

Dutch Caribbean Research Week

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17 - 24 June 2026



Abstract book Dutch Caribbean Research Week 2026

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ORAL PRESENTATIONS

Aruba, Wednesday 17 June

Theme: Education, Research & Technology in the Caribbean

Keynote

The opportunity of social media curation - From distractor to shareholder: A human-centered design strategy for the emergence of Futures of Education

Drs. Stephanie Croes

Abstract

In 2023, I did research that is still ongoing on testing pedagogical frameworks for algorithm training among youth. The main purpose of this research is to train the youth on how to train their social media algorithms for content curation and make their social media account a learning pod/ecosystem. With funding through UNESCO participation programs, I have expanded this research within the Futures Lab of the Emerging Communities Foundation. This ongoing research is part of the Designability Series for the Futures of Education with a focus on non-formal learning.

Aruba, Wednesday 17 June

Food Resilient Futures in the Caribbean Netherlands: a vision on continuity

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Abstract

Food Resilience is a highly relevant and complex theme of the Caribbean Netherlands. Inhabitants experience high dependency on imported (processed) foods, high prices, and scarcity of locally produced fresh products.

Current efforts of the Netherlands Governments focus on increasing food production on the islands. But more productive food systems on the islands are only part of a response to this complexity. While a food production orientation offers practical solutions, in this research the term "food resilient futures" was chosen to emphasize agency and social ecological learning, placing focus on community-led transformation rather than purely technical interventions. This broader framing, though it may seem distant from conventional food production approaches, emerged as an important result of the research project.

In the research project Food Resilient Futures, a Living Lab approach was initiated leading to the formulation of priorities and consequent experiments in relation to water-smart and nature-inclusive resilient food systems. Although it is unrealistic to strive for complete local food production, a Living Lab approach can pave the way for exploring what is possible within ecological limits and for identifying cultivation and production opportunities that local inhabitants can benefit from. The research results indicate that the cultural dimension of food offers opportunities: Krioyo food as an expression of Antillean identity. This vision fits seamlessly with a Living Lab approach as it creates the foundation for local ownership in a necessary transition process. To respect the social capital invested, the relationships and trust established, continuation of this collaboration is essential.

Aruba, Wednesday 17 June

Learning Communities Bridging Education, Science, Society and Culture for Societal Impact on Curaçao

Roeline Bossen¹, Liesbeth Echteld²

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Roeline Bossen: Programme manager Transdisciplinary Education TU Delft, project Lead Even Groene Vrienden;

Liesbeth Echteld: Professor and Director of De University of Curacao research institute (UCRI)

Abstract

Addressing complex societal challenges in the Caribbean requires educational and research models that integrate interdisciplinarity, societal engagement and cultural diversity in a systematic manner. This contribution examines the design, implementation and curriculum anchoring of *Learning Communities (LCs)* developed through collaboration between Delft University of Technology, the University of Curaçao, and The Hague University of Applied Sciences within the *Even Groene Vrienden* eco-system.

The LC model functions as an infrastructural framework connecting education, research and societal practice and is grounded in design-based research and participatory action research. Organisational and governance structures explicitly define roles and responsibilities of students, educators, researchers and societal partners, while didactic principles support cross-boundary collaboration and knowledge co-creation.

Two empirical Learning Communities on Curaçao are analysed: Sustainable Environments and Gezonde Wijk. Sustainable Environments engages students with partners such as UCRI, Carmabi, businesses and governmental organisations on locally embedded sustainability challenges within the socio-ecological context of Curaçao. Gezonde Wijk focuses on health and liveability in neighbourhoods through co-creation with residents and local professionals. Data sources include project outputs, participant reflections and institutional documentation.

Results indicate that participation in LC's enhances student agency and the development of cross boundary collaboration-skills, professional and intercultural competencies, while generating context-sensitive solutions with societal relevance. The approach has demonstrated institutional and societal impact, evidenced by follow-on funding from a research and a citizen science grant. These enabled sustainable embedding of the LC methodology, including curriculum integration and teacher professionalisation at the Radulphus College, strengthening multi-level learning pathways between secondary, vocational and higher education.

Aruba, Wednesday 17 June

A scoping review in small island contexts: mapping research on food in the ABC islands

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Abstract

Scoping reviews aim to map the extent, range, and characteristics of evidence across diverse sources. Existing scoping reviews on food in small island contexts often excluded evidence from the ABC islands. However, substantial food-related research has been conducted in this region. This study presents a first-time systematic mapping of publicly available scientific and grey literature on human food and beverage production, supply, and consumption in the ABC islands.

A protocol was developed based on the JBI and PRISMA-ScR methods. Nine databases were searched, including academic databases, local university and knowledge repositories, and global knowledge repositories. In total, 264 items were identified, of which 117 were published between 2000 and March 2025. Research characteristics were analysed for this latter subset, to explore current relevant themes. The results indicated a diverse, accessible, and expanding research field, with notable growth over the past decade. This increase coincided with a period of growing global attention to food-related research, as well as expanded funding opportunities and international collaborations. Most authors were affiliated with Dutch institutions, while first authors were predominantly affiliated with local institutions. Research focused primarily on Aruba, followed by Curaçao and Bonaire. The most frequently studied supply chain stage was agricultural production, particularly arable farming and fisheries.

For scoping reviews in small island contexts, we recommend searching multiple databases and including local University repositories. Each database contributed unique items and most evidence was drawn from these repository types. This overview contributes to greater transparency and accessibility of food-related research in the ABC islands.

Aruba, Wednesday 17 June

Tools for weather, climate and seismic hazards on the Dutch Caribbean islands

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Abstract

Caribbean islands are exposed to a wide range of weather, climates and seismic hazards, including hurricanes, extreme rainfall, heat, rising sea levels, earthquakes and tsunamis. The interaction of these hazards and their associated impacts can lead to amplified risks through compound and cascading effects. Therefore, understanding such multi-hazard dynamics is essential for effective disaster risk reduction and climate planning.

The EU-funded PARATUS project addresses this challenge by developing tools to support stakeholders in managing compound disasters (<https://www.paratus-project.eu/>). Within the Caribbean case study, the Royal Netherlands Meteorological Institute (KNMI) is contributing its expertise on climate and seismic hazards. The KNMI develops climate change scenarios, investigates future changes in hurricane intensity and assesses regional seismic hazards.

The KNMI has developed extranet platforms to support the timely and effective relay of meteorological and geophysical warning information to professional stakeholders. This represents an important step forward in strengthening risk preparedness and environmental monitoring for Bonaire, Sint Eustatius, and Saba. The current extranet for these islands combines multiple hazard domains within a single interface, displaying tropical storm warnings, weather forecasts and warnings and seismic events.

Aruba, Wednesday 17 June

Navigating Research Realities on a Small Island: Lessons from A PhD Healthcare Project on Aruba

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Abstract

Background and objective: One way to characterize the difficulties of conducting research on small islands is to describe them as a combination of methodological barriers, ethical situatedness, and resource and logistical constraints. Drawing on examples from a PhD project on the Caribbean island of Aruba, we mapped challenges onto a framework that identifies common drawbacks and evaluates potential solutions, with the aim of helping current and future small island researchers mitigate and manage risks when conducting data science research.

Method: Using examples from a PhD project conducted at a small-island university in collaboration with a continental university, we first identify and categorize key challenges. We then evaluate the proposed solutions using a SWOT analysis. Finally, the lessons learned were visualized through cross-functional flowcharts.

Results and conclusion: The PhD project integrates exercise physiology, machine learning, and telehealth. Six key challenges were identified and grouped into three categories: methodological barriers, ethical considerations, and resource and logistical constraints. A retrospective SWOT analysis of the strategies used provided additional insights that had not been recognized during the project itself. In addition, cross-functional flowcharts, commonly applied in business process analysis, proved helpful in systematically visualizing lessons learned. To our knowledge, this structured approach to reflecting on PhD challenges is uncommon and warrants further validation by other researchers working in small-island contexts.

Keywords: healthcare; small-island research; research ethics and governance; resource and logistical constraints; SWOT analysis; cross-functional flowcharts

Aruba, Wednesday 17 June

Language ideologies in Aruban secondary education: Integrating policy texts, teacher perspectives and pupil perspectives through nexus analysis

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Abstract

Aruban language-in-education policy is shaped by a tension between the dominant home language, Papiamentu, and Dutch, the primary language of instruction in most schools. This paper presents an analysis of three key policies, interviews with teachers (n = 11) and focus groups with pupils (8 groups; n = 29) across different schools. The study adopts a nexus analysis approach to examine the links between policy and classroom practice in Aruban secondary education. Analytically, the paper focuses on (1) the language ideologies embedded in policy (“discourses in place”) and (2) how these ideologies shape and are reshaped through classroom practice (“interactional order”). A third lens attends to pupils’ lived linguistic trajectories (“historical bodies”), foregrounding how learners experience and are positioned within the Aruban educational system. These lenses constitute a critical analysis with context-specific insights into the interaction between practice and policy, and language ideologies.

By exploring how these policies relate to practice, the study highlights the tension between policy intentions and real-world practice. Further, it is a window into the considerations of teachers who must balance using their pupils’ diverse language repertoire with the demands of a monolingual, educational system which has Dutch proficiency as a primary linguistic goal. It contributes to wider debates on linguistic justice and decolonial perspectives in language policy, assessing whether current policies promote or undermine linguistic diversity. The findings hold relevance not only for Aruba but also for other multilingual and postcolonial Creole settings. This research forms part of the Horizon Europe project Pluridentities.

Curaçao, Thursday 18 June

Theme: Health & Healthcare in the Caribbean

Keynote

From Cells to Systems: a Journey of Evolving Questions in Caribbean Health Research

Dr. Soraya Verstraeten

Abstract

This keynote tells the story of a research journey shaped not by fixed answers, but by changing questions. It begins with a simple, fundamental inquiry: why do individuals get sick?, and follows how that question evolved in response to new evidence, new methodologies, and the lived realities of the ABCSSS-islands. Along the way, one insight became clear: the questions we choose to ask define not only what we study, but the impact our work can ultimately have.

Each next question was driven by the limitations of the previous one. Biomedical research uncovered critical insights into disease mechanisms but could not explain why entire populations experience different health outcomes. Population health studies revealed striking disparities and the importance of preventable and amenable conditions. Looking across the Caribbean, comparative research brought into focus the powerful role of governance, institutions, and policy performance. Yet even with this knowledge, real-world prevention efforts exposed a well-described gap between evidence and action, shifting the focus toward quality improvement.

This research journey -from cells to systems- illustrates that improving health in small island contexts requires continuously reframing our questions to match the levels at which health is shaped. It calls for bridging disciplines, from biomedical sciences to public health and implementation sciences, to build health systems that not only deliver care, but learn to adapt and improve over time.

Curaçao, Thursday 18 June

Redesigning neurosurgical emergency healthcare. A Task-Sharing Roadmap for the Caribbean Island Health System.

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Abstract

Background

13 million people lack timely access to neurosurgical care in the Caribbean. The World Health Organization (WHO) and Centers for Disease Control (CDC) see neurosurgical task-sharing as a promising strategy to address specialist scarcity and delayed emergency care. In task-sharing, medical tasks are performed collaboratively between specialists and non-specialists with shared responsibility.

Healthcare workforce scarcity is seen across the Caribbean Islands of the Dutch Kingdom. Curaçao serves as a neurosurgical tertiary hub for referrals from Bonaire, Sint Maarten, Saba, and Sint Eustatius, while Sint Maarten serves as a secondary care center for the northern islands. The consequent air-ambulance-dependent pathways negatively impacts neurosurgical emergencies, resulting in preventable morbidity and mortality.

Methods

This research aims to: (1) analyze workflow, quality, and equity in emergency air-ambulance transfers using mixed qualitative and quantitative methods; (2) explore the potential and limits of neurosurgical task-sharing in underserved island settings; (3) survey Caribbean physicians and communities on the need, acceptability, and perceived impact of neurosurgical task-sharing; and (4) develop and implement an initial simulation-based training hub in Curaçao for non-neurosurgeons to systematically train for emergency procedures. These procedures will be supported by structured curricula, standardized assessments, cost-effective analysis, and real-time tele-monitoring via Vuzix smart glasses, to strengthen islands without resident neurosurgeons, focusing on the Caribbean islands of the Dutch Kingdom.

Ultimately, this work aims to co-create a collaborative model that improves timely access, safety, and resilience of neurosurgical emergency care, with hopes of building a reproducible model for analogous geographically constrained settings.

Curaçao, Thursday 18 June

Sickle Cell Disease and Sickle Cell Trait on Curaçao: Incidence and Pediatric Complications. A Retrospective Cohort Study From a Single Centre

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Abstract

Introduction

Sickle cell disease (SCD) is a clinically heterogeneous autosomal recessive disorder that causes substantial morbidity and early mortality when not diagnosed and treated early. Despite increasing awareness of SCD in the Caribbean, epidemiological data for Curaçao are scarce. This study aimed to determine the birth incidence of SCD and sickle cell trait (SCT) and to describe the frequency of the clinical complications observed in affected children.

Methods

A retrospective, population-based cohort study was conducted using high-performance liquid chromatography (HPLC) screening data for all newborns in Curaçao born between 1995 and 2024. Confirmed genotypes (HbSS, HbSC, HbSβ⁰/β⁺) were classified as SCD and HbAS as SCT. Additionally, a descriptive review of pediatric medical records was performed to assess SCD-related complications.

Results

Among 40,231 screened newborns, 2,156 (5.6%) had SCT and 131 (0.3%) had SCD. No significant differences in incidence were observed between hospital and community births or across time. Of 74 children with SCD (mean age 10.3 years; 58.1% male), 63.5% experienced at least one complication. The most frequent were anaemia (43.2%) and transfusion requirement (21.6%), and were most common in children with HbSS.

Conclusion

SCD affects approximately 1 in 300 births in Curaçao, with a carrier rate exceeding 5%. The disease presents a substantial, yet under-recognised, health burden. The high complication frequency underscores the urgent need for a structured national neonatal screening and follow-up program to ensure timely diagnosis and care. We suggest an island-wide intervention for optimisation of the screening and inclusion of DNA analyses for definitive diagnoses.

Curaçao, Thursday 18 June

Implementing a Lifestyle Medicine Screening Program for NCD Prevention in Curaçao

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Abstract

More than 65% of the population of Curaçao is overweight or obese, and the prevalence of non-communicable diseases (NCDs) continues to rise. The Caribbean Prevention Center is therefore introducing an organized screening program to prevent more residents of Curaçao from developing NCDs. The program aims to individually assess six pillars of lifestyle: diet, physical activity, sleep, stress, alcohol, and smoking- and provide targeted interventions.

Eligible participants for the screening are men and women between 25 and 75 years. The intervention is open for screening participants with low to high risk of developing NCDs based on guidelines according to the Dutch combined lifestyle intervention. Weight, height, waist circumference, blood pressure, heart rate, glucose, and cholesterol are measured to establish the risk profile of the participant. The physical measurements are accompanied by a questionnaire to evaluate the six pillars of lifestyle medicine. Next, the results are discussed with a lifestyle physician. During this intake visitation, the lifestyle physician and the participant jointly select up to two pillars for targeted intervention.

After the baseline measurement, the participant is followed for 12 months with follow-up visits every four months. During the follow-up, the physical measurements are repeated along with self-reported questions about the pillars chosen to intervene on. The program is considered successful if participants achieve their goals set from the start.

The current implementation study will evaluate the impact and optimization of the organized lifestyle screening and intervention program in Curaçao.

Curaçao, Thursday 18 June

Realization of a cancer registry in the Dutch Caribbean countries and special municipalities

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Abstract

Background: Cancer is a significant public health concern in the Caribbean, being the second leading cause of death. Despite this, the region lacks comprehensive cancer data, hindering efforts to combat cancer. Population-Based Cancer Registries (PBCRs) are critical for collecting data on cancer incidence and prevalence to implement effective health interventions. Therefore, this study assesses the feasibility of establishing a PBCR across the Dutch Caribbean (Aruba, Curaçao, Sint Maarten, Bonaire, Saba, and Statia).

Methods: A study was conducted in the Dutch Caribbean in 2024 to evaluate the feasibility of establishing a PBCR. Data were collected through structured interviews aligned with European Network of Cancer Registries and WHO guidelines, involving healthcare facilities and laboratories responsible for cancer diagnosis and treatment. Furthermore, assessments were performed covering technical, legal, financial and privacy considerations.

Results: Key findings indicate that while some islands, e.g. Curaçao and Aruba, have laid the groundwork for cancer registration, other islands do not, and gaps remain in legislative frameworks, data sharing and infrastructure. Based on study results, the PBCR system of the Netherlands Comprehensive Cancer Organization is best fitting. A robust legal framework, sustained financial support, and stakeholder collaboration are also key to the registry's success.

Conclusion: Implementing a PBCR is feasible, provided that a coordinated effort across the islands is made, with shared data management systems and financial resources. To proceed, governments in the Dutch Caribbean must secure formal approvals, establish a clear legal and financial framework, and engage stakeholders to drive the implementation of a PBCR.

Curaçao, Thursday 18 June

mHealth for decision-making support in colorectal cancer screening in the Dutch Caribbean Islands

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Abstract

Background

The Dutch Caribbean faces a relatively high burden of colorectal cancer (CRC)-related mortality compared to the Netherlands. Population-based screening is essential for reducing CRC-related morbidity and mortality. In 2020, Curaçao introduced CRC screening for adults aged 50–75, yet participation remains low (~20%) due to, e.g., logistical barriers in reaching screening invitees, as well as misconceptions and limited knowledge of the procedure. In 2025, Aruba and Bonaire also implemented CRC screening, with St. Eustatius and Saba to follow in 2026 (BES-islands). However, similar barriers to informed decision-making (IDM) persist, implying the need for tailored, culturally aligned information. Combining mobile health (mHealth) and personalized strategies may support IDM and strengthen coverage across the region.

Objective

To co-create culturally appropriate mHealth and personalized strategies that support IDM and coverage in CRC screening and follow-up colonoscopy in the Dutch Caribbean.

Methods

We will conduct a needs assessment through interviews with target populations and stakeholders in Curaçao, Aruba, and BES-islands. Co-creation sessions and usability tests will follow in Curaçao and Aruba. Next, implementation conditions and user experience will be assessed through interviews and questionnaires. Finally, we will evaluate effectiveness on reach and IDM using a pretest–posttest design.

Impact

This four-year project aims to establish and implement co-created mHealth and personalized

strategies to improve IDM and thereby increase participation in Dutch Caribbean CRC screening programs. It will also contribute to closer and sustainable cooperation between the islands in early CRC detection and prevention, ultimately reducing CRC-related mortality.

Curaçao, Thursday 18 June

Maternal Near Miss in Curaçao: Comparing WHO and Namibian Criteria in a High-Income Caribbean Setting

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Abstract

Background: Maternal mortality ratios (MMR) are statistically unstable in small-population settings, limiting their value for monitoring maternal health. Maternal near-miss (MNM) surveillance complements MMR by identifying women who survive life-threatening obstetric complications. The World Health Organization (WHO) developed standardized MNM criteria. Some countries, including Namibia, adapted these criteria to increase sensitivity in specific health-system contexts. MNM data from Curaçao have not yet been reported. This study compares WHO and Namibian MNM criteria in Curaçao, a high-income small-island setting with centralized obstetric care.

Methods: A retrospective cohort study was conducted at Curaçao Medical Center between November 2019 and December 2024. All deliveries, ectopic pregnancies, and abortions were included. MNM events and maternal deaths were identified using WHO and Namibian MNM criteria. WHO-recommended MNM indicators were calculated and agreement between criteria was assessed using Cohen's κ and McNemar's test.

Results: Among 6,449 pregnancies (5,879 live births), one maternal death occurred (MMR 16.6 per 100,000). WHO criteria identified 34 MNM cases (5.78/1,000 live births), compared to 71 cases using Namibian criteria (12.08/1,000 live births). Despite substantial agreement ($\kappa = 0.74$), Namibian MNM criteria identified significantly more cases ($p < 0.0001$). WHO criteria identified more severe MNM cases, whereas Namibian criteria included additional cases with lower severity.

Conclusion: Expanded MNM criteria increased case detection, but reduced specificity for identifying severe maternal morbidity. WHO criteria more accurately captured life-threatening obstetric events, supporting its use in high-functioning health systems. The MNM ratio on Curacao is lower than reported regional data, likely reflecting timely access to high-quality care.

Bonaire, Friday 19 June

Theme: Social Behavioural Science in the Caribbean

Keynote

Protecting our future generation on Bonaire! How data can help for an effective approach against Domestic Violence and child abuse on Bonaire

Drs. Elly Rojer

Abstract

Youth represent the future, including the future of science. But what happens when a high percentage of children on the islands are exposed to abuse? Is the prevalence higher than in the European Netherlands? What forms of abuse occur most frequently, and how can this shape society? In her keynote, Elly Rojer will analyze and categorize the available data and statistics to clarify these patterns and identify where further research is urgently needed.

Bonaire, Friday 19 June

Beach Inna Bondage: The Fight for Jamaica's Coastline

Emiel Martens

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Abstract

Beach Inna Bondage: The Fight for Jamaica's Coastline is a research-based documentary exploring the growing struggle for beach access in Jamaica. Since the 1950s, access to the island's beaches has steadily declined, leaving less than one percent of the coastline publicly accessible. Over the decades, most of Jamaica's beaches have been captured by private and tourist interests, and particularly since the 2000s large-scale hotel developments have limited beach access for Jamaicans.

This film follows the movement resisting the privatization of Jamaican beaches by zooming in on three frontline struggles: Bob Marley Beach near Kingston, the Blue Lagoon in Portland, and Mammee Bay Beach on the North Coast. The interviewees reveal how the 1956 Beach Control Act, which is still in effect today, vests ownership of the foreshore in the Jamaican state (and actually the British Crown) and traces how this colonial-era law, combined with the island's all-inclusive tourism model, has displaced communities, disrupted livelihoods, and degraded environments.

Interwoven with archival footage, news clips, and live coverage, the interviewees situate today's beach access struggles within Jamaica's colonial history of land ownership. They argue that the island's tourism industry replicates the plantation by monopolizing land, concentrating wealth, exporting profits, and, ultimately, marginalizing the people.

Beach Inna Bondage shows that beach access, which is not only an issue in Jamaica but across the Caribbean, is an urgent matter of economic, social, and environmental justice, raising the question of who the tropical paradise of sun, sand, and sea truly serves, and at what cost...

Bonaire, Friday 19 June

Public Preferences for Climate Change Adaptation in Curaçao and Aruba

Peter Robinson¹, Diego Acevedo², Juliet Carvalhal³, Pedzi Girigori⁴, Renske Pin⁵, Ryan Peterson⁶, Timo Kelder⁷, Pieter van Beukering¹

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Abstract

Two national surveys in Curaçao (555 respondents) and Aruba (560 respondents) during late 2025 and early 2026 captured public attitudes on climate adaptation to inform National Strategies.

In Curaçao, residents report climate impacts intertwined with economic strain. Nearly half face higher costs for essentials. Over half report disruption from extreme heat. Public support leans toward nature-based interventions like planting trees and accessible financial tools. However, this coexists with doubt toward government, with few expressing full confidence.

Aruba's survey revealed "getting warmer" as the predominant concern for over half of respondents, while dryness, storms, and sea-level rise received varied prioritization. Residents favoured options with ecological benefits, such as green roofs and water-saving systems.

Both populations demonstrate high climate awareness and preference for nature-based solutions. Affordability shapes support for measures that lower costs. However, Curaçaoans focus more on immediate economic hardships, while Arubans ranked heat as their top concern. Curaçao's survey highlighted a trust deficit in government.

Shared priorities include nature-based solutions with co-benefits, financial mechanisms like low-interest loans, and building trust through engagement. Curaçao needs infrastructure attention and accessible financing. Aruba could structure strategy around heat resilience and water security. Effective adaptation must be people-centred, ecologically sound, and economically inclusive.

Bonaire, Friday 19 June

The economic impact of unintended pregnancies and early motherhood at micro-and macrolevel

Rosita Sobhie PhD

Anton de kom university, Paramaribo, Suriname

Abstract

Adolescent pregnancy and early motherhood (AP&EM) remain persistent public health and development challenges across the Caribbean, with disproportionate impacts on vulnerable and rural populations. This study presents a comprehensive socio-economic impact assessment of AP&EM in Suriname, Curacao, and Belize using the MILENA methodology, a standardized UNFPA framework applied across LA&C. Drawing on nationally representative data from both countries the analysis quantifies the opportunity costs of early childbearing across five dimensions: labour market participation, labour income, educational attainment, health outcomes, and fiscal losses.

Findings show that about 40% of women who have ever given birth in Suriname and Belize had their first birth before age 20. These adolescent mothers have significantly lower educational attainment than 25% of women who delayed childbearing. Labor force participation is low, and on average they are 15% more likely to be economically inactive. Income disparities persist across all employment sectors, with adolescent mothers concentrated in the lowest income brackets. Health risks, such as delivery complications and maternal morbidity, further compound the socioeconomic burden.

The estimated socio-economic cost of AP&EM in Belize and Suriname ranges from USD 20 to 40 million annually, equivalent to 1-2% of national GDP. These losses stem from reduced productivity, foregone earnings, increased health expenditures, and diminished tax revenues. This study provides critical evidence for Dutch Caribbean and broader regional policymakers, demonstrating that preventing adolescent pregnancy is not only a human rights imperative but also a strategic investment in economic development, gender equality, and intergenerational well-being.

Bonaire, Friday 19 June

The Spatial Legacies of Oil Refining in San Nicolaas, Aruba

Anna Karla De Almeida Milani, PhD

Postdoctoral Researcher - TU Delft and guest lecturer - Swiss Federal Institute of Technology Lausanne EPFL

Abstract

The presentation examines the long-term socio-ecological consequences of oil refining in Aruba through the spatial history of the Lago Oil and Transport Company and its company town in San Nicolaas. Founded in 1929, the refinery reorganized the San Nicolaas territory around the oil refinery, reshaping coastal environments, labor geographies, and urban form. Working-class neighborhoods such as Lago Colony were planned with controlled infrastructures and environmental buffering for expatriate workers, especially coming from the USA, while local and other migrant communities were residents in Essoville and Lagoville, having limited company services and reinforcing spatial and social segregation based on color and origin. The study observes how spatial arrangements produced enduring patterns of environmental inequality. Housing typologies, zoning decisions, and proximity to the refinery structured unequal access to environmental safety, health, and ecological resources. These spatial qualities persisted beyond the closure of the refinery, leaving unresolved questions and the need for transitioning towards a sustainable future. Methodologically, the research combines archival analysis, historical cartography, and oral history to reconstruct how company decisions and the refinery activity were embedded in the built environment over time. By situating Aruba's oil landscapes within debates on environmental justice and post-extractive futures, the presentation highlights how historical extraction shaped and continues to shape Aruba's built environment. The research is part of the ongoing postdoctoral project "Flaring Oil in Paradise: Colonial Legacies of Company Towns in the Dutch Caribbean" (2025-2027) developed at the Department of Urbanism at TU Delft, and supported by the Swiss National Science Foundation.

Bonaire, Friday 19 June

Food Boost Challenge Curacao: participatory action research for healthier food environments

Judith Sonder¹, Machteld van Lieshout², Wendy Scholtes-Bos²

¹University of Curacao, Willemstad, Curaçao. ²De Haagse Hogeschool, Den Haag, Netherlands

Abstract

Many young people in Curaçao experience unhealthy lifestyle patterns and increasing rates of overweight and obesity, partly due to a complex and insufficiently supportive food environment. Although knowledge is an important determinant of health behavior, youth often face structural barriers that limit their ability to make healthy choices. The Food Boost

Challenge Curacao therefore focuses not only on youth-led ideas for individual behavior change, but primarily on facilitating them to co-create ideas which improve the food environment of youth in Curaçao for healthier decision-making.

The Food Boost Challenge is a collaborative applied research project conducted by the University of Curaçao and The Hague University of Applied Sciences. The project is grounded in participatory action research and actively involves youth as co-researchers and co-developers of intervention strategies. Through a structured five-phase model (situational analysis, idea generation, co-creation/ prototyping, communication/finals, and implementation), stakeholders from the quadruple helix (academia, government, industry, and civil society) collaborate with the target group.

The study investigates social, economic, and environmental determinants of food choice, including affordability, accessibility, cultural norms, and the availability of food options in and around schools and communities. Based on empirical findings, youth-led solution pathways are co-developed and pilot-tested, including innovative food concepts, improvements in local food access, and the strategic use of social media as a tool for health promotion and social influence.

By positioning youth as active agents in knowledge production and intervention design, the project aims to generate context-sensitive and sustainable approaches to improving healthy behavior of youth in Curacao.

Bonaire, Friday 19 June

Book presentation: Turning the Tide: Climate Change, Social Change and Islandness

Eric Mijts¹, Anouk Mertens²

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Abstract

This collection of essays from islanders around the globe offers a complex understanding of the intersections of climate change and social change on islands. How are the effects of climate change and catastrophic weather experienced and narrated by islanders? What stories need to be told? How do local, traditional, and Indigenous knowledge practices facilitate the capacity to improvise, innovate, and adapt to volatile weather events? How do social relations on climate-stressed islands continue to flourish? How do governance structures and issues of sovereignty support and/or inhibit climate and social justice? This interdisciplinary approach foregrounds island storytellers as they convey worldviews, knowledge, and cultural values, beliefs, and emotions that are often missing from climate change discourses. This volume emerged from the 2023 international conference entitled "Turning the Tide: Climate Change, Social Change and Islandness", organized by the Universities of Aruba and Prince Edward Island and held at the University of Aruba. Scholars from the Caribbean, Pacific, Mediterranean Sea, as well as continental Europa and North America contributed to this collection.

Saba, Monday 22 June

Theme: Ecology & Environment in the Caribbean

Keynote

Restoring *Diadema antillarum* on Saba: A Work in Progress

Drs. Oliver Klokman

Abstract

Since 2019, we have been working to restore the long-spined sea urchin *Diadema antillarum* to Caribbean coral reefs. We have made real progress in culturing and restocking on Saba and learned a great deal about these animals. However, every step forward seems to raise as many questions as it answers. Large scale cultivation appears possible, but requires specific optimization, and post-release survival remains stubbornly variable. Every restock attempt reveals new aspects that need to be considered in order to be successful. Physiology and behavioral ecology have added yet another layer: how urchins are conditioned before release appears to influence how they cope on the reef, raising its own questions about what laboratory-reared animals are actually prepared for.

The honest takeaway is that restoring *Diadema* is not simply a production problem. The biology is complex, the system keeps surprising us, and there is still plenty we don't fully understand. That uncertainty isn't a reason for pessimism, but it is something worth keeping in mind when planning restoration work. Our experience on Saba is not unique, and we hope to offer useful insights for practitioners working across other systems.

Saba, Monday 22 June

Coral reef restoration efforts succeed in restoring reef fish communities

Marilla R Lippert¹, Sanne Tuijten², Maurice Goodman³, Andrew Rassweiler¹, Sarah Lester¹

¹Florida State University, Tallahassee, United States. ²Reef Renewal Foundation, Bonaire, Kralendijk, Bonaire, Sint Eustatius and Saba. ³Washington State University, Seattle, United States

Abstract

The Caribbean has experienced dramatic decreases in coral cover, causing severe reef degradation and loss of ecosystem services. As a result, coral outplanting efforts – where corals are fragmented, grown in a nursery, and deployed on reefs - have become a widespread approach for attempting to restore reefs and their functionality. While coral outplanting can be an effective measure to restore specific

coral species, there is limited knowledge about whether outplanted reefs can support fish communities comparable to those on natural reefs and the timeframes that might be required for fish community recovery. This study examines patches of the endangered staghorn coral (*Acropora cervicornis*) in Bonaire, Caribbean Netherlands, comparing reef fish communities at wild staghorn patches and restored patches ranging from 0–12 years old. Staghorn coral is one of the most commonly restored coral species - it is a key, reef-building coral with a high growth rate whose loss has led to declines in reef function, fish habitat, and coastal protection. We found that fish communities on newly restored staghorn patches do not resemble those on wild patches, while fish communities at the oldest restored patches are indistinguishable from wild patches, suggesting coral outplanting is recovering reef fish communities. This reflected a trend for older restored patches to support fish biomass and richness levels higher than that found on younger patches, and comparable to that found on wild patches. These results have important implications for restoration strategies, conservation goals, and the ability of coral restoration to result in broader community recovery.

Saba, Monday 22 June

Lessons from fifteen years of dry forest restoration in Bonaire

Milena Holmgren¹, Paulo Bertuol², Julianka Clarendá³, Quirijn Coolen⁴, Adolphe O Debrot¹, Caren Eckrich², Floor Edixhoven¹, Barry van den Ende¹, Roxanne Liana Francisca², Kevin Geurts¹, Nikkie van Grinsven¹, Klaas Metselaar¹, Bram Surkyn¹, Asha Vergeer¹, Pim van Hooft¹

¹Wageningen University, Wageningen, Netherlands. ²STINAPA Bonaire, Kralendijk, Netherlands. ³ECHO Foundation, Rincon, Netherlands. ⁴BonBèrdè, Kralendijk, Netherlands

Abstract

Dry tropical forests are the most threatened tropical biome. Restoring them on islands is essential for supporting ecosystem functions of interconnected terrestrial and marine ecosystems. Here we identify the best strategies to stimulate dry forest recovery based on 15 years of experimentation on Bonaire. We analyzed passive and active restoration approaches conducted at different spatial and temporal scales within the same study system: 1) natural regeneration in experimental plots, 2) natural regeneration after removal of feral herbivores at landscape scales, 3) enrichment planting of seedlings under fenced remnant forest patches. We monitored tree establishment, taxonomical and functional diversity, soil hydrology and fertility. We found long-legacy effects on soils and on forest taxonomical and functional diversity. Tree seedling establishment increased when herbivores were excluded or drastically reduced. However, significant increases in sapling and tree abundance required up to 15 years of herbivore exclusion. Only one third of the dry forest tree species recruits naturally with slow shifts from conservative to acquisitive functional trait strategies as forest succession progresses without herbivores. Herbivore exclusion results in higher litter accumulation and less organic matter in runoff, but no significant differences in soil nutrients, water runoff or infiltration capacity after 9 years. Overall, our results indicate that slow recovery of degraded

Caribbean dry tropical forests can be accelerated by combining herbivore removal at landscape scales with enrichment planting of rare tree species under the cover of remnant forest patches. Coupling these restoration approaches to ENSO rainy years may facilitate dry forest recovery.

Saba, Monday 22 June

Rainfall to reef: Event-driven groundwater recharge and transport in Curaçao's fractured rock hydrogeology

Titus P. Kruijssen¹, Mike R.J. Wit², Boris M. van Breukelen², Martine van der Ploeg¹, Victor F. Bense¹

¹Wageningen University and Research, Wageningen, Netherlands. ²Delft University of Technology, Delft, Netherlands

Abstract

Quantifying groundwater recharge and lateral transport is essential to monitor freshwater storage, and to assess nutrient and other contaminant fluxes toward groundwater-dependent ecosystems, including the coral reefs surrounding Curaçao. However, the island's fractured rock geology hosts a highly heterogeneous groundwater system, complicating monitoring and hydrogeological conceptualization.

We applied a multi-parameter approach to characterize recharge and lateral groundwater discharge in the island's subsurface by integrating time series of groundwater tables, electrical conductivity (EC) and temperature, with depth profiles of groundwater EC and temperature. This multi-parameter analysis revealed rapid groundwater table rises and coincident changes in groundwater quality directly after intense rainfall events, indicating rapid groundwater recharge through fracture zones in the shallow subsurface.

The multi-parameter dataset further reveals peaks in groundwater drainage through shallow ephemeral streambed aquifers (*rooien*), indicating prolonged groundwater throughflow at the coastline. Furthermore, stepwise changes in groundwater EC and temperature with depth suggest focused lateral groundwater transport through deeper fracture zones, supported by heat tracer experiments and borehole video observations.

Together, the results inform an updated conceptual hydrogeological model of the island. The pronounced spatiotemporal focusing of groundwater recharge and transport implies short-lived but intense pulses of nutrient and other contaminants towards Curaçao's fringing reefs. This emphasizes the importance for high-resolution groundwater table, EC and temperature monitoring to support effective management of pollution sources in recharge areas and ephemeral stream systems. This study is funded by the Dutch national science foundation (NWO), part of SEALINK research project.

Saba, Monday 22 June

Crossing the border between biodiversity and health, mosquito diversity on the ABC-islands

Jordy G. van der Beek^{1,2}, Pepijn J.J. Helleman^{1,2}, Roel M. Wouters^{1,2,3}, Francis Schaffner⁴, Maarten Schrama^{1,2}, Arjan Stroo⁵, Jelle Devalez^{6,7}, Luis Chong⁸, Gisette Seferina⁹, Joey van Slobbe¹⁰, Odette Doest^{11,12}, Erik Houtepen¹², Giancarlo Nunes¹³, Jilly Sarpong¹⁴, Natasha Silva¹³, Stanislas Talaga¹⁵, Jacobus C. Biesmeijer^{1,2}, Marieta A.H. Braks^{16,2}

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Abstract

The Caribbean is a major travel hub; however, the millions of annual visitors increase the risk of introducing pathogens to local mosquito populations. Despite this, fundamental information on mosquito diversity is lacking for many of the Caribbean islands. The absence of species distribution data and ecological understanding hampers risk assessment and complicates vector control, particularly for non-urban species.

To address this knowledge gap for the Dutch Caribbean, we conducted a four-week snapshot survey on the islands of Aruba, Curaçao, and Bonaire. Our team included researchers from several Dutch institutes, local vector control units, and representatives of the local Natural Park authorities. Together, we collected almost 400 adult and larval samples across the three islands.

This effort doubled the number of known mosquito species on the islands, including vectors not previously recorded on the islands, such as the malaria vector *Anopheles aquasalis* and the arbovirus vector *Aedes scapularis*. These data allowed us to revise species taxonomy and construct identification keys for all life stages.

Using the new distribution data, we created high-resolution ecological niche models to assess mosquito distribution patterns and link these to environmental preferences. Additionally, phylogenetic and haplotype network analyses clarified population genetics and connectivity between islands.

Our results have filled significant gaps in knowledge regarding mosquito distribution in the Dutch Caribbean. This provides data for local vector control teams and researchers to

effectively monitor, study and manage mosquito populations, while establishing a baseline for improved public and veterinary health risk analyses when diseases (re)emerge.

Saba, Monday 22 June

Designing a Sub-Regional Trigger Model for Anticipatory Action to Hurricanes in the Eastern Caribbean

Marc Van den Homberg^{1,2}, Aklilu Teklesadik², Corina Markodimitraki², Mahée-Théa Viton³, Jeremy Mouton³, Lisette De Valk², Memory Kumbikano², Cees J Van Westen¹

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Abstract

Small Island Developing States in the Eastern Caribbean face escalating hurricane risk under climate change. Anticipatory Action mechanisms offer a means to translate advances in climate and weather prediction into timely, risk-reducing interventions. However, designing robust, decision-relevant trigger models that balance forecast skill, uncertainty, and operational feasibility remains a key challenge, particularly in multi-country contexts.

We studied the feasibility of a sub-regional Early Action Protocol (EAP) covering Saint Kitts and Nevis, Dominica, and Antigua and Barbuda, and focused specifically on how to design a sub-regional trigger model. Using stakeholder consultations, analysis of national disaster management systems, analysis of historical and synthetic events by modelling wind, surge, and rainfall, and a review of existing forecasting products, we assessed trigger options across temporal scales, compound-hazard components, and impact relevance.

Results show that the wind and track forecasts from the US National Hurricane Centre demonstrated substantial improvements in accuracy over recent decades. Early actions within this lead time may include mobilising communities and prepositioning stock.

Our study highlights key design principles for anticipatory trigger models in SIDS now and in the future: transparency, simplicity, tolerance to forecast uncertainty, and alignment with decision timelines for early action. By articulating how forecast information can be operationalised across borders, this contribution advances the integration of climate services and anticipatory humanitarian action in highly exposed island regions. A sub-regional trigger model can leverage shared meteorological information and pooled technical expertise.

The project was cofunded through the EU HORIZON Europe PARATUS project.

Saba, Monday 22 June

Caribbean pollen and spores as proxies to observe past vegetation dynamics

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Abstract

Caribbean ecosystems today are under pressure from climatic and land-use change. To gain empirical evidence of long-term (10-1000s years) resilience and dynamics within ecosystems, and reveal the legacies of past peoples in the landscape, palynological (pollen and spore) records obtained from sedimentary can be generated. In the Caribbean palynological identification is particularly challenging due to the high biodiversity, morphologically similar taxa, and the limited availability of comprehensive regional reference collections. To advance and facilitate palynological research in the Caribbean we present the “*Atlas of pollen and spores from the Caribbean*”, a new resource providing high-resolution transmitted-light microscopy images, concise morphological descriptions, and identification keys tailored for Caribbean taxa. It is hoped that this resource will empower future researchers within the region and facilitate work that will provide a better understanding of environmental change and cultural heritage in the region. The atlas compiles approximately 300 pollen and spore taxa from Caribbean islands and the wider Americas, developed through collaboration with the Royal Ontario Museum (Canada), the University of the West Indies (Jamaica), CARMABI Herbarium (Curaçao), and by building on earlier regional identification efforts including the Bahamas pollen key (Snyder et al., 2007). This section offers a general introduction to pollen and spores as proxies, outlines the underlying methodology, and explains the scientific value of proxy identification.

Snyder T.P., Chiantello J.L., Kjellmark E. & Baumgardner K.B. 2007. Online key to the pollen of The Bahamas. San Salvador (Bahamas): The Gerace Research Center. Available at: <http://www.pollen.mtu.edu/> (accessed January 16, 2026; URL inactive)

St. Maarten, Tuesday 23 June

Theme: Culture, Literature & Arts in the Caribbean

Keynote

Our Stories Are Not Footnotes: Culture, Memory, and the Right to Shape Caribbean Research

Drs. Raymond Jessorun

Abstract

This keynote starts from the conviction that, in the Caribbean, culture is not something that surrounds research from the outside; it is one of the places where knowledge begins. Literature, language, music, storytelling, and the arts carry memory across generations, give shape to belonging, and preserve truths that official records have too often ignored. Focusing on St. Martin / Sint Maarten and the wider Dutch Caribbean, the presentation reflects on how identity, multilingual life, archives, and the memory of slavery continue to shape both everyday experience and the ways the region is studied and understood. It argues that research has too often arrived with concepts formed elsewhere, while the islands themselves hold rich ways of knowing in their voices, histories, and cultural practices. Drawing on local reflections on identity, archival recovery, and reparative memory, the keynote calls for research that listens more closely to island realities, strengthens local institutions, and returns knowledge to the communities from which it comes. In this sense, culture is not a backdrop to inquiry, but a living guide for justice, memory, and Caribbean futures.

St. Maarten, Tuesday 23 June

Protecting Caribbean heritage from salt damage - the SALTCURA project

Barbara Lubelli¹, Erik Schlangen¹, Maghalie George², Jonathan Jukema³

¹Delft University of Technology, Delft, Netherlands. ²Stichting Monumentenzorg Curacao, Willemstad, Curaçao. ³Stichting Monumentenfonds, Willemstad, Curaçao

Abstract

Sea salt (mainly sodium chloride) crystallization is a major threat to the built cultural heritage in Curaçao and other Caribbean islands. Several factors contribute to the observed severe salt damage: proximity to the sea and consequent exposure to sea salt spray, strong wind and high temperatures which accelerate evaporation and salt crystallization, and the coral reef material constituting the walls. Current renovation mortars typically fail within a few years, leading to high costs and irreversible loss of historic value.

In a recently completed project, mortars with improved resistance to salt decay were developed and tested both in laboratory and on a case study, with good results [1]. The high resistance of these mortars is achieved through the use of sodium ferrocyanide, a crystallization inhibitor that modify crystallization, making it less harmful. The inhibitor is encapsulated in biopolymers capsules to control its release and thereby enhance the durability of the mortar.

The recently started SALTCURA project [2], a collaboration between TU Delft, *Stichting Monumentenzorg Curaçao* and *Stichting Monumentenfonds Curaçao*, investigates whether and how salt resistant mortars containing encapsulated crystallization inhibitors can be applied in the conservation of cultural heritage buildings in Curacao and other Caribbean Island.

Through various activities (demonstrations, workshops and symposia), we will explore the potential applicability of the mortar prototypes on Curacao's heritage buildings and assess their potential market. The final aim is to create a support base for the future implementation of the new mortar in Curacao and other Caribbean islands.

[1] <https://doi.org/10.1016/j.cemconcomp.2024.105682>

[2] <https://www.nwo.nl/en/news/three-projects-granted-in-impact-explorer-2025>

St. Maarten, Tuesday 23 June

“Do I belong here?”: uncovering racialized experiences of Dutch Caribbean students in The Netherlands through a participatory action research-based intervention.

Durwin Lynch¹, Tanja Fraai²

¹Athena Institute, Vrije Universiteit Amsterdam, Amsterdam, Netherlands. ²Stichting WeConnect, Amsterdam, Netherlands

Abstract

Dutch Caribbean (DC) students face challenges in the racialized Dutch educational context that negatively affect their mental wellbeing and study success. To address this issue, this study aimed to develop need-based intervention(s) to foster resilience and sense of belonging among DC students. A Participatory Action Research (PAR) approach was used to develop and implement five reflexive workshops and one impact event over three years to foster and improve individual and community resilience among DC students. The interventions provided reflexive and healing spaces for students to share racialized experiences, feel connected, and (re)build a sense of self and community. More culturally appropriate interventions were recommended to empower DC students to connect and cope with their emotions and foster resilience. The findings warrant the need for more safe reflexive spaces for racialized students to connect, share experiences, and build both personal and communal resilience – as anti-racist transformative praxis.

St. Maarten, Tuesday 23 June

Systemic Sensitive-Responsive Pedagogical Transformation of Intergenerational Legacies of Slavery and Colonialism in Dutch Caribbean Education

Rosemarie A Hoen, Paula M. Kibbelaar

Instituto Pedagógico Arubano, San Nicolas, Aruba

Abstract

A Kingdom-wide research program on the history and heritage of transatlantic slavery has commissioned a work package on the Impact of Slavery on Education, Teaching and Learning, entrusted to the Instituto Pedagógico Arubano (Aruba's teacher training academy). This study examines how the intergenerational legacy of transatlantic slavery and colonialism continues to shape relational and pedagogical cultures in the Dutch Caribbean.

Although slavery and formal colonial rule have ended, hierarchical and fear-based relational patterns embedded in colonial schooling systems may persist in contemporary upbringing and education. These patterns, characterized by emotional distance, harsh discipline, and authority grounded in obedience rather than empathy, may influence youth identity formation, emotional security, and mental health.

Drawing on findings from the recently published post-COVID Youth Monitor and extending this work through a mixed-methods design, the study focuses on primary education across the Dutch Caribbean. Surveys, interviews, focus groups, and school-based action research explore how pedagogical sensitivity and emotional responsiveness, grounded in attachment-informed, trauma-sensitive, and culturally responsive frameworks, can strengthen resilience, relational trust, emotional wellbeing, and mental health.

The project aims to develop and test systemic, culturally grounded pedagogical models that interrupt intergenerational cycles of fear-based authority while fostering emotionally safe and supportive learning environments. By integrating postcolonial analysis with educational and developmental psychology, this research contributes to scholarship on historical trauma and offers scalable strategies for educational transformation in postcolonial contexts.

St. Maarten, Tuesday 23 June

Language values, ideologies and beliefs in Aruban Primary Education policies and practice

Regine Croes

Instituto Pedagógico Arubano, San Nicolas, Aruba

Abstract

For decades, educators and policymakers have debated the consequences of (post-)colonial monolingual language policies for educational quality in Aruba, Bonaire, and Curaçao.

Although Aruba has gradually introduced multilingual approaches that better reflect its linguistic ecology and recognize Papiamentu as most children's primary home language, little systematic research has examined the ideological foundations that continue to shape policy design and classroom implementation. As a result, we lack empirically grounded insight into how language ideologies structure educational reform in small postcolonial societies.

This project addresses this gap by investigating the language values, ideologies, and beliefs that inform primary education policy and practice in Aruba. Anchored in theories of language ideology and postcolonial sociolinguistics, it conceptualizes educational language policy as embedded in historically layered power relations and processes of nation formation. A multilayered discourse analysis of policy documents traces how competing ideological orientations are reproduced, negotiated, and transformed within broader geopolitical, socio-economic and technological developments.

Methodologically, the project innovates by integrating critical discourse analysis with the development and validation of a survey instrument that systematically measures language-ideological orientations among educational stakeholders. This mixed-method design enables both in-depth interpretive analysis and longitudinal trend mapping. Scientifically, the study advances theoretical understanding of ideological change in postcolonial multilingual contexts. Societally, it provides evidence-based tools to support sustainable language policy development and informed public debate in the Dutch Caribbean and comparable small-island settings.

St. Maarten, Tuesday 23 June

TiPiCo: Co-creating and Sharing Indigenous Knowledge on Teaching in Plurilingual Island Communities

Merlynne Williams, Régine Croes

Instituto Pedagógico Arubano, San Nicolas, Aruba

Abstract

The role of language in Aruba's education system presents specific and peculiar aspects that are indispensable to investigate. With the goal of co-creating knowledge for the benefit of education, the Centro di Investigacion y Desaroyo di Enseñansa (CIDE) has over 15 years of experience conducting practical, contextual, and community-based research. Within CIDE, the research unit dedicated specifically to multilingualism is TiPiCo (Teaching in Plurilingual Island Communities).

While language research is conducted globally, the context of the ABC-islands is unique. Papiamentu plays a mediating and fundamental role in our multilingual society, where English and Spanish are also omnipresent. Organically, Papiamentu provides a solid foundation for cognitive, cultural, artistic, and civic development; yet, within the educational system, Dutch remains the official language—a situation often experienced as artificial. This dynamic is typical for all three islands, suggesting that the solutions lie within our own context.

TiPiCo employs mixed-method approaches, combining classroom observations and practitioner-based research, longitudinal community-based studies commissioned by the

Department of Education, and fundamental research leading to doctoral theses. Knowledge generated thus far includes the implementation of multilingual pedagogies, the use of Papiamentu as a literacy language (specifically considering etymological orthography), and the clear distinction and interaction between *Foreign Language learning* and Mother Tongue education. This localized body of knowledge contributes directly to 21st-century teacher training, language policy development, and the professional development of in-service teachers in Aruba and the wider Caribbean, providing urgent, evidence-informed alternatives to the current monolingual norms that hinder student success.

Keywords: *Multilingualism, teacher training, Papiamentu*

Statia, Wednesday 24 June

Theme: The Science of Governance & Law in the Caribbean

Keynote

From Research to Action: Turning Knowledge into Impact

Island Governor Alida Francis

Tracing (Post-)Colonial Planning and Urban Blue Justice in Paramaribo, Suriname

Sofie Carpaij, Hebe Verrest

University of Amsterdam, Amsterdam, Netherlands

Abstract

Globally, cities are increasingly affected by climate change, with floods, heatwaves, and other extremes becoming more frequent and intense. Water poses a central challenge, in terms of both excess and scarcity. Cities respond with a variety of (adaptation) infrastructures and policy measures. However, these responses are never purely technical: they reflect historical choices and existing power-relations, often producing uneven protection and unequal influence in decision-making.

Paramaribo offers an interesting case to explore these dynamics. Much of the city lies low in the landscape, close to the Atlantic coast, and many neighborhoods regularly experience flooding. Furthermore, the city's urban form, infrastructure, and governance have been strongly shaped by Dutch colonial planning traditions. These legacies continue to shape how flooding is understood, how solutions are designed, and whose knowledge counts in decision-making.

Against this background, the research asks: **How have historical planning and governance practices in Paramaribo shaped patterns of *distributive, procedural, recognition* and *epistemic* blue justice, particularly in relation to urban flooding, and how are these legacies, including considerations of inter- and intra-generational justice, manifested and materialized in contemporary blue infrastructure and governance?**

Methodologically, the study combines archival research, policy analysis, expert interviews, and participant-led walks, where residents share how flooding affects their daily lives, how they adapt, and what they know about water, place, and history. Counter-maps will link residents' experiences with planning and flood maps, revealing lived history, intangible heritage, and community adaptation strategies.

Keywords: urban flooding, blue justice, colonial planning, climate adaptation, Paramaribo

Statia, Wednesday 24 June

Incompatibility regulations for public office holders in the Dutch Caribbean

Brechtje Huiskes

University of Aruba, Santa Cruz, Aruba

Abstract

My PhD research focusses on integrity supervision of public office holders in Small Island States. This contribution analyzes the incompatibilities regulations ("incompatibiliteitenregelingen") which have been laid down in the constitutions of Aruba, Curacao, the Netherlands and Sint Maarten, and in the legislative frameworks pertaining to the governance of the Dutch municipalities and the BES-islands. An example of an incompatibility regulation is that a Minister may not concurrently hold the office of parliamentarian.

While these regulatory regimes exhibit notable similarities, they are not uniform. This project aims to :

1. systematically identify and explain the differences between these incompatibility regimes; and
2. critically evaluate the extent to which the existing incompatibility regimes in the Dutch Caribbean adequately incorporate the contextual factors of post-colonialism, limited sovereignty, small-scale governance, and the unique dynamics of islandness.

By adopting a comparative legal and governance perspective, this study seeks to contribute to the broader discourse on integrity, accountability, and institutional design in small island jurisdictions.

Preferred type of presentation: oral.

If it is not possible to accomodate an oral presentation, I would be open to a poster presentation.

Statia, Wednesday 24 June

Mitigation, Adaptation, and Equality: The Significance of the Bonaire Climate Ruling

Daphina Misiedjan

Erasmus University Rotterdam, The Hague, Netherlands

Abstract

This presentation examines the landmark Dutch court ruling that found the Netherlands in breach of its human rights obligations toward residents of Bonaire due to insufficient climate mitigation and adaptation. The court concluded that weak emissions policy, the absence of binding interim targets, and delayed adaptation planning exposed Bonaire's population to foreseeable and disproportionate climate harms. It also held that treating Bonaire differently from the European Netherlands in climate protection lacked objective justification and therefore violated principles of equality and non-discrimination.

The presentation unpacks the court's legal reasoning, the remedies it ordered, and how it assessed scientific uncertainty and future risk. Particular attention is paid to the dual focus on emissions reductions and concrete adaptation planning, including the requirement to adopt binding targets and to develop an actionable adaptation plan for Bonaire. The ruling demonstrates how courts may translate global climate goals into enforceable national obligations.

Finally, the talk explores what this decision could mean beyond Bonaire. For the wider Kingdom of the Netherlands, it signals that differentiated vulnerability within one state structure can generate differentiated legal duties. For other non-sovereign and overseas territories worldwide, the case offers a potential precedent for arguing that metropolitan states owe heightened, context-specific climate protection to territories facing acute climate exposure. In this way, the judgment contributes to an emerging body of climate jurisprudence that links human rights law to territorial climate responsibility.

Statia, Wednesday 24 June

Ensuring the equality of Bonaire, Sint Eustatius, and Saba within the constitutional system of the Netherlands.

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Abstract

Since the constitutional reforms of 2010, Bonaire, Sint Eustatius, and Saba have become part of the constitutional system of the Netherlands. Due to the distinct characteristics of these islands compared to the European part of the Netherlands, the Dutch Constitution includes a special provision which allows for legislative differentiation for Bonaire, Sint Eustatius, and Saba. However, this provision has sparked considerable debate regarding the equal treatment of these islands within the Dutch legal system.

My research demonstrates that the special differentiation provision in the Constitution does not establish a separate framework for assessing the admissibility of differentiation in regulations for Bonaire, Sint Eustatius, and Saba. Instead, it emphasizes an aspect of the existing framework based on the equal treatment clause of Article 1 of the Dutch Constitution. The equal treatment clause not only permits but, under certain circumstances, even requires legislative differentiation for the islands if their specific conditions so demand.

Nevertheless, my research also reveals that the current regulatory framework lacks essential elements to ensure a consistent and transparent assessment of whether the circumstances on the islands necessitate differentiation or harmonization in laws and regulations with the European part of the Netherlands. The absence of such a framework renders the legislative process highly vulnerable to arbitrariness, as all stakeholders must independently develop their own criteria for this assessment. This puts the equal treatment of Bonaire, Sint Eustatius at risk, as highlighted by the decision of the Dutch court in the Bonaire climate case.

Statia, Wednesday 24 June

ECHR obligations and the necessity to collaborate: how to do so considering the Murray-case?

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Abstract

In 1980, James Murray was sentenced to life imprisonment, after which he was imprisoned in Curaçao until 1999 and afterwards in Aruba. In the 2016 "Murray case", the ECHR ruled that the lack of psychiatric care provided to him for over 30 years constituted a grave violation of Article 3 of the ECHR by the Dutch State. Murray himself had by that time already died.

The lack of adequate psychiatric care for prisoners still remains a problem: forensic psychiatric treatment still cannot be provided in a Caribbean clinic within the Kingdom. Given the small size of the islands and the infrequency of such sentences, it is also financially and organizationally unrealistic for a separate Caribbean country to organize this. The only way such care *can* be provided within the Kingdom on the Caribbean islands themselves is through collaboration. This study therefore focuses on *how* to legally structure a collaboration in which a Caribbean psychiatric care unit/clinic can be established with the aim of fulfilling the autonomous national obligations under Article 3 of the ECHR. At first glance, creating an independent public agency seems logic, but questions arise about parliamentary accountability. A legal framework for such a body (on the Kingdom level) does not exist. The ultimate appropriate form of collaboration has to be in line with requirements on democratic oversight and participation by the various countries in such a collaborative arrangement.

Statia, Wednesday 24 June

Public Value Creation by Civil Society Organizations: Insights from Social, Health, and Cultural CSOs in Aruba and Bonaire

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Abstract

Civil society organizations (CSOs) are vital actors in small-island governance, where limited state capacity, political proximity, and multi-level governance structures shape how public value is created and sustained. Yet, little empirical research has examined how CSOs in such contexts understand, produce, and operationalize public value in practice. This study investigates public value creation by social, health, and cultural CSOs in Aruba and Bonaire, two sub-national island jurisdictions within the Dutch Caribbean with contrasting constitutional formations and enabling environments. Building on a reframed Public Value Governance (PVG) model, this research conceptualizes public value creation through a two-layer approach. First, it draws on an adapted version of Moore's strategic triangle, analyzing three interconnected components: shared public value, adaptive operational capacity, and relational authorizing environments. Second, it examines the mechanisms through which CSOs navigate within this public value triangle: (i) community-based value framing, (ii) value-driven service delivery, and (iii) trust-based collaboration. The study employs an embedded comparative case study design across two islands and three sectors, utilizing in-depth semi-structured qualitative interviews, document analysis, and contextual observations. Rigorous thematic coding using NVivo software will be used for the analysis. Findings aim to advance the theoretical understanding of CSO-driven public value creation in small island settings and to provide a relational, context-sensitive framework for assessing public value creation beyond state-centric mechanisms. The study contributes to Public Administration, Island Studies, civil society scholarship, while offering practical insights for governance innovation in micro-jurisdictions.

Keywords: Public Value Creation, Small Islands Governance, Civil Society Organizations, Dutch Caribbean

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