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Rio Seco Waterfall, Sangre Grande

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# ONCE IT'S NICE, YOU DO IT TWICE!

The success of our Quiz Time Competition in 2020 encouraged our team to launch another season of Quiz Time to close off 2021. This allowed us to keep our online audience engaged, while the programme continued to raise awareness and educate them about watersheds and water resources management.

The competition was launched on both our Facebook (FB) and Instagram (IG) pages, with two (2) questions posted weekly for a four-week period. Questions focused on water resources, the environment, and general water management and conservation measures for the home and workspaces. Throughout the duration of the competition, there was a steady stream of reponses from enthusiastic and knowledgeable participants of all ages.

Each week, winners were randomly chosen and awarded prizes. To qualify for the grand prize, participants were required to answer all 8 questions over the four weeks. Having been randomly selected from all qualifying entrants, Ms. Janice Ballah emerged as the overall winner, walking away with a Samsung Tablet, a hamper from Coca Cola and cool Adopt A River memorabilia.

ISSUE 5

NEWSLETTER

## **QUIZ TIME WINNERS**









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#### THE ADOPT A RIVER PROGRAMME 5TH ANNUAL CONFERENCE 2022

The Adopt A River Programme (AARP) hosted its 5th Annual River Conference on Tuesday March 29th 2022 under the theme "Connecting the Dots... Harnessing Technology and Innovation". This year's event was our second virtual conference and featured various technological and innovative tools for the efficient use and management of our water resources. In keeping with our mandate of promoting and supporting the sustainable management of our water resources and protection of our watersheds, the conference exposed our stakeholders, partners, and wider audience to viable and accessible solutions for managing our land and water resources.



Feature Presenter: Dr. Kegan Farrick Lecturer, UWI

The Conference proceedings included various presenters who showed how technology and innovation is being utilized in various spheres, inclusive of the private and public sectors. Our keynote speaker was Dr. Kegan Farrick of the University of the West Indies, St Augustine, Head of the Geography Department and a Hydrologist specializing in catchment hydrology. Dr. Farrick highlighted the use of stable isotope application and geometrical techniques in understanding water movement and stream flow. Ms. Marissa McMillan of the Water Resources Agency (WRA), provided an overview of the Community Flood Early Warning System Project (CFEWS), which aims to monitor and measure water flow for ealry flood warning and mitigation. The Adopt A River Programme's Data Officer Mr. Allister Brizan, who developed the CFEWS App, demonstrated how the App is utilized for data collection and needs assessments post flood events.



**Devanand Ragbir** TTGBC Representative



**Don Rambarran** Civil and Coastal Engineer, Ministry of Works



Jonathan Barcant Managing Director, IAMovement



**Balraj Ragoo** Agricultural Assistant III, Forestry Division



*Marissa McMillan* Watershed Planner, Water Resources Agency



*Muhammad Baksh* Drainage Engineer, Ministry of Works



**Faariah Khan** Director, Green Age Farms

Nature-based solutions to help protect both our environment and more specifically our watersheds were offered by a few of our speakers. Civil and Coastal Engineer Mr. Don Rambarran attached to the Coastal Protection Unit, Ministry of Works, spoke of shoreline stabilization projects being conducted at various locations throughout the country to combat coastal flooding and sea level rise associated with climate change. Proceeding inland, we heard from Drainage Engineer also from the Ministry of Works, Mr. Muhammed Baksh, who spoke of the innovative techniques and infrastructural systems utilized by the Ministry for water management and flood mitigation.

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Allister Brizan AARP Data Officer



Moderator: Avril Alexander AARP Project Manager



Host: Alisia James-Perez AARP Communications Officer



Dr. Ronald Roopnarine Lecturer, UWI

Nature-based solutions for land and water management, was shared by our partners at the Forestry Division, Ministry of Agriculture, Lands and Fisheries, Conservator of Forests Mr. Denny Dipchansingh and Agricultural Assistant III Mr. Balraj Ragoo. Featured in their presentation were techniques such as terracing, check dams and intercropping. Representing the IAMovement and Vetiver TT Ecological Engineering Solutions Ltd, was Co-founder and Director Mr. Jonathan Managing Barcant, who shared insights into the

use of the vetiver system as a naturebased technology for slope stabilization and land management. The vetiver system can be combined with traditional technologies such as retaining walls and gabion baskets for infrastructural support for riverbanks and slopes in residential, commercial, and public spaces.

Other notable highlights of the conference came from Ms. Faariah Khan, one of the Directors at Green Age Farms located at Endeavour, Chaguanas. Ms. Khan noted that with the ever-growing concern for the conservation of our limited water resources, water reuse has become paramount to sustainable living and food production. Thus, with this premise, Green Age Farms provides a simple, sustainable, and efficient method of water usage in agriculture and food production through the use of hydroponics systems. Since hydroponics use less water to grow produce than conventional farming methods, it can be utilized by homeowners, increasing food production and self sufficiency.



Honourable Marvin Gonzales Minister of Public Utilities



**Ravindra Nanga** Chairman of the Board WASA



Sherland Sheppard CEO(Ag) WASA



Keith Meade Senior Manager, Water Resources Agency

Efficient water-use and management, natural and technological tools, and the future of building design creating a balance of all factors, was beautifully demonstrated by Mr. Devanand Ragbir, a Mechanical Engineer of 20 years and co-founder of the Trinidad and Tobago Green Building Council. Mr. Ragbir spoke of the Council's work as they advocate for more sustainable construction, which incorporates water reuse and recycling systems in both public and private buildings. These elements were demonstarted by the construction of the first LEED (Leadership in Energy and Environmental Design) Building in Trinidad, at Queens Park East Port Of Spain.

All AARP Conference proceedings and videos can be viewed on our YouTube by simply typing in **Adopt A River TT.** 

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## **SPREADING THE WORD**

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Engaging our citizens and bringing awareness to the importance of all our watershed issues has remained an important aspect of the AARP's mandate. Where safely possible, outreaches and education and awareness activities were held physically at various locations and communities. Some of these locations include West Bees Supermarket, Diego Martin, Massy Express, Maraval and Massy Stores, West Moorings. The AARP was also invited to participate at Caribbean Bottlers (Trinidad and Tobago) Limited (CBTTL) HSE Day, held annually at their Tacarigua facility.







Massy Express, Maraval





Tamana R.C Primary School





CBTTL HSE Day, Tacarigua

### SPREADING THE WORD (Continued)

Virtual interactions were also conducted with several schools and community groups. These included St Michaels (Whim) Anglican Primary and the Montgomery Government Primary, Tobago; San Juan Presbyterian; Hockett Baptist Primary, Morvant; and the Point Fortin Community Emergency Response Team (CERT).



**Online Outreach with CERT** 

We are grateful to our many partners and stakeholders for collaborating with us to serve their schools and communities.

#### WATER WARRIORS ARE AT IT AGAIN

We are assisted in conducting water quality testing and monitoring through various groups such as Nature Seekers, Ambiance Project, Aripo Community Council, Trinidad and Tobago Scout Association Tobago District, Caroni River Warriors, and the Penal/Debe Foundation to name a few. The AARP has provided training in basic ambient water quality sampling and testing to these groups through its flagship Water Warriors Training Program. Bolstered by the training, the groups have 'adopted' rivers in their communities, which they monitor on an ongoing basis. Nature Seekers completed an entire year of Water Quality Testing and members of the group were awarded certificates in a simple ceremony at their headquarters in Matura.



We continue to encourage other groups and communities to get involved. Visit our website (www.adoptarivertt.com) for more information on how you can join us.

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#### **CLEAN SLATE**

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Starting a new year with clean and positive vibes is always great and so the AARP team jump started the year with those sentiments in mind, by hosting several clean-ups in partnership with various stakeholders. A beach clean-up of Kilgwyn Bay took place on Saturday, January 15th, 2022, in our beautiful twin island of Tobago. This exercise was conducted in collaboration with members of Project Green Heart, an environmental NGO based in Tobago. Coordinating the event was Ms. Oshun Mills and the groups President Ms. Kaneisha Toussaint.



Kilgwyn Bay, Tobago

Other areas tackled by the AARP and partners include Moraldo Street, Maraval, facilitated by the Councillor for the area Andy Felician and CEPEP workers; a follow-up cleaning of the Caroni River with the Caroni River Warriors; a beach cleanup at Matura with Nature Seekers; and a clean-up with the Aripo Community. Mounds of garbage were removed from dumping sites at Depot and Billy Harmond Roads in Longdenville, facilitated by the Couva/Tabaquite/Talparo Regional Corporation (CTTRC).



## SIGNED, SEALED, DELIVERED!

Beautification and 'do not litter' signs were installed at various locations as a measure to dissuade individuals from polluting the environment and to encourage further action and pride in keeping one's communities clean and pristine. Signs were installed in the Aripo Community at the main entrance to the village and the entrance to one of their recreational river sites. Signs were also installed at the cleared dumping sites in the Felicity and Longdenville areas, advising against the illegal practice.



Sign installed at the entrance to the Aripo village



Councillor for Aripo Kerry-Ann Roberts-Kassmally, community member Darryl "Jack" Durrity and Project Manager of AARP Avril Alexander



Members of the Aripo Community Council, the Aripo Police Youth Club and members of the Tunapuna Piarco Regional Corporation.



AARP staff, secretary of the Bio Sci Club, **Ms Chickree** Vice Principal of ASJA Boys Secondary School and **Mr Hameed** of the Chaguanas Borough Corportion



Entrance to the Lakhan Karriah (Felicity) Cremation Site



Billy Hammond Road, Longdenville

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JUNE 2022

## **RAINWATER HARVESTING IN ARIPO**

During many engagement sessions with the Aripo Community, including monthly clean up exercises with the Aripo Police Youth Club, online and in-person meetings with the wider community and the community council, the AARP was made aware of the water supply challenges facing the community. Resulting from this awareness, the AARP began its efforts to alleviate the community's water shortages and contacted the technical team from WASA's North-East Operations Unit to conduct site visits to the community's intake to assess how the supply of water to the over 2000 residents of the Aripo village can be improved.

Long term solutions entailed remodeling the intake, building a new intake, or improving the storage capacity of the intake. As this would take time, and require substantial finances, a short-term solution was sought as a means of supplementing the community's current water supply, through the installation of a Rainwater Harvesting System. The Aripo Community Centre was chosen as the most appropriate location to place the Rainwater Harvester, as it was an easily accessible public building in the community with an already appropriate roofing and guttering system. The Community Centre also serves as an emergency shelter for natural disasters, thus equipping it with Rainwater Harvesters ensures water availability in the event of an emergency.







Meetings were held with the Councillor for the Heights of Aripo, Ms. Kerry-Ann Roberts-Kassmally of the Tunapuna/ Piarco Regional Corporation (TPRC) and the community council in February 2022. The then President of the Aripo Community Council, Mr. Kevin Thompson, endorsed the project and committed the Community Council to maintain and supervise the use of the system once completed. The TPRC committed to provide the construction supervision and labour to complete the system. All building materials, inclusive of cement, gravel, tanks, and fittings were provided by the AARP.

Work on the construction of the system began on April 4th, 2022 and was completed on April 27th 2022. An existing 600-gallon tank, and the addition of 2 x1000 gallon tanks increased the maximum availability of water that can be stored to 2600 gallons, filled with both spring and rainwater. This will allow for water to be accessed in both dry and rainy season. The system has two tap outlets that will afford any member of the community access to the water under the supervision of the Community Council.

## **ROOTING FOR THE ENVIRONMENT**

Trees play an important role in the health of our eco-systems and our water resources. They provide shelter for aquatic animals, their roots stabilize riverbanks and reduce erosion, they regulate environmental temperatures and keep rivers cool just to name a few. With this premise, the AARP and partners commit to conduct tree planting exercises year round. Stemming from our tree planting events in commemoration of World Rivers Day in September 2021, many of our partners and adopters have continued tree planting exercises in many locations throughout Trinidad and Tobago.



Green Vale Police Youth Cub, Maracas





St. Joseph Police Youth Club, La Grine Road, Maracas Valley





Project Green Heart, Plymoth Recreation Ground

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## SIGNING OF MEMORANDUM OF AGREEMENT (MOA)

#### FOR THE NATIONAL RAINWATER HARVESTING PROGRAMME

The Adopt A River Programme is jointly implementing a National Rainwater Harvesting (NRWH) Programme developed through the Ministry of Public Utilities with the objective to alleviate the water supply challenges of communities and to build their resilience to natural disasters and climate change. The Programme will include the installation of 100 rainwater harvesters to qualified households in water scarce parts of Trinidad & Tobago. The NRWH Programme is in collaboration with Habitat for Humanity TT which will construct the harvesters, and The National Institute of Higher Education, Research, Science and Technology (NIHERST) which will focus on community disaster resilience.



Sherland Sheppard CEO(Ag) WASA, Honourable Marvin Gonzales Minister of Public Utilities and Jennifer Massiah National Coordinator Habitit TT



Sherland Sheppard CEO(Ag) WASA and Honourable Marvin Gonzales Minister of Public Utilities



Signatories from other government ministries and agencies

#### DID YOU KNOW?

About 6,800 gallons of water is required to grow a day's food for a family of four.

68.7% of the fresh water on Earth is trapped in glaciers.

30% of fresh water is in the ground.

1.7% of the world's water is frozen and therefore unusable.

Check our pages below for our Water Conservation Tips & AARP Tidbits, Activites and Events. Full Conference Highlights available on Youtube.

Facebook: Adopt A River Trinidad & Tobago Instagram: @adoptarivertt

Youtube: Adopt A River TT