and the sample was sieved to separate out the fines using a 2000 $\mu$ m mesh screen. The fines were then weighed. Sites with greater than 15% fines were disregarded as a suitable site to incubate Atlantic salmon eggs. Slope was also calculated at each site. Slope is important as it determines the drawing power of the water under the substrate. Since the EIBs will be buried in the substrate, enough

water flow under the substrate needs to occur to wash the eggs and bring oxygen, but too much flow may batter the eggs too severely and destroy them.

Water chemistry grab samples were also taken to analyze the water quality at each site. When looking at suitable water chemistry habitat for Atlantic salmon eggs, the levels and ratios of calcium, magnesium, and potassium are very important. Calcium, magnesium, and potassium need to be 5.0mg/L, 2.5mg/L, and 1.25mg/L or higher, respectively, and maintain a ratio of 4:2:1 for suitable habitat for Atlantic salmon eggs. Once the EIB sites are chosen, water chemistry samples of each site will be taken seasonally.

Juvenile Atlantic salmon surveys were conducted, using a backpack electrofisher, in 50 meter transects at each potential site to determine presence and absence of Atlantic salmon. No Atlantic salmon of any life stage were found, which is both a positive and a negative. On one hand, it depicts how dire the conservation of Atlantic salmon is, but on the other hand it means that any salmon found while conducting surveys next year will have come from the EIBs that the team has planted.

Based on the visual assessments, weekly water quality and channel measurements, and substrate and water chemistry analysis the project team have chosen one site each on Portapique and Chiganois Rivers, and 2 sites on Staples Brook. The sites on Portapique and Chiganois are large enough to fit 3 redds (a depression in the substrate created by the



female salmon's body and tail). On Staples Brook, one site will hold 2 redds while the other will hold 1 redd. Each redd will hold 5 EIBs and each EIB will incubate 100 iBoF Atlantic salmon eggs. In total 4500 fertilized iBoF Atlantic salmon eggs will be obtained from the Coldbrook Biodiversity Facility and incubated in the Chiganois and Portapique Rivers, and Staples Brook during November.

The EIBs were constructed using 4-inch sewer pipe cut to 11.5 inch lengths. Two windows were cut into the sides of the pipe, approximately 3 x 5 inches and glued with 200 $\mu$ m Nyltex mesh inside. The bottom was capped with a 4-inch end cap, while the other end was topped with a 4-inch end cap with a  $\frac{3}{4}$  inch hole drilled in the top and an adaptor threaded through. The adaptor was capped with a  $\frac{3}{4}$  inch PVC cap until April/ May. In the spring, when alevin are emerging (around 10°C and photoperiod align), the cap



will be removed and an emergence basket will be attached. The emergence baskets will be constructed using a tube of 200 $\mu$ m Nytex mesh with a 3-inch cover on the bottom, while the top cover will have a  $\frac{3}{4}$  inch hole drilled in the top with an adapter threaded through. Attaching an emergence basket will give the newly hatched alevins more space and freedom to move, but keep them contained to the emergence basket where successfully hatched eggs can be counted. This will allow the project team to determine survivability. A galvanized double ended adaptor will be used to attach the emergence basket to the incubation basket.

Each chosen EIB site has a caution sign installed upstream and downstream to notify anyone passing through the area about the scientific study in progress. There is also a phone number on each sign for the public to report any disturbances or damages to the EIBs or the EIBs site to the MAPC office.

Over the course of the field season many changes have been observed and documented in regards to water levels, flow, and the forests surrounding the sites. During peak summer, the water at many of the sites had dropped up to one meter, and the wetted width of the sites had decreased by several meters. A handful of sites on Chiganois had to be completely disregarded after one week of monitoring as there was no water at the site during one visit. Many trees were felled during Hurricane Dorian and the water was quite high and fast for several

weeks following Dorian.

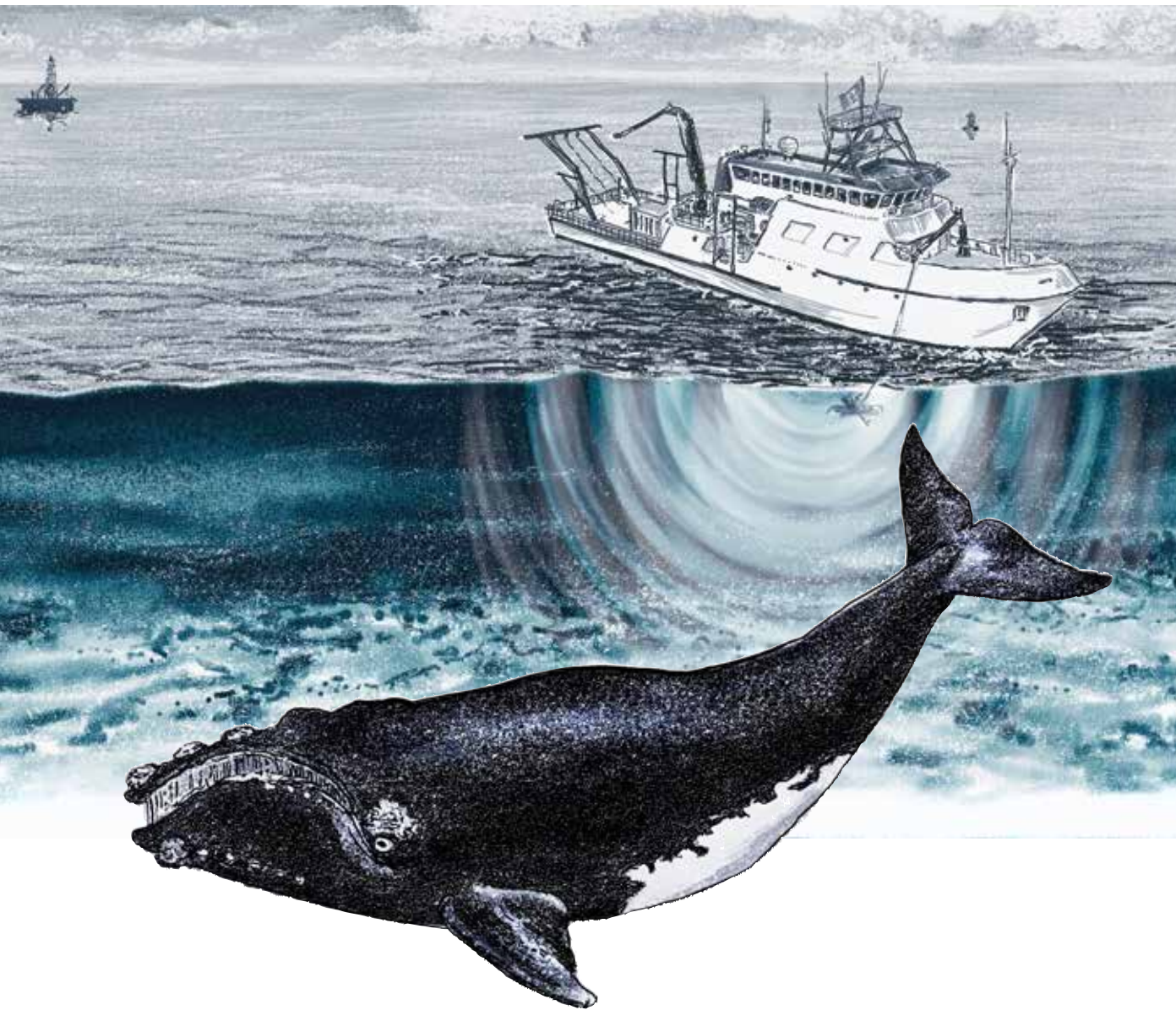
When not working on the inner Bay of Fundy Atlantic Salmon In-situ Egg Incubation Project, the team helps to bring Atlantic salmon conservation full circle by helping the Coldbrook Biodiversity Facility with their unfed fry releases in the spring and their adult salmon releases in the fall. In the spring approximately 50, 000 fry were released in the Debert and Folly Rivers. In the fall, 16 adult salmon were released in the Salmon River. We look forward to continuing to work with the Coldbrook Biodiversity Facility to aid in iBoF Atlantic salmon conservation.

# A COMPELLING REASON

*“You cannot protect the environment unless you empower people, you inform them, and you help them understand that these resources are their own, that they must protect them.”*

*Wangari Maathai*





*Illustrations by Anna Nibby-Woods*

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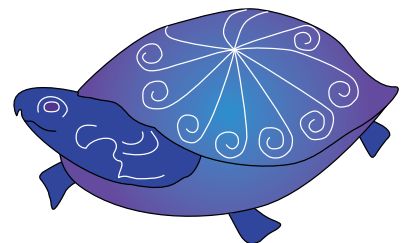
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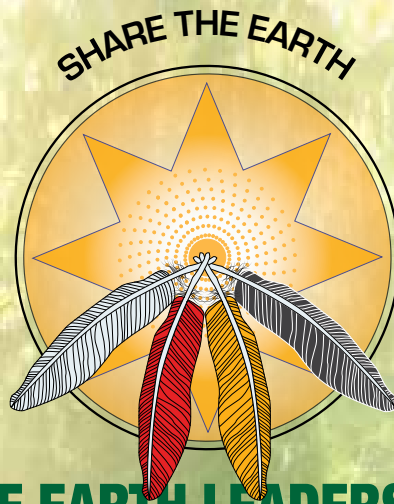
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