



2021 ISSUE

GREEN NOTE

NEWS ON THE ENVIRONMENT

'STRIKING THE BALANCE'

WHAT'S INSIDE

BALANCING ENVIRONMENTAL PROTECTION
AND ECONOMIC DEVELOPMENT

UTILIZING BIODIVERSITY FOR INCOME GENERATION

ADAPTING TO COVID-19

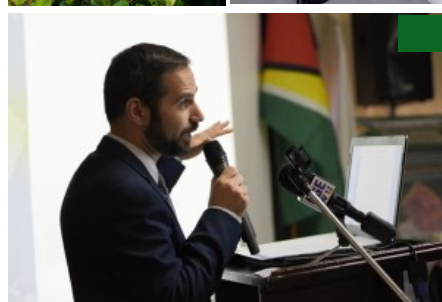
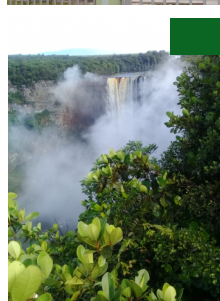
ENVIRONMENTAL GOVERNANCE

WE ARE NOT ONLY PROTECTING OUR
ENVIRONMENT, WE ARE LIVING IN IT



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PREFACE

The GreenNote, Environment Protection Agency's Magazine - now in its third year. This unique publication offers a glimpse into the work of the Agency and its partners - both state and non-state in an engaging, reader-friendly format. Guyana is rapidly undergoing transformation as an oil producing nation, and with this transformation, the need for the services of the EPA becomes more urgent. It is with this thinking, that the magazine is published under the theme 'Striking the balance' - a reflection of interventions taken to balance environmental protection and biodiversity conservation with economic development.

Articles and features in the GreenNote provide updated information on various environmental subjects under the themes:

- **Balancing Environmental Protection and Economic Development;**
- **Utilizing biodiversity for income generation;**
- **Adapting to COVID-19;**
- **and Environmental governance;**
- **and We Are Not Only Protecting Our Environment, We Are Living In It**

The latter part of the magazine titled 'We are not only protecting the environment, we are living in it' features the work of outstanding youth and community groups involved in conservation and environmental management. We hope you enjoy perusing our publication.

MESSAGE FROM CHAIRMAN AND DIRECTORS OF THE EPA BOARD

On behalf of the Board of Directors, I extend happy 25th Anniversary greetings to the Management and Staff of the Environmental Protection Agency.

At this critical juncture in our country, when development is set to occur at an accelerated pace, as a consequence of our newly found oil and gas resources, it is opportune for the EPA to plan strategically to continue to effectively perform its critical role of environmental protection, conservation and management. Cognizant of this, the Board of Directors has conveyed to the Management of the EPA that it should actively pursue development of a new five-year Strategic Plan.

At this time, as the country's lead environmental regulator, the EPA has to critically assess its existing legal and technical tools and to quickly begin the process to update and strengthen them to cater to new and emerging developments. No doubt, such an assessment would also inform the EPA on the necessity to develop new tools for the task of pollution control and biodiversity conservation.

Drawing from lessons-learnt over the last 25 years, the EPA needs to orient its organizational structure to best meet the increasing demand for its services. On this note, the Board has been working with the EPA to grow its section responsible for managing oil and gas projects and has already approved nine additional positions for the section.

As development in the country continues to occur at a fast pace and larger scale, it is important that all significant environmental impacts are mitigated. Therefore, it is of utmost importance that all project developers apply to the EPA for environmental authorisation to ensure that they operate in a manner that will have the least impact on the environment. Also, it is critical that all authorised facilities strictly comply with the conditions of the authorisation granted by

the EPA in order to safeguard the environment and people.

The Board commends the EPA on its continued publication of the GreenNote Magazine. This is much needed publication to convey vital information to project proponents and the public on the process and procedure for obtaining an environmental authorization. Armed with this information, the public is empowered to critically observe developments and ask the EPA if they are authorised and complying with their permits.

Now in its 25th year, the EPA has had many achievements, however its successes can be attributed not only to its internal efforts but also to support provided by many partners. Indeed, the EPA's ability to forge successful partnerships and advance public participation in decision making has been pivotal to the success of many of its endeavors. No doubt, going forward the EPA will continue to build on its successes both internally and with supporting partners and the public.

The Board commends the EPA on its high performance over the past 25 years and stands committed to provide its support and guidance to advance environmental management and conservation in the country.





MESSAGE FROM THE EXECUTIVE DIRECTOR MR. KEMRAJ PARSRAM

Since its inception, the Environmental Protection Agency (EPA) has been committed to the management, conservation, protection and improvement of the environment, the prevention or control of pollution, the assessment of the impact of economic development on the environment, and the sustainable use of natural resources. As the Executive Director, I can attest to the significant strides the EPA has made in environmental management. This is reflected through the robustness of the numerous programmes, policies and plans developed and implemented over the years. Notably was the development and implementation of systems to regulate the fast paced and rapidly expanding oil and gas sector among others.

Our commitment to the execution of our mandate will guarantee that appropriate environmental safeguards are in place for development activities, ensuring sound environmental management and strong compliance and enforcement. All this must be implemented via an approach of collaboration, participation and partnership. I am of the belief that development and environment are not mutually exclusive; economic and social development are important for Guyana and its

people. I remain committed to making a positive impact through outstanding environmental sustainability performance by building an organization with a cadre of staff with the capacity to articulate and translate the core values and vision of the EPA and its mandate into reality.

In 2021, the EPA celebrated 25 years of existence and the significant strides made should be applauded, however we still stand at a crucial moment to define sustainability strategies for Guyana's environment, given the rapidly evolving expectations and demands of its users. For this transition to be smooth and people be able to navigate successfully in such an economy, the EPA must further strengthen its multidimensional and multi-stakeholder objective approach. This will help to further accelerate collective actions needed to come-up with resilient solutions to many of the pervasive environmental issues. Equally, it will help to build strategic alliances in public and private spheres, and will further eradicate and reverse inequalities and exclusions. The absence of such a strategic alliance will only militate against this admirable objective. This publication is a deliberative attempt by the EPA to encourage and showcase greater participation.

As we continue to navigate the challenges of the COVID-19 pandemic which has reoriented the way we work and live, the ability of the Agency to thrive requires transformational leadership. Numerous systems and initiatives are being implemented to better position the Agency to proactively attain its objectives and respond effectively to Guyana's environment and development needs; from strengthening our response to pollution through the establishment of a dedicated Complaints Unit and robust emergency response, to implementing innovative state of the art technologies for remote real-time monitoring, to reviewing our legislative framework. As I continue to effect leading a dynamic team, one of my goals is to permeate every strata of the Agency by taking a "pro-staff" approach that creates an equitable and inclusive, working environment.

ABOUT US

Motto

'The environment is everybody's business'

Who we are?

The Environmental Protection Agency (EPA) was legally established by the Environmental Act in 1996.

It has the responsibility to take the necessary measures to manage, conserve, protect and improve environment. This entails that Agency takes actions to prevent and control pollution; assess the impact of economic development on the environment; and ensure the sustainable use of Guyana's natural resources.

01

Coordinating programmes to conserve and sustainable use of natural resources

02

Assessing the impact of development activities on the environment

MISSION

Our mission is to protect and manage our natural environment

03

Integrating appropriate environmental provisions into development planning; and

04

Promoting public participation in environmental decision-making

Balancing Environmental Protection and Economic Development



THE ENVIRONMENTAL AUTHORISATION

The Environmental Protection Agency (EPA) has the statutory functions to prevent and control pollution, to ensure the effective management, conservation, protection and sustainable use of Guyana's natural resources, and to ensure that the adverse effects of any developmental activity be assessed before such activity commences. These functions require the EPA to regulate and monitor activities which may pose risks to the environment through the issuance of Environmental Authorisations.

Under the EPA's legislation, an Environmental Authorisation is defined to include:

1. Environmental Permits;
2. Operation Permits;
3. Construction Permits; and
4. Prescribed Process Licences

An Application for Environmental Authorisation must be accompanied by:

- The processing fee;
- Supporting documents including proof of land ownership;
- A detailed project summary;
- Business Registration or Certificate of Incorporation; and

Other documents that may be requested for issuance of a permit include:

- Central Housing and Planning Authority (CH&PA) approval;
- No objection from local government authority (Neighbourhood Democratic Council or Town Council); and
- Any other permits or approvals from relevant government entities.

The EPA also reserves the right to request any other information or document it deems necessary or relevant to the project.

Upon screening of the application and supporting documents, the EPA will determine whether an Environmental Impact Assessment (EIA), an Environmental Assessment and Management Plan (EAMP) or any other documents or studies may be required for the EPA to make a decision to issue an Environmental Authorisation. Where an EIA is required, there are several additional statutory procedures, including scoping and stakeholder engagements to be followed before the EPA renders a decision. However, in order for the EPA to issue an Environmental Authorisation, the Agency must be satisfied that the application and supporting documents or studies

contain no false or misleading information, and that the developer or operator can comply with the terms and conditions of the Environmental Authorisation. The EPA must also assure itself that the developer or operator can compensate for any loss or damage which may arise from the project, and that the issuance of the Environmental Authorisation would not be contrary to the interest of protecting human health and the environment.

There are several benefits to being issued an Environmental Authorisation by the EPA. The Environmental Protection Act affords the EPA “*first development consent*”; meaning that all other entities shall defer to the authority of the EPA before deciding on matters relating to the environment. As such, developers and operators who are proactive in seeking an Environmental Authorisation are able to prevent unnecessary delays, the suspension of works and possible penalties.

Moreover, officers of the EPA are trained and competent to ensure that each Environmental Authorisation contains adequate safeguards for the prevention of environmental incidents, appropriate mitigation measures for any potential adverse effects associated with the project, sufficient monitoring and reporting protocols, and such terms and conditions necessary to regulate the type of activity.

In addition to the environmental benefits, it is typically much more economically feasible for developers and operators to be guided by all relevant regulatory requirements designed to prevent adverse impacts on the environment, than to be held liable for penalties including fines, imprisonment and the payment of costs to rehabilitate and restore the environment or to compensate any person for loss or damage suffered as a result of environmental incidents.

Additionally, an Environmental Authorisation issued by the EPA signals to the public and the world at large that your company or business has an interest in preserving and maintaining the environment. As environmental issues, including climate change, continue to garner global attention and mobilization for action, businesses, industries and commercial entities have a key role to play in ensuring their operations are conducted in an environmentally sound and safe manner.

It is an offence under the Environmental Protection Act, Cap. 20:05, and its Regulations, to operate without an Environmental Authorisation, punishable by penalties including fines and imprisonment. As such, developers and operators are strongly advised to make an application to the EPA soonest.



By Saeed Hamid

THE VALUE OF PUBLIC PARTICIPATION

By Candacie Thompson

The value of public participation in the Environmental Authorisation process cannot be over-emphasized. One of the functions of the Agency is to ensure members of the public participate in the process of integrating environmental concerns in planning for development on a sustainable basis. Additionally, the Agency is required to promote and encourage a better understanding and appreciation of natural environment and its role in social and economic development.

What is public participation?

This is the involvement of members of the public in problem-solving or decision-making and that uses public inputs to inform decision making.

Who are stakeholders?

Stakeholders are any individual, group of individuals, organisation or political entity with an interest or stake in the outcome of a decision.

Public participation and Environmental Authorisation

The involvement of the public in any project should be in the early stages of the project and continue at various levels, throughout the life of the project. In the Environmental Authorisation process, public participation is more extensive for major projects requiring Environmental Impact Assessment (EIA). The Agency however is required to publish a 30-days Public Notice for non EIA projects to provide the opportunity for members of the public can lodge an appeal against the Agency's decision. Moreover, for non EIA projects, developers are encouraged to make provisions for public participation to avoid resistance, adequately access the impacts and avoid unnecessary delays or even cancellation of the project.

EPA's process for public participation in the EIA process



Some key values of public participation are:

1. The belief that those who are affected by a decision have a right to be involved in the decision-making process;
2. The promise that the public's contribution will influence the decision;
3. Promotes sustainable decisions by recognizing and communicating the needs and interests of all participants, including decision makers;
4. Seeks out and facilitates the involvement of those potentially affected by or interested in a decision;
5. Seeks input from participants in designing how they participate;
6. Provides participants with the information they need to participate in a meaningful way; and
7. Communicates to participants how their input affected the decision. (Source: *Effective stakeholder engagement for the 2030 agenda*, 2018)

ENVIRONMENTAL AUTHORISATION PROCESS



"The Environment Is Everybody's Business"

LITTER! ARE WE DOING OUR PART?

By Ladonna Kissoon

Waste is a bi-product of life - all living things produce waste. Developmental activities including both new and existing industries, large- scale commercial entities, or even smaller and local business, will by their very nature generate waste. Waste is even produced by you, by your household.

Solid waste management is one of the most problematic environmental issues, not only in Guyana but around the world. As our lifestyles and consumption demand for pre-packaged, easily accessible items increases, the amount of waste produced will continue to accumulate. This is due to the fact that many of the packaging materials used are non-biodegradable and are often disposed of in the environment in a callous manner, thereby creating a number of issues for biodiversity, with marine life facing the brunt of our actions.

In Guyana, people continue to litter with no regard for the environment, causing economic gains to be diverted to remedying the impacts of improper waste disposal.

You can help stop this unsavory situation from escalating by doing your part in helping the Environmental Protection Agency (EPA) in promoting and sustaining a clean environment. Help the EPA in its fight against littering. You can reduce your waste by incorporating these easy to do tips in your daily routine:

- Buy products in refillable containers, or containers that can be recycled;
- Compost your kitchen scraps and yard waste. Your compost can be used in your own organic kitchen garden, which will reduce the amount of packaged fruits and vegetables you purchase from the market or



supermarket;

- Leave the cut grass on the lawns, it will retain the moisture of the lawns, provide nourishment, kill weeds and discourage insects;
- Take your own reusable shopping bags to the market or supermarket;
- Repair appliances instead of buying new ones;
- Keep a couple of bags in your vehicle or in your bag for those unplanned food wrappers, or keep your wrappers on you until you can dispose of them properly;
- Sell old text books, or novels or donate them to students or a library;
- Never throw garbage into a drain, it will block the water ways and cause flooding or end up in our rivers and oceans;
- Have an ice cream cone instead of ice cream a plastic cup;
- Plant a tree and take care of it. Trees provide cleaner air for you to breathe and other numerous benefits;
- Most importantly be vocal, speak up against litter bugs.

Share this message with your families, friends, neighbours and workmates. Littering is illegal according to the Environmental Protection (Litter Enforcement) Regulation 2013. It is a crime. Save yourself the embarrassment and cost of littering by doing the right thing. Dispose of your waste properly.

GENERAL DOCUMENTS REQUIRED FOR APPLICATION

1

**COMPLETED
APPLICATION FORM**

2

**PROOF OF IDENTIFICATION
(ID OR PASSPORT)**

3

PROOF OF LAND OWNERSHIP

4

**BUSINESS REGISTRATION
LICENCES**

5

**ANY OTHER PERMITS OR LICENCES
OR APPROVALS REQUIRED BY
OTHER GOVERNMENT ENTITIES**

6

**PROJECT SUMMARY/
DESCRIPTION INCLUDING**

7

SITE LAYOUT

8

APPLICATION FEE



OIL AND GAS 592

By Esso Exploration and Production Guyana Ltd. (EEPGL)

Guyana has established itself as an oil producing nation with over a year of production under its belt from the Liza Phase 1 project in the Stabroek block. This is just the beginning. ExxonMobil Guyana continues to progress the Liza Phase 2 and Payara projects, and further projects are planned for coming years. With exploration drilling in the Canje and Kaieteur blocks and the arrival of two more drill ships this year, Guyana's resource potential is set to grow. Already, the benefits of the emerging industry are beginning to transform the nation.

ExxonMobil Guyana's environmental management approach is guided by the national regulations and international standards. It reflects a respect for the unique national flora, fauna and socioeconomic environment, and a commitment to responsibly develop Guyana's natural resources for a sustainable, more prosperous future for all Guyanese.

During the first year of production, flaring was an important consideration. The Liza Destiny floating production storage and offloading (FPSO) vessel was designed to eliminate routine flaring by utilizing the produced gas to power the FPSO and reinjecting gas into the reservoir.

In 2020, commissioning of the gas injection system took longer than expected due to equipment issues, and it was necessary to maintain the flare above pilot levels for safety. This was deeply disappointing for ExxonMobil.

In line with regulations and company processes, we kept the government informed at every step, took measures to minimize impacts and initiated comprehensive root cause analyses of the issues. A number of upgrades and repairs have been performed on the Liza Destiny gas compression equipment, and we are incorporating lessons learned into future projects.

As Guyana continues on its transformative journey, ExxonMobil Guyana remains committed to responsible resource development in line with regulations and global best practices. We are constantly seeking to improve our environmental performance for current and future projects.

Low Carbon Development Strategy

"Transforming Guyana's Economy While Combating Climate Change"

In June 2009, the Government of Guyana launched its Low Carbon Development Strategy (LCDS), which aims to transform Guyana's economy on to a low carbon, sustainable development trajectory, while simultaneously combating climate change.

The LCDS aims to protect and maintain the forests in an effort to reduce global carbon emissions and at the same time attract payments from developed countries for the climate services that the forests provide to the world, which will be invested to foster growth and development along a low carbon emissions path, without compromising the sovereignty over the forests or affecting the development prospects of Guyanese.

The LCDS has several important components. The first examines how Guyana can deploy its forests in mitigating climate change while also gaining financial and other support for doing so. The second examines how the country can move along a low carbon development path. The third examines the further protection of Guyana from the effects of climate change (adaptation). The Strategy aims to enable overall national development in the process. In other words, the LCDS demonstrates how developmental goals can be achieved in a low carbon economy.

The two broad goals of the Strategy, as detailed in the LCDS Update (2013), are outlined below:

1. Transforming the economy to deliver greater economic and social development by following a low carbon development path; and
2. Providing a model for the world of how climate change can be addressed through low carbon development in developing countries, if the international community takes the necessary collective actions, especially relating to Reducing Emissions from Deforestation and Forest Degradation Plus (REDD+).

The implementation of the LCDS directly supports at least five of the seventeen Sustainable Development Goals.



"The updated LCDS take into account the challenges that has emerged since the strategy was introduced" - Dr. Ashni Singh, Senior Minister within the Office of the President with responsibility for Finance.

Source: <https://dpi.gov.gy/guyana-aims-to-unlock-over-28b-for-development/>

"...an expanded LCDS would guide Guyana's developmental trajectory. The President said it would be done in an inclusive, low carbon, sustainable, clean, resilient path with increased economic opportunities and investments linked to greater social and infrastructural development. The expanded LCDS would also see the establishment of an International Centre of Excellence for Biological Diversity."

H.E President Irfan Ali's Budget 2021 Speech

Source: <https://op.gov.gy/index.php/2021/02/12/president-alis-inaugural-speech-to-the-12th-parliament/>

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UTILIZING BIODIVERSITY FOR INCOME GENERATION

ACCESSING BENEFITS FROM THE USE OF GENETIC RESOURCES

By Vidyanand Mohabir



The access and benefit-sharing (ABS) concept was especially introduced to remedy the situation deemed to be unfair emanating from bio-prospecting activities. Governments, local communities and indigenous peoples over the decades have lost recognition, rights and benefits relating to the utilization of their genetic resources via non-transparent, unfair, and questionable practices of corporations and disingenuous individuals.

Formalised through Article 15 of the UNCBD and expanded in the Nagoya Protocol, ABS attempts to balance the interests of the users of genetic resources, wanting to continue accessing these resources, and in parallel the providers, who wish to receive an equitable share of the benefits that can be derived from their use.

The Protocol stipulates the modality by which the provider countries undertake to facilitate access to genetic resources, while the users undertake to share, in a fair and equitable manner, the benefits arising from the access and utilisation of these resources. The equitably shared benefits thus obtained, whether in hard currency or in kind (transfer of skills, supply of equipment) would be directed to efforts linked to conservation and sustainable use in accordance with Article 9 of the Protocol.

Guyana, a mega bio-diverse country and a party to the Nagoya Protocol is seeking to establish an effective ABS regime to bring with it legal certainty, a transparent access procedure and robust benefit-sharing to users and providers alike. Over time, this can transform the operating environment, thereby building capacity, encouraging local sustainable use initiatives as means for sustainable livelihoods, and in the process attracting ethical bio-prospectors.

The EPA recognizing the complex legal and scientific nature of ABS, has been developing the ABS regime starting with the ABS Policy and draft regulations.



WILDLIFE TRADE IN GUYANA

By The Guyana Wildlife Conservation & Management Commission

When persons hear the words 'wildlife trade', a host of emotions are evoked. There are those who experience feelings of anger, bitterness and sadness while there are others who feel joy, satisfaction and pride. Despite what one's personal feelings might be, it is important to note that the wildlife trade in Guyana is not only well and truly alive, but it is a legal and necessary means of livelihood for many. Key players in the wildlife trade are trappers, collectors, middlemen, commercial dealers, community marketing agents, and exporters. The most commonly traded species are 'psittacines' which are parrots and macaws, including the red and green macaw, blue and gold macaw, mealy parrot, hawk headed parrot, orange winged parrot and the black headed parrot. Other species that are targeted for the wildlife trade are the squirrel monkey, kinkajou, labba, tapir, red-brocket deer, two-toed sloth, iguana, and emerald tree boa.

Currently, there are 610 persons who are registered as local wildlife users while, in 2020 there were 22 individuals who were legally authorised to engage in the international trade, i.e., import and export of wildlife.

The Guyana Wildlife Conservation and Management Commission (GWCMC) has the responsibility of managing the wildlife trade in Guyana. Various measures that are implemented by the Commission to secure the future of wildlife include ensuring persons are:

- ensuring persons are licenced to be involved in the trade,
- granting protected status to species that are classified as vulnerable, endangered and critically endangered,
- designating closed seasons for the hunting of certain species, and
- conducting research into status of species targeted for the trade.

In the near future, the Commission will be rolling out a suite of domestic licences, developing management plans for particular species targeted for trade, outlining harvest zones and quotas.

BIODIVERSITY: The basis of eco-tourism

**By Treina Fiona Butts,
Tourism and Hospitality Association of Guyana**

Worldwide, biodiversity is vital for tourism, be it on coasts, in the mountains, along rivers and across [savannahs] and forests, these are major attractions for tourists. (UNWTO, 2010). IUCN defines biodiversity very simply. The term Biodiversity refers to the variety of life: the diversity of all living organisms from the various ecosystems of the planet. It "includes diversity within species, between species and of ecosystems" in which they live. (IUCN, n.d.) These serve as the primary reasons for tourists' travel, to enjoy nature and outdoor recreation, tourists will also engage in other activities as well, such as shopping trips, visits to museums, or sports events into their itineraries.

Located on the South American coast, Guyana's tourism product depends heavily upon nature-based-adventure tourism and eco-tourism offerings that focuses on flora and fauna as dominant attractions and source of income for the tourism sector. Guyana's forest and biodiversity are considered important and mostly untouched. Approximately, 85% of the total land area is covered by forest and over the past two decades, deforestation rates in Guyana have ranged from between 0.02 per cent to 0.079 per cent – much far less than many other tropical countries.

Guyana's tourism product found across the Rupununi and developed

within the designated and established Protected Areas embraces the principles of authentic ecotourism: (1) involves travel to natural destinations; (2) minimizes impact; (3) builds environmental awareness; (4) provides direct financial benefits for conservation; (5) provides 2 financial benefits and empowerment for local people; (6) respects local culture; and (7) supports human rights and democratic movements. The Rupununi Cluster serves as a successful case study of blending development and conservation for the betterment of all. Preservation and forest conservation reduces deforestation, raises awareness of the value of the ecosystem and biological diversity, encourages stewardship and reduces illegal trafficking through sustainable initiatives and community partnership. International funding and the through locally-led projects, these efforts have been successful resulting in locally based groups as the South Rupununi Conservation Society and Visit Rupununi with conservation and tourism as their focal points.

Some of the proposed and established locations within the National Protected Areas System currently comprises approximately 8.4% of Guyana's landmass includes Iwokrama Forest, Kaieteur National Park, Kanashen Amerindian Protected Area, Kanuku Mountains Protected Area, Shell Beach Protected Area and

the Urban Parks: National Park, Botanical Gardens, Zoological Park, and Joe Vieira Park. Our protected areas play a major role in the preservation of biodiversity and are major attractions of visitors to the destination. In 2018, Kaieteur Falls recorded a total of 8,195 visitors to the tourist attraction, which is a 10 percent increase from the previous year.

Other tourism highlights are Karasabai for the breathtaking views of the endangered Sun Parakeets, North and South Rupununi Corridor- Surama Eco-lodge, Karanambu Trust and Eco – Lodge, Caiman House of Yupukari where conservation and wildlife tagging of black caimans help to track population growth and decline, Rewa Eco Lodge, Iwokrama – at the heart of Guyana and Iwokrama Canopy Walkway, Maparri Ranch, Manari Ranch, Wichabai and the South Rupununi IBA.

Biodiversity is the major tourist attraction in several ecotourism hotspots found across developing countries. Our rich biodiversity is a major factor in the choice of visitors coming to these destinations, even though only a proportion of visitors may come primarily to view wildlife or participate in cultural activities. Once here, visitors may also choose to extend their stays to experience other tourism attractions, such as cultural or heritage sites or recreational resorts. However, most would have planned their travel with specific locations and activities in mind. The image created by the biodiversity of these destinations is therefore important for the destination's marketing efforts, regardless of it is or is not based on biodiversity.

References:

1. Ecotourism Assessment: Applying the Principles of Ecotourism to Paddle-Based Recreation in St. Lawrence Islands National Park and Environs- Juliene Melissa McLaughlin
2. Developing and Promoting Ecotourism in Guyana- <https://guyanachronicle.com/2018/11/11/developing-and-promoting-ecotourism-in-guyana/> - November 11, 2018
3. Managing biodiversity for a competitive ecotourism industry in tropical developing countries: New opportunities in biological fields- <https://aip.scitation.org/doi/pdf/10.1063/1.5012708>
4. More biodiversity means more ecotourism - <https://wildlife.org/more-biodiversity-means-more-ecotourism/>



In Guyana, Sustainability is the Journey and the Destination

By The Guyana Tourism Authority (GTA)

South America's best-kept secret is not much of a secret anymore. Guyana has had a long-standing commitment to a Green State Agenda which was formalised under the Low Carbon Development Strategy. This coupled with nine Indigenous Nations who have been stewards of their ancestral lands for a millennia illustrates that sustainability is a core value and a way of life for many Guyanese.

In the tourism sector, embracing sustainable tourism, which meaningfully contributes to promoting the conservation values of protected areas and species, supporting biodiversity preservation and improving the wellbeing of local people is paramount to its success. When communities benefit from their natural resources, they have an economic incentive to protect them. This can be experienced in community-led and owned Indigenous tourism enterprises country-wide - an initiative that the Guyana Tourism Authority (GTA) champions as the pinnacle of success for Guyana's journey towards sustainable tourism.

Surama Eco-Lodge, Rewa Eco-Lodge, and Caiman House Field Station & Guest House act as the blueprint for sustainable, community-led and owned tourism in Guyana. The host

communities own the enterprises, which results in all of the residents receiving economic benefits.

The GTA has developed a coordinated approach to ensure that it continues along this path of sustainable tourism development. Through inter-ministerial and multi-stakeholder collaboration, the GTA has been able to maximise local socio-economic and conservation outcomes to improve the travellers' experience. Training initiatives, increased marketing and awareness opportunities both locally and internationally, as well as community-led and owned Indigenous tourism product development all play an important role in GTA's mission to becoming recognised as a premier destination for protecting its natural and cultural heritage while providing authentic experiences.

With its recent move into the limelight and its tremendous endowment of bio and cultural diversity, Guyana is uniquely positioned to welcome travellers who are seeking out unspoiled destinations and looking to positively impact the people and places they visit. This beautiful country, filled with vast pristine landscapes, untapped resources and beautiful wildlife is only just getting started.



ADAPTING TO COVID-19

EPA AND COVID-19

March 2020 is a month many of us will never forget – the World Health Organization declared a global pandemic due to the COVID-19 virus. As we all came to grips with the new normal, the Admin Unit of the EPA-Guyana swiftly moved into action to ensure the safety of employees and visitors at all offices.

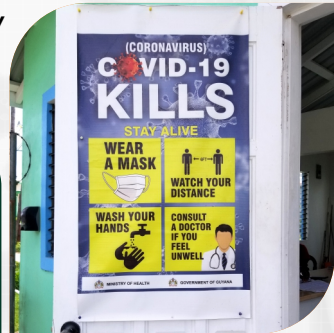
For visitors

- Temperature checks at the security hut at head office; and
- Mask mandate

For staff

- Rotation of in-office days for staff;
- Provision of N-95 masks and hand sanitizer for staff;
- Increased sanitization of offices and fumigation of buildings; and
- Providing regular updates on national COVID-19 measures.

The Admin Unit continues to prioritize the health and safety of the Agency's most valuable assets, its human resources and encourages everyone to stay safe, get vaccinated and continue to observe all protocols set out by the competent authorities.



COVID-19 - AN OPPORTUNITY FOR CAPACITY BUILDING

By Malia Smith

Capacity building is the process of developing an organization's strength and sustainability. Without capacity building, you run the risk of not having new and innovative techniques and skills displayed in the workforce. This lack of a strong foundation can lead to organizational instability and stagnation. We can all agree and attest to the fact that the COVID-19 pandemic presented what is undoubtedly one of the greatest challenges ever faced by the workforce. Employers had to seek new means on how to strengthen their employees' growth in the workplace even during this time. As such a call for even more online training/seminars were made, to which the Environmental Protection Agency (EPA) answer.

In the year 2021, the EPA engaged its staff in more than 300 capacity building sessions, the majority taking the form of webinars. These webinars aided the officers in building a stronger foundation to be better equipped to carry out the EPA's mandates. Webinars were conducted from local, regional and international entities. Some of the entities were the New Producers Group, the Basel Secretariat Convention, Inter- American Developmental Bank (IDB), International Association for Impact Assessment (IAIA) United Nations Development Programme in Jamaica (UNDP), Global Environmental Facility (GEF), Caribbean Community (CARICOM) Secretariat, and Organization of American States (OAS).

The officers were thought how to re-skill and up-skill for the post COVID global work market which leaned towards the topic of how to work with developers during this COVID-19 era. Officers were reminded of the importance of reminding the public and themselves why we need to protect the 30% percent of the planet's land and ocean by 2030. The officers were given a preview of the amended Basel Convention's Plastic Waste (enforcement) which is needed since the EPA is the focal point for the Basel convention. They were also engaged in a webinar titled 'Coastal Monitoring and Modelling' which will be very essential given the fact that Guyana is now an oil producing nation, and we are still playing catch up in terms of knowledge needed to better manage our marine resources while drilling for oil.

In spite of the pandemic's crippling effect on the workforce, an opportunity was created for online training, which helped played a key role in the EPA officers developing new solutions in a short time, to meet the demands of developers and the public. The EPA will continue to seek new ways to better its capacity building for staff.

VIRTUAL CELEBRATIONS FOR ENVIRONMENTAL OBSERVANCES

By Aretha Forde



Winners of virtual and radio Ozone Day quiz

Environmental observances/days are a great way to raise awareness for environment and biodiversity issues and encourage action to address them. These special days offer organizations and people the chance to meet, network, and celebrate the environment and actions to protect it, or launch new initiatives. In fact, the Environmental Protection Agency shares its anniversary with the most significant day on the environment calendar – World Environment Day on June 05. Over the years, the EPA has executed various public activities to commemorate environmental observances, from camps, to conferences, and concerts, engaging youths, students, and the business community.

The Agency's plans for celebrating the various observances came to a halt with the advent of the COVID-19 pandemic – an event that upended almost every aspect of our lives. With creativity and resourcefulness, the Agency was able to engage stakeholders and fulfil the objectives of observing environmental days. In addition to utilizing its traditional media platforms, officers harnessed the power of the Agency's social media platforms – Facebook, Instagram, and YouTube to host quizzes and competitions. Here are just a few of the many activities executed for major environmental observances:

- Quiz – International Mountain Day;
- Kitchen Garden Challenge - World Environment Day;
- Backyard Video Competition – Biodiversity Day;
- Development of informative videos by EPA staff – World Food Day;
- Radio quiz for children – Ozone Day; and
- SUP Ban Poetry Competition – Earth Day

You too can be a part of the celebrations – join a group or take individual action, not only on environmental days, but everyday!



VIRTUAL ENVIRONMENTAL EDUCATION

By Ladonna Kissoon

COVID-19 has resulted in the shutdown of many educational institutions across the world. Globally, over 1.2 billion children were out of the classroom (World Economic Forum – year-document). As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely on digital platforms.

“The highest result of education is tolerance” – Hellen Keller; research suggests that online learning has been shown to increase retention of information, and take less time, meaning the changes COVID-19 has caused might be here to stay. As such, our education systems and our teachers have been forced to adjust to the new norm, and we have witnessed the resilience and camaraderie to combat the ongoing effects of COVID-19. Along with all the changes happening in Guyana and around the world, the EPA also adapted to virtual platforms to ensure the dissemination of information and continued interaction with the public.

Over the last decade, the Agency has engaged over 100 trainee teachers from the Cyril Potter College of Education (CPCE) from Regions 1 through 10 with the aim to eradicate the gap between environmental

education and learning in our schools. Despite the setbacks, the Agency has found creative ways to expose teachers to the devices which can be used to make environment learning experiential. Devices which enable teachers to utilise a variety of methods to successfully infuse environmental education into the core subject areas of the school's curricula; Science, Social Studies, Mathematics and English Language.

The Agency conducted its annual Environmental Education Teachers' Training Camp over a two weeks period via the Zoom platform, engaging a total of fifty-one (51) Early Childhood and Primary Trainee Teachers. In spite of this new interaction teachers were still allowed to immerse themselves in a rich learning experience about the environment. The virtual sessions enabled teachers to explore their connections with nature. It also served as an impetus for positive, informed actions for the environment and the invaluable services it provided.

Memories will fade with time and lessons will be forgotten, but experiences shape a human being and leave a lasting mark. Teachers have the privilege of guiding early experiences and discoveries.

ENVIRONMENTAL PROTECTION DURING THE COVID-19 PANDEMIC

By Candacie Thompson

The EPA places high value on public safety when conducting its work to assess the impact of projects on the environment. This objective has become more challenging during this unprecedented time of the novel COVID-19 pandemic, particularly since, environmental factors such as air & water quality, waste management and climate change can worsen the adverse impacts of the pandemic.

The Agency continues to provide professional and timely service despite the challenges. Moreover, the EPA has realigned its operations in some critical areas including;

Enhancing Environmental Authorisation & Compliance –the Agency has developed a system to ensure the authorisation process is not stalled during this period. Several mechanisms were employed during the pandemic, including sector-specific checklists for self-monitoring. Projects permitted and in compliance with the conditions of their Environmental Permit conditions reduces the risk of negative impacts on the people's health and the environment.

Establishment of a 24-hour complaint hotline – Cognisant of the value of timely response, the Agency implemented a new system to better manage environmental complaints. All environmental complaints can now be channeled using the information below.

- **Complaints 24-Hour Hotline Number: 592-225-5469; or**
- **E-mail: complaint@epaguyana.org.**

Expanding education and awareness – To remain highly visible, the Agency has amplified its media presence and virtual engagements. This include: weekly radio and television interviews, a weekly TV programme ("The Environment Matters"); bi-monthly News bulletin, airing ads daily on TV; Blast text messages; social media video competitions, challenges and quizzes; google advertising; publication and distribution of its 2020 environmental magazine, Green Note; distribution of approximately 2000 posters; online public survey; publication of notices, newspaper articles, news spreads; and social media infographics.

Training and capacity building- The Agency has been utilising and expanding on its international networks and has exposed a much broader cross-section of staff to international conferences and meetings.

Focus on Policy development – Development of Regulations, Standards and Guidelines, to ensure protection of the environment is a prime focus area during this pandemic. Moreover, in excess of 15 guidelines were developed which includes the generic Environmental Impact Assessment (EIA) Guideline, as well as, some sector specific guidelines including mining and hydropower. Additionally, the Agency conducted an internal review of the Environmental Protection Act and developed a comprehensive screening tool for sound, scientific, evidence-based decision-making.

The Agency advises the public to remain vigilant and do your part to reduce and not aggravate adverse health and environmental impacts during this pandemic.



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Solar energy is one of the ways we can try to prevent the effects of climate change. By reducing our CO2 emissions, and releasing fewer pollutants in the air, we can all do our part to slow down climate change.

Electric Cars

Electric cars is a new and cleaner alternative to conventional cars. This step towards sustainable transportation significantly reduces the emissions that contribute to climate change, thereby reducing ecological damage. In addition, electric cars are cheaper to maintain since they have fewer moving parts than a petrol/diesel car. This makes servicing easy, less frequent and overall cheaper.

Furnace

The utilization of the furnace to handle biomass as fuel to generate heat by burning paddy shell is low cost, and does not have a negative impact on the environment. For paddy drying, the adaption of the furnace not only to saves the energy cost, but improves the product quality by adapting indirect heating which help eliminates contamination.



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ENVIRONMENTAL GOVERNANCE



ENVIRONMENTAL PROTECTION ACT



Environmental Protection
Water Quality
Regulations (2000)



Environmental Protection
Air Quality Regulations (2000)



Environmental Protection
Noise Regulations (2000)



Environmental Protection Hazardous
Waste Regulations (2000)



Environmental Protection
Wildlife Regulations (2013)



Environmental Protection Expanded
Polystyrene Ban Regulations (2015)



Environmental Protection Litter
Enforcement Regulations (2013)



Environmental Protection Authorisation Regulations (2000)

STRENGTHENING COMPLIANCE AND ENFORCEMENT

The Environmental Protection Agency (EPA) has the statutory duty to take the steps needed to ensure compliance with the Environmental Protection Act, Regulations and the terms and conditions of its Environmental Authorisation.

In investigating compliance with the Authorisation, the EPA must satisfy itself that the activities authorised by the Environmental Authorisation do not cause harm to human health or the environment.

The EPA is also obligated to investigate complaints which relate specifically to breaches of the Act or Regulations.

The Environmental Protection Act empowers the EPA with the following enforcement powers:

Enforcement Notice: Where the EPA has determined that there is a contravention of a term or condition of the Environmental Authorisation, an Enforcement Notice may be issued outlining the contravention, the steps necessary to address the contravention, and the timeline within which the developer or operator must comply. Failure to comply with such a notice is an offence punishable by fines and imprisonment.

Cease Order: The EPA may issue a Cease Order where the investigation has determined that a developer has commenced a project without obtaining an Environmental Permit, or conducting an Environmental Impact Assessment (EIA).

Prohibition Notice: Regardless of whether or not an activity requires Environmental Authorisation from the EPA, where the officers of the EPA have determined that the activity poses a serious threat to natural resources, the environment or public health, a Prohibition Notice may be issued outlining the EPA's opinion, the threat involved, the offending activity, the steps required to be taken and timeline within which to do so.

Fixed Penalty: Where the EPA has determined that an offence has been committed, the EPA may offer the offender an opportunity to discharge their liability to conviction by payment to the Agency of a sum of money amounting to two thirds of the minimum penalty for that offence.

Prosecutions: Finally, the EPA is allowed to prosecute for offences under the Act or Regulations, where there has been evidence collected to support the commission of the particular offence.

Consequently, crucial to the work of investigating officers is the procurement and proper utilization of technical equipment to monitor, assess and evaluate the impacts of specific activities on the environment and human health. Officers of the EPA in conjunction with the legal personnel must determine whether the

activity poses a threat to the environment, and is within the jurisdiction of the EPA to enforce against. Consequently, the EPA is continuously engaged in training sessions to improve the level of competence and skill in conducting investigations.

In order to fulfil these duties, officers of the EPA are afforded several powers and protections by virtue of the Environmental Protection Act. For instance, officers of the EPA are empowered to enter premises at any reasonable time to investigate any potential adverse effects on the environment and human health. Examinations and investigations by officers may be accompanied by the use of equipment or materials required to conduct assessments, measurements, testing, monitoring or to otherwise collect evidence such as photographs and environmental samples. The Act also empowers officers to dismantle and/or detain any article which may have caused or is likely to cause pollution of the environment.

Officers also have the right to require the production of statements, declaration of truths, and any records or documentation relevant to the investigation, including electronic data. Persons may also be required to afford such facilities and assistance to officers of the EPA necessary to facilitate the conduct of the investigation or examination.

Moreover, officers are protected from civil or criminal liability for executing any of these functions in good faith under reasonable grounds. However, any interference, hindrance, assault or obstruction of an officer during the execution of his duty is an offence punishable by a fine of as much as **three hundred thousand dollars (\$300,000)**. Members of the public are therefore encouraged to ensure the authority of officers of the EPA are respected and maintained at all times; failing which, there may be legal consequences.

The EPA is constantly seeking ways to improve its compliance and enforcement protocols, and over the years there have been several initiatives to do so, e.g. the EPA has conducted several training sessions with the Guyana Police Force (GPF) to investigate noise nuisance complaints.

Officers of the EPA have also engaged with several Neighbourhood Democratic Councils (NDC) in areas of capacity building and joint collaborations to investigate complaints within their respective jurisdictions. There is also an initiative being pursued by the EPA together with the Central Housing and Planning Authority (CH&PA) to facilitate joint inspections into matters of mutual concern to both entities.

The EPA, as the prime guardian of the environment, recognises and acknowledges the value in collaborations and cooperation mechanisms with other entities and authorities, to ensure that the protection, preservation and maintenance of the environment is a commitment for all.



The Escazu Agreement

Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters

By Diana Fernandes

Initiated at the United Nations Conference on Sustainable Development (Rio+20) and rooted in Principle 10 of the 1992 Rio Declaration on Environment and Development, the Escazu Agreement is the only binding agreement from Rio+20 and the first environmental agreement adopted by the Latin America and Caribbean Region.

On March 04, 2018 history was made when Latin America and the Caribbean adopted this Regional Agreement in Escazú, Costa Rica. To advance towards greater environmental rights and protection at the local level, countries in Latin America and the Caribbean decided to act in a regionally coordinated manner, putting capacity-building and cooperation at the service of greater collective goods and interests.

Guyana, along with fourteen (14) Latin American and Caribbean countries made history at the United Nations General Assembly by signing this Agreement. Following this, Guyana became the first country in the Region to ratify this Agreement setting the bar for others in the region to follow.

The Agreement is open to the 33 countries of Latin America and the Caribbean and to date, the Escazu has received 24 signatures and 12 ratifications. The period for signature took place during the period September 27, 2018 to September 26, 2020 at the United Nations headquarters in New York. With meeting the stipulated amount of ratifications as set out under Article 22, the Agreement will enter into force on April 22, 2021.

At the national level, we understand the importance of Access to information, public participation and justice in Environmental Matters, as these are not new concepts to us. Our Constitution (our Supreme Law- Articles 25 and 149J) provides the fundamental

legal basis that guarantees access to information, public participation and justice in environmental matters.

"25. Every citizen has a duty to participate in activities designed to improve the environment and protect the health of the nation"

"149J (1) Everyone has the right to an environment that is not harmful to his or her health or well-being"

Access to environmental information, public participation and justice in environmental matters are also imbedded within several legislations (including the Environmental Protection Act, Protected Areas Act, and Access to Information Act) in the country. The Environmental Protection Act Cap.20:05 for example establishes the Environmental Impact Assessment (EIA) process which encourages public involvement in the decision making process, as well as facilitates the participation of communities that may be adversely affected by development activity.

Since ratification, and with support from the United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC), Guyana hosted a Seminar and Workshop in 2018 and 2019, respectively. These forums provided us with the opportunity to present the Agreement to stakeholders and to review key provisions of the Agreement as well as analyse national strengths, weakness and opportunities considering our current legislative and policy frameworks. The forums were attended by a wide variety of stakeholders (government, civil society, NGOs)

Direct implementation of the Escazu Agreement has not commenced. However, through its current legislative frameworks mentioned above, Guyana has taken steps indirectly to implement various aspects of the Agreement.

In moving forward with implementation of the Escazu Agreement, Guyana will have to designate a National Focal Point for the Agreement and begin to prepare for the first Conference of Parties (COP) to the Agreement which is schedule to take place in 2021. We will also have to work with our stakeholders to assess the current legislations in the context of the Agreement. This will allow us to further take stock of the current gaps, weaknesses and strengths and priorities moving forward.



REGULATING THE OIL AND GAS SECTOR

By Savitri Itwaru

The regulation of oil and gas projects is an important step that needs to be undertaken in the project life cycle and has several key objectives, some of which are (1) protecting the environment (flora, fauna, air quality, water quality, ecosystem services), (2) protecting cultural resources, (3) ensuring public health and safety, (4) ensuring proper waste management and (5) ensuring adherence to regulatory requirements.

The Environmental Protection Agency (EPA) is an environmental regulatory agency and as such is mandated to protect Guyana's environment via the provisions outlined in the Environmental Protection Act, Cap 20:05 Laws of Guyana. The EPA through its mandate is responsible for the environmental regulation and monitoring of oil and gas projects, both in the offshore and onshore environments.

Historically, exploration for hydrocarbons in Guyana commenced in the 1950's, however, a significant find was not made until 2015. Shortly thereafter, Guyana joined the list of oil producing countries in 2019 with the commissioning of the Liza Phase 1 Development Project. With this significant development, the EPA recognized the need to develop and implement necessary mechanisms by which it can ensure proper regulation and monitoring of oil and gas activities.

In the year 2020, due to restrictions imposed by COVID-19, regulation and monitoring of oil and gas projects was primarily achieved through self-monitoring reports (daily, weekly, monthly and yearly) submitted by operators. Additionally, access to information was further strengthened through the development of a data sharing platform between the EPA and Operators. However, the EPA has

recognized the need to diversify its approach to monitoring and regulation in keeping the restrictions imposed by COVID-19, and is currently working on several methodologies which it hopes will be approved in 2021.

To further strengthen its approach to environmental regulation and monitoring, the EPA has undertaken the following activities:



1. Preparation of an Annex to the Environmental Impact Assessment (EIA) Guideline which specifically relates to Offshore Petroleum Exploration and Production (OPEP) activities. The Annex will provide details regarding offshore petroleum industry specific aspects, impacts and risks to be covered in an EIA in order to guide project proponents and its contractors on how to conduct EIAs for the offshore petroleum sector. Additionally, the Annex will support the EPA in EIA reviews and ensure that informed decisions are made.
2. Development of criteria for the conduct of “Cradle to Grave Waste Analysis” Study which seek to manage all categories of waste from the point of origin to the point of disposal.
3. Development of Waste Profile Sheets which operators are required to use when categorizing wastes generated by projects.
4. Capacity building for staff. Over the past year, the EPA became a member of the following international groups within the Oil and Gas Industry through which staff has access to courses, training materials and workshops all which assist in developing key technical skills required to effectively regulate and monitor oil and gas activities:
 - a) Society for Petroleum Engineers (SPE);
 - b) International Offshore Petroleum Environmental Regulators (IOPER);
 - c) New Producers Group (NPG); and
 - d) Subscribed member of American Petroleum Institute (API).

With access to new information and development of technical skills of staff within the EPA, it is envisioned that the environmental regulation and monitoring framework will be further improved and strengthened to ensure oil and gas projects in Guyana continues to be undertaken keeping the environment in mind and international best practices and standards



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**WE ARE NOT
ONLY PROTECTING
OUR ENVIRONMENT,
WE ARE LIVING
IN IT**

EPA'S COMMUNITY OUTREACH

By Ladonna Kissoon

It was Maya Angelou who said **"...that among its other benefits, giving liberates the soul of the giver."**

The knowledge that you're helping others is often empowering and in turn, can make you feel happier and more fulfilled. Volunteering your time or even resources to support a cause you are passionate about is something you will never regret. The Agency for many years has ensured its presence in communities through out Guyana is felt through our outreach programmes. This not only include environmental education but charitable activities such as:

- "The Annual Toy Drive" started in 2018, targeting children from orphanages across Guyana, in an effort to spread cheer and warm their hearts; and remind them that we care during the Christmas season;
- "Hot Meals" for children within our immediate community.
- "Good environmental practices" during our World Environment Day celebrations, members within the immediate community were gifted with items such as plants and garbage bins, as a means of encouraging and advocating being good environmental stewards.

The Environmental Protection Agency is an organization with a lot of heart and intelligence behind it. It is composed of a wonderful group of committed and willing staff, who ensure its presence in the community aids development. There are plenty of opportunities to help, even if it's for a few minutes, take time to do some good work.





COMMUNITY BASED APPROACH TO ECOSYSTEM BASED MANAGEMENT

By Christine Samwaroo

As the global community works towards building back better for all people and the planet, ecosystem-based management approaches are a significant tool to achieve sustainable solutions. The Environmental Protection Agency (EPA) was selected as the National Project Coordinator for the Sub Regional Project on the North Brazil Shelf Large Marine Ecosystem (NBSLME).

This project seeks to develop and test various governance arrangements to enable effective ecosystem-based management to mangroves and wetlands. Regional countries such as Guyana, Trinidad and Tobago, Suriname and Brazil were selected to design and implement country-specific projects to address the objective of establishing an inter sectoral mechanism that links local, national and regional levels of dialogue and management planning on marine areas within the NBSLME.

The Wellington Park Mangrove Reserves located in Region Six was selected as the project site. This site was once an area where the success of mangrove restoration was initially recorded. However, the noticeable extensive erosion driven by natural forces, and observable pollution of the mangrove environment with sawdust has contributed to the significant loss of the mangrove forests.

Consultations with community members were major components in addressing the project deliverables. The residents who live along the Wellington Park Mangrove Reserves recognised the need for mangroves in their communities to: provide a livelihood, maintain biodiversity, and to protect against flooding. The residents who took part in this project showed continuous enthusiasm and passion to restore the area.

Through the Ecosystem-Based Management approach, the EPA in collaboration

with the community developed a management plan and governance structure that will be most effective in the mitigation of pollution, restoration and/or rehabilitation of the area. Additionally, sawmill operators, Skeldon Energy Inc., the University of Guyana, National Agriculture Research and Extension Institute (NAREI), and Sea and River Defense were consulted by the Agency. A management plan and governance structure was completed for the next five years (2021-2026). The plan outlines that community members would like to see healthy mangroves through restoration activities, and for the site to be developed as an eco-tourism destination that promotes awareness, research and overall sustainability of the site.

The community noted that they would like to:

“To restore, manage and protect the Wellington Park Mangrove Reserves using Ecosystem-Based Management (EBM) approaches. The community aims to develop the park as a model for livelihood activities in the form of eco-tourism, environmental awareness and conservation for the benefit and enjoyment of the present and future generations.”

The second phase of the project will address deliverables

“Activity 2.3.3 Implement local/national Ecosystem-Based Management (EBM) projects promoting an integrated approach to pollution reduction and habitat restoration in at least two selected countries who are parties to both the LBS (Land Based Sources of Pollution) and SPAW (Specially protected Areas and Wildlife) Protocols. This will build on lessons learned from EBM pilot projects implemented under the GEF CLME+ Project and support countries in implementing activities under their national pollution prevention plans and strategies.”

As the global community continues to address biodiversity loss and develop programs to restore ecosystems, community members are integral in this process. All stakeholders including women, youths, differently-abled persons, and indigenous persons offer a unique perspective on the success of any project. Not only do they bring years of experience, but they are also the ones living in these spaces and should have ownership of all developments in their communities.





Thinking about forming an environmental club?

An environmental club can be formed by any person or group that wants to make a difference in the environment. These include community groups, youth groups, students, and religious groups.



STEP 1

Select a name for your club. Remember this will be your identification, so you want something catchy and meaningful.

STEP 2

Elect your chief office bearers. Choose wisely as these persons will often have to represent the club at important events.

STEP 3

Set out some general objectives of your club. You may also want to have a mission statement or pledge.

STEP 4

Decide on meeting times and places.

STEP 5

Map out some activities the club could undertake and set deadlines.

STEP 6

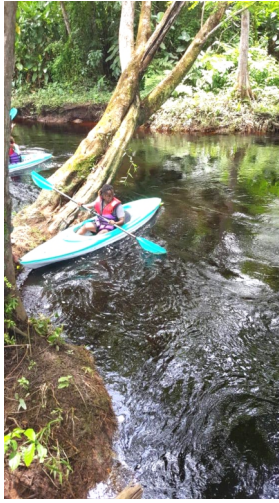
Make yourself known, i.e. within your school/community.

STEP 7

Send your application form and become affiliated to the EPA.



YOUNG AND THOUGHTFUL YOUTH CLUB



The Young and Thoughtful Youth Club a non- governmental youth development organization launched in Georgetown on March 08, 2000. Y&TYC is registered under the Ministry of Youth, Sports, and Culture and caters for young people between the ages of fourteen to thirty (14-30), with a balanced programmed of activities for individual development. After nine years, a branch was launched in Linden by Mr. Cornelius Roberts – the current Director and a team on November 28, 2009.

The goal of the club:

- To create an environment in which young people will be
- Encouraged to develop their full social, mental, spiritual and
- Physical potential, through opportunities which will enable
- Them to become responsible and productive citizens.

The objectives of the club:

- To create awareness of the ills in society, within the youth population.
- Assist members in the involvement of the community.
- To lend support to the less fortunate in society.
- To assist in the development and education of young people.

Types of programmes available:

- Peer Educators Training
- Skills Training
- Youth Organization Entrepreneur Members Project
- Parents' Development Support & Mentor Project
- Job Training
- Community Development Project

After eight years, our annual training camp and tree planting, seed distribution exercise along with other activities were taken to Kwakwani and other neighboring

communities. Mr. Roberts launched three units in the following sub-regions, Kwakwani August 07, Aorima August 08 and Ituni on August 10 2016, bringing a lifetime of opportunities to the youths in these communities.

Current work

Young and Thoughtful Youth Club is currently creating two friendly spaces and has planned within the next two years by 2025 to create more completely youth friendly physical recreation spaces.

Ongoing programmes include:

- Y&TYC beautification refurbish projects, environmental campaign in creating safe & healthy spaces (cleaning up/tree planting exercise, seeds distribution, capacity building, educational tours/camps among others;
- Literacy classes (Read To Me Project) with programs in English, Mathematics, Reading, Writing with a counseling room among others;
- Social Skills Training Projects which include; Joinery, Mechanic, Sewing, IT Computer Repairs Hub, Catering/Cooking, Craft and Agriculture, among others;
- Physical recreation (sport) which include: swimming, athletics, jumping, dancing, Cricket, basketball, football, circle tennis, volleyball among others; and
- Me to You Feeding Program- this program is geared at assisting struggling families in the community with no food or clothing. It is with this initiative we hope will help mitigate suicide teenage pregnancy among others social ills.

Motto of the Club: TODAY YOUTHS, TOMORROW'S LEADERS.
You can find us on Facebook at Young Thoughtful Club





SEAWALLS AND BEYOND

YOUTHS DRIVING ENVIRONMENTAL PROTECTION

Seawalls and Beyond is a group of young people who describe themselves as nature-loving volunteers who see the oceans, the largest part of nature, as deserving of care for the enjoyment of all. Originally with the intent of showcasing the beauty of the Georgetown beach front at Kingston through social media, the group has grown in its influence and impact after an emergency intervention of a weeks-long beach clean-up in mid-2020. The group uses the power of social media - Facebook - to spread its message and to invite the public to join in regular activities in addition to beach-clean ups. Using art as a form of communication to spread a message of environmental consciousness is one of its methods. Tree planting exercises are also conducted. Advocacy as well as public education & awareness through social media are key activities of the group.

The coastlines of Guyana are, in many parts, affected by ocean trash or marine debris which is becoming a growing problem. Poor waste disposal practices in many communities lead to the ocean being affected by large volumes of plastic and other inorganic materials – much of it washing back onto beaches and spoiling their beauty. The impact on marine life itself is often severe. It is with this care for nature, that the volunteers of Seawalls and Beyond press on despite numerous challenges. Its activities have inspired other communities to engage in clean-up campaigns as well and the group believes that it can be a catalyst for positive actions in caring for nature.



The group continues to receive wide support from individuals, the private sector, clubs and NGOs who either join in monthly activities at Kingston or provide much needed gear, equipment and supplies. Seawalls and Beyond has an active Facebook page through which it interacts with the Guyanese public (@SeawallsandBeyond). The group openly welcomes new volunteers as it believes in the power of ordinary people to be agents of positive change.



CARIBBEAN YOUTH ENVIRONMENT NETWORK



In 1961, when Jamaica voted by referendum to withdraw from the West Indies Federation, Dr. Eric Williams, then the Premier of Trinidad and Tobago, said "one from ten leaves naught".

Perhaps, Dr. Williams, knew that the only realistic chance of success in regional progress came from collective action.

It was a similar notion that catalyzed the birth of the Caribbean Youth Environment Network (CYEN) between 1989 and 1993. CYEN was established in Montserrat in November 1993 with initial financial contributions being made (inter alia) by Ziggy Marley and Irvine 'Carrot' Jarret of the band 'Third World'.

Today, CYEN is recognized as a regional NGO managed by youth leaders within 19 Caribbean countries who are dedicated to improving the quality of life of youth by facilitating their personal development and promoting their full involvement in all matters on the environment and sustainable development.

Through its work, CYEN promotes Caribbean integration and community empowerment as tools to develop an ethic amongst young people that assists in the conservation and protection of natural resources within the Wider Caribbean.

Moreover, through tremendous effort and persistence to consolidate youth effort and facilitate change on a regional and international stage, the organization has formulated affiliations with, to name a few; the Conference of Youth (UNFCCC), Climate Action Network, Caribbean Policy Development Centre, Ocean



Conservancy, Caribbean Network for Integrated Rural Development, Global Water Partnership-Caribbean and the Commonwealth Youth Council.

CYEN in Guyana drives the organization's mandate through the execution of projects and leading advocacy opportunities, often in tandem with regional chapters. The most notable of which include the annual International Coastal Cleanup, participation in Caribbean Youth Environment Network and TUNZA-Youths Involvement in Sustainable Development in (2007), participation in Climate Change Advocacy and Media Training held by 360.org (2009), awareness and education on Principle 10 of the Rio (2016), participation in the United Nations Convention for Combating Desertification Conference CRIC 17 (2019) and the Guyana Solar Challenge (2019)



At the root of the work of CYEN is the understanding that a single international convention or action plan cannot simultaneously combat the environmental ills of the world without regional integration and effort.

THE MARIAN ACADEMY ENVIRONMENTAL CLUB

The Marian Academy Environmental Club started in September 1998 at the beginning of the school and has been consistently engaged in environmental issues, even online in the COVID-19 pandemic. The intention of this club is to conscientize our students at all levels in the care of the environment, to protect, to conserve and to preserve. The Club's membership is composed of passionate and motivated teachers and students who are keen and eager to engage in educational activities about nature. The attitude fostered is to live responsibly with the natural environment and to raise awareness of the need to be stewards of our "Common Home" the earth.

Through these activities the students have come to realize that they live in an interdependent world, and whatever they do to the environment will also affect them. Examples of environmental issues are used to help identify and encourage them to draw parallels and make comparisons between what is done in the club and what happens in their own homes and the wider society.

Students understand better when they apply their acquired knowledge. Therefore, opportunities are provided for the students to apply theoretical knowledge to practical projects. The members of the club participate in activities both in and out of school such as green walks, at various forums sponsored by the Environmental Protection Agency, with which we are affiliated, The World Wildlife Fund, clean up campaigns, planting of trees, field trips, environmental competitions



just to name a few. Most of all the club has contributed in helping the Marian Academy to become a litter-free zone.

Marian Academy was the first community in Guyana to join the Global Peace Pole Project in 2002. A project dedicated to the co-creation of Peace on Earth in honour of the World Peace Organisation that was founded in Japan after World War 11. The Club also collaborated in 2003 with the Pan American Health Organisation and World Health Organisation to establish the school as a Smoke-Free Zone, making Marian Academy the first school in Guyana to declare a No-Smoking Zone.

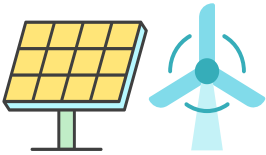
The Environmental Club has, in its activities, emphasised the relationship between peace and the environment. This is based on the principle that respect, love and care for all that the Creator has made, namely the environment and everything that lives in it, with humans as the highest creation, should lead the world of peace and harmony. The Club introduced in 2005 in Guyana the ENO, Environment Online, plant a tree tradition. The tree is seen as a symbol for environmental protection and international co-operation in the field of environmental education, cultural diversity, tolerance and peace. This day coincides with the celebration of International Day of Peace and forms part of the UN Peace activities around the world. The Marian Academy is the first school in Guyana to join the ENO School Programme, and continues to mark World Peace Day each year on September 21, by planting a tree.

The Club continues to be vibrant by fostering attitudes in helping our students to acquire a set of values, care for the environment, and the motivation for actively participating in environmental improvement and protection.



SAVE *the* PLANET

Whether it's a long term investment or changing a small daily habit, YOU can do your part!



Invest in renewable energy



Compost your kitchen and yard waste



Protect wildlife



Choose to use re-usable items such as water bottles, straws, and shopping bags



Buy local to help local farmers, small businesses, reduce packaging and transportation costs



Always dispose of your garbage in the correct way



Plant trees and start your own kitchen garden



Make your own household cleaners using everyday items such as baking soda and vinegar

CHOOSE TO REUSE

USE WHAT YOU HAVE

REDUCE REUSE RECYCLE

Practice the Rs of waste management: Rethink, repurpose, refuse, reduce, reuse, recycle



Enjoy a more plant based diet



FREQUENT QUESTIONS ASKED ABOUT EIA'S



What is an EIA?

An EIA is a decision-making tool which assesses the potential impacts of a particular project which may significantly affect the environment.



Who conducts the EIA?

The EIA is conducted by an independent consultant or team of consultants.



When is it required?

An EIA is required when the potential impacts may be significant.



Who reviews the EIA?

The Environmental Assessment Board (EAB), the EPA, sectoral agencies, governmental & non governmental organisations, indigenous communities, members of the public.



How is the EIA reviewed?

Through written submissions from stakeholders and input from public disclosure meetings including the groups listed above.



FREQUENT QUESTIONS ASKED ABOUT EIA'S



What type of project requires an EIA?

Projects which may significantly impact the environment e.g. oil and gas production, large scale mining etc.



What information is captured in an EIA?

Identification of alternatives, legal policy framework, baseline conditions, environmental components affected, assessment methodologies, cumulative impacts, mitigation measures, monitoring protocols



Can an EIA be rejected?

Yes, if an EIA doesn't meet the standard of the EPA/EAB and the Terms and Scope prepared, it can be rejected.



What are the statutory timelines for the EIA according to the EP Act?

28 days for recommendations before the terms and scope are prepared, and 60 days to review the EIA.



How long does it take to complete an EIA?

The Environmental Protection Act doesn't stipulate how long the study should take.



PUBLIC SCOPING MEETINGS

What you need to know!



It involves you!

Developers who propose certain kinds of projects must consult with the public. The Environmental Protection Agency (EPA) requires that this be done to gather your concerns and views about the project. Scoping meetings are only done for projects where an EIA is required.



It gives you the chance to add to what the EIA study should cover.

Your concerns and questions about the project can be included in the EIA study; the EPA will decide on this with the developer and the consultant approved to conduct the study.



It gives important information about the project.

At the scoping meeting, the developer will share a lot of information about the project; how they think it will affect the environment and how they plan to carry out the EIA study.



Your questions and comments are recorded

At the meeting, the EPA records your questions, concerns, and comments which contributes towards the development of the 'Terms and Scope' for the EIA study. The EPA also accepts written submissions on questions and matters you would like to be addressed in the EIA by email or letter. The public has 28 days after the EPA publishes a Public Notice to send in comments.



They are held in the project area of influence

Scoping meetings are usually held in the project area of influence to allow persons who may be impacted by the proposed project to contribute towards the decision-making process.



Developers organise scoping meetings

The developer is responsible for organising scoping meetings to involve communities that are close to project or that may be affected by it. The EPA may assist the developer in organising the scoping meetings.

You obtain information on a proposed project from EPA's website www.epaguyan.org; EPA's Office, Ganges St., Sophia, Georgetown, or at the RDC/NDC/Village Office in your Region.

5



Throwing in the trash

Find the 10 differences between these two drawings!



SPOT THE DIFFERENCE





SAY NO NO NO

SAY NO,NO,NO!

USE YOUR OWN FROM YOUR HOME.

SAY NO,NO,NO!

PLASTIC ENDS UP IN THE SEA.

KILLING SEA CREATURE FAMILIES.

SAY NO,NO,NO!

PLASTIC BAGS DON'T BREAK DOWN.

THEY WILL STAY IN THE GROUND.

SAY NO,NO,NO!

PLASTIC BAGS JUST HAVE TO GO!



YUVRAJ ROMESH ROOPNARINE,
PHILADELPHIA PRIMARY SCHOOL



EPA IN THE FIELDS



EPA IN THE FIELDS









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Environmental Protection
Agency - Guyana