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INTERNATIONAL RESEARCH SYMPOSIUM

Climate Change Adaptation in the Coastal Built Environment

19th - 20th June 2023
Santander (Spain)

Communicating climate change adaptation and its impact on human and planetary health, from a multidisciplinary, inclusive and international perspective

M.A. Erazo-Pesántez (1), A. Carmona-Báez (2)

(1) Higher Communication Technician at IHCantabria and collaborating professor at the Open University of Catalonia, in Spain.

(2) President of the University of St. Martin (in Philipsburg, Sint Maarten), and Co-chair of the research programme

“Island(er)s at the Helm”.

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Co-funded by the
Erasmus+ Programme
of the European Union



Above: images of the damage caused on the Caribbean island of Sint Maarten, in September 2017, after the Hurricane Irma. **Below:** images of the reconstruction, in February 2018. (Photos published by El País newspaper)



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*Co-creating research on
sustainable and inclusive
solutions for social adaptation
to climate challenges in the
(Dutch) Caribbean*



Dr. Antonio Carmona Báez (University of St. Martin)



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Island(er)s at the Helm

- NWO-funded, 5-year multidisciplinary research programme.
- Archaeology, Cultural Anthropology, Policy Studies, Architecture, Water Management.
- Community engaged, with study of traditional and local knowledge practices.
- Research carried out on all six islands of the Dutch Kingdom
- Co-creation and human rights.
- Stakeholder involvement (GOs, NGOs, Civil Society foundations).

What set of innovative tools and practices is needed to develop sustainable and inclusive, societally embedded solutions to climate change challenges in the (Dutch) Caribbean and to co-create better informed and more tailored strategies with wider regional and global significance?

Workpackages

(Water-Food-Shelter-Energy Nexus)

1. Archaeology (Paleoethnobotany, Paleoecology).
2. Cultural Anthropology (Visual Arts and Ethnomusicology).
3. Ethno-architectural and urban planning/design (housing, watermanagement).
4. Governance and Climate Policy.
5. Transatlantic Academic Platform.



Current PhD and Postdoc Researchers

1. Aga Kus (TU Delft, USM) (Architect)
2. Sharelly Emmanuelson (KITLV, UNIARTE Curaçao) (Visual Artist)
3. Harold Kelly (Leiden) (Archaeologist)
4. Lysanne Charles (USM, UvA) (Anthropologist/Policy)
5. Dr. Jaime Pagán-Jimenez (KITLV, UPR)
6. Dr. Kees Nooren (Utrecht, KITLV, USM)
7. Dr. Charissa Granger (UWI, KITLV, USM) (Ethnomusicologist)
8. Dr. Daphina Misiedjan (Erasmus, The Hague) (Climate Justice)



1



2



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Purpose

- Strengthen institutional ties within the Kingdom.
- Capacity building through sharing of resources.
- Provide a Climate Change Challenges Minor and internships for BA students.
- Provide graduate (MA) courses and research internships in the Caribbean and for students hailing from Europe.
- Creating bonds among regional and Netherlands-based experts/researchers dealing with Climate change.

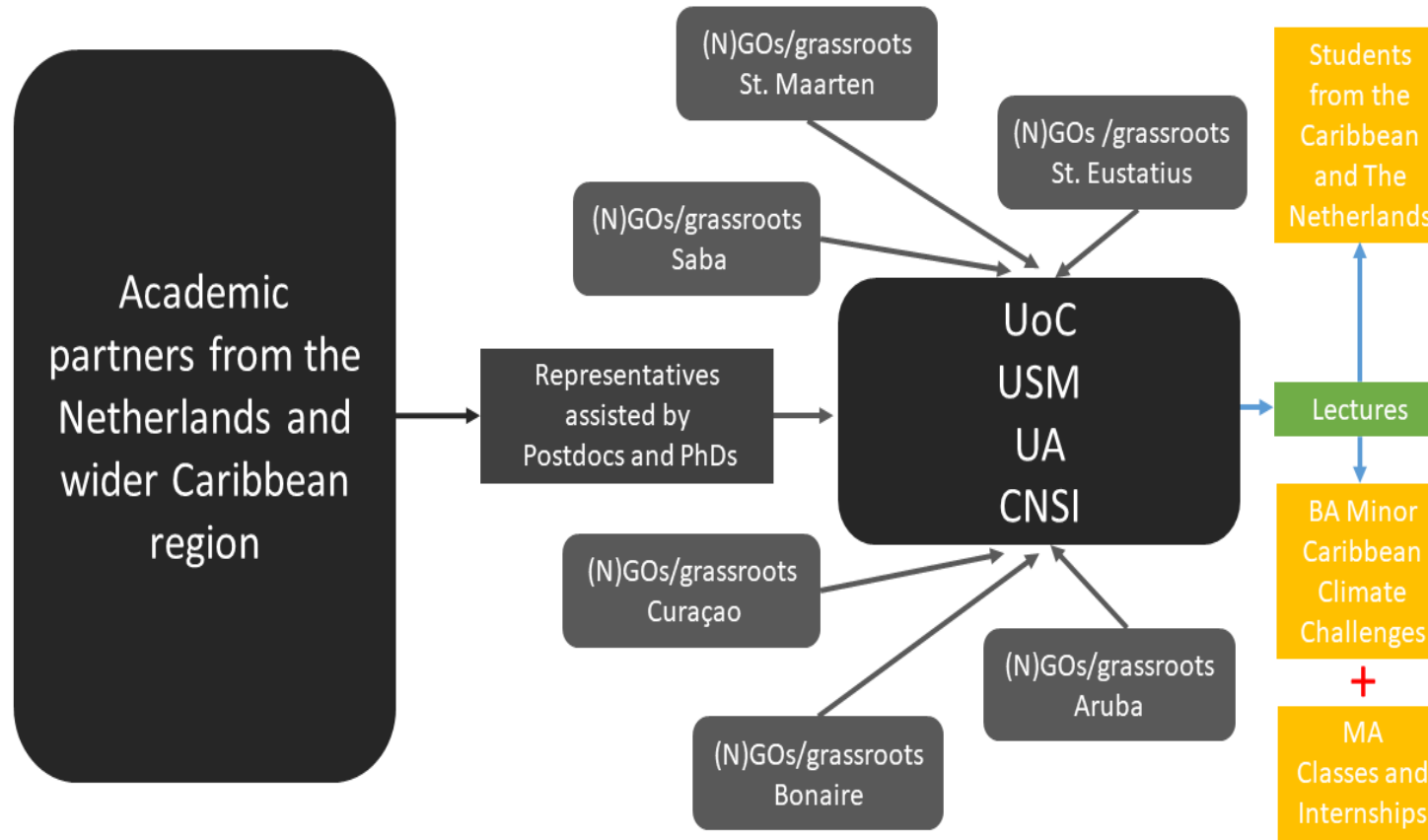


Island(er)s at the helm public outreach seminars hosted at the Caribbean Netherlands Science Institute in Oranjestad, St. Eustatius

(Photo: Sharelly Emanuelson)

Transatlantic Academic Platform

Academic platform and regional expertise centre



- Leiden University
- University of Amsterdam
- KITLV
- International Institute for Social Studies, Erasmus University (Den Haag)
- TU Delft
- Utrecht University

- University of St. Martin
- University of Aruba
- Univeristy of Curaçao

- University of the West Indies
- University of the Virgin Islands
- Centre for Advanced Studies of Puerto Rico and the Caribbean



Dr. Jean-Jacques Muyembe-Tamfum, who treated the very first Ebola cases more than 40 years ago



“We call them neglected diseases because they come from underdeveloped countries (...) But these neglected diseases can become a threat to developed countries. With travel and everything we have now, the world has become a village.”

**(Dr. Jean-Jacques Muyembe-Tamfum)
Huffington Post**

Communicating climate change adaptation

- Research focused on understanding the associations between climate change, human and planetary health.
- Analysis of the relationships between socio-spatial adaptation to climate change and vector borne disease transmission.
- Communication on neglected tropical diseases (NTD).
- Citizen science and community participation in global health research.

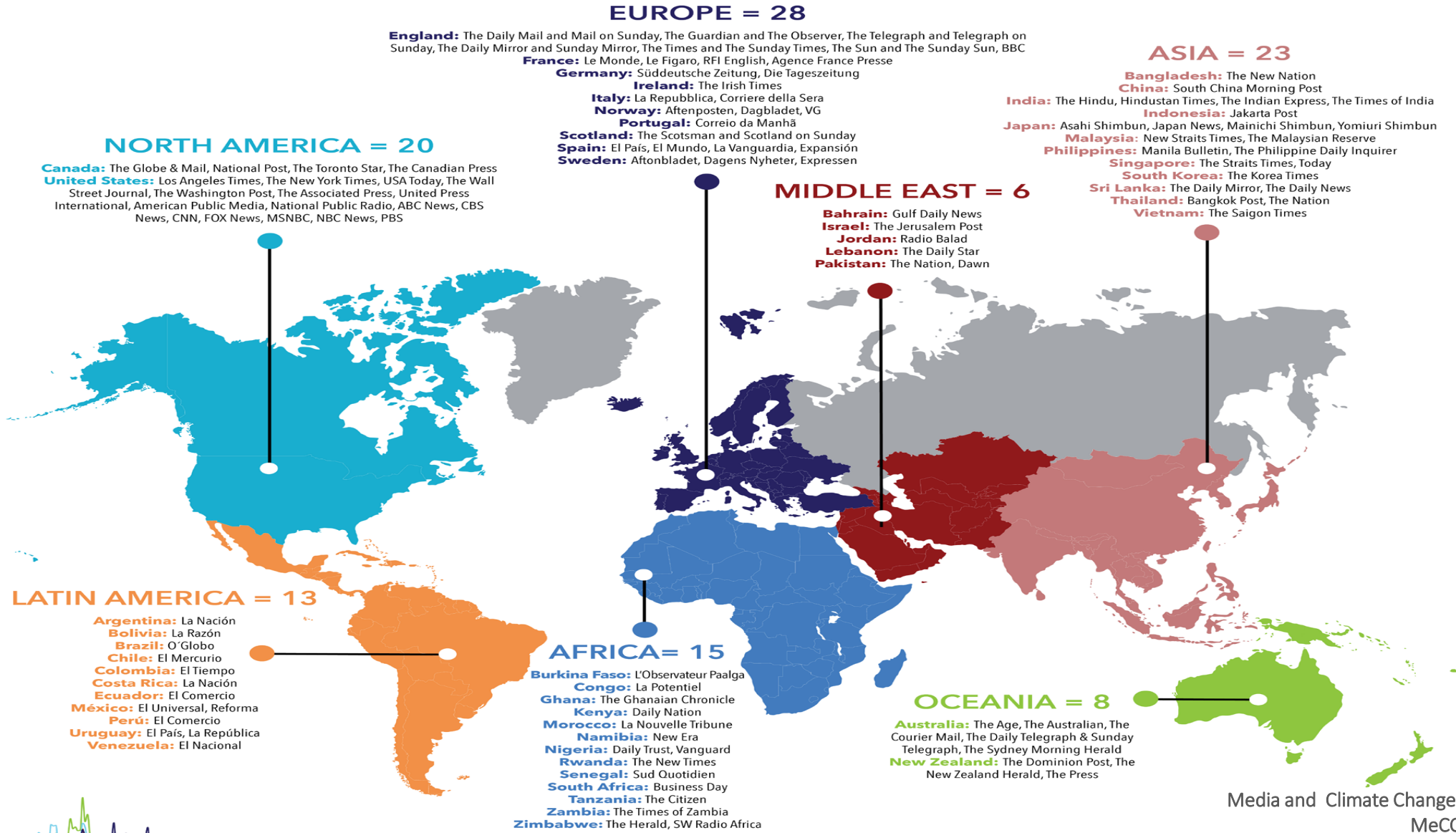
*Photos: Published in the Huffington Post, on May 18, 2017
http://www.huffingtonpost.com/entry/ebola-neglected-tropical-diseases_us_58d2ac02e4b0f838c62e9e0d*



There are links between climate variations and the emergence of climate-sensitive infectious diseases, such as the mosquito-borne diseases Zika, chikungunya and dengue.

Climate change and global health

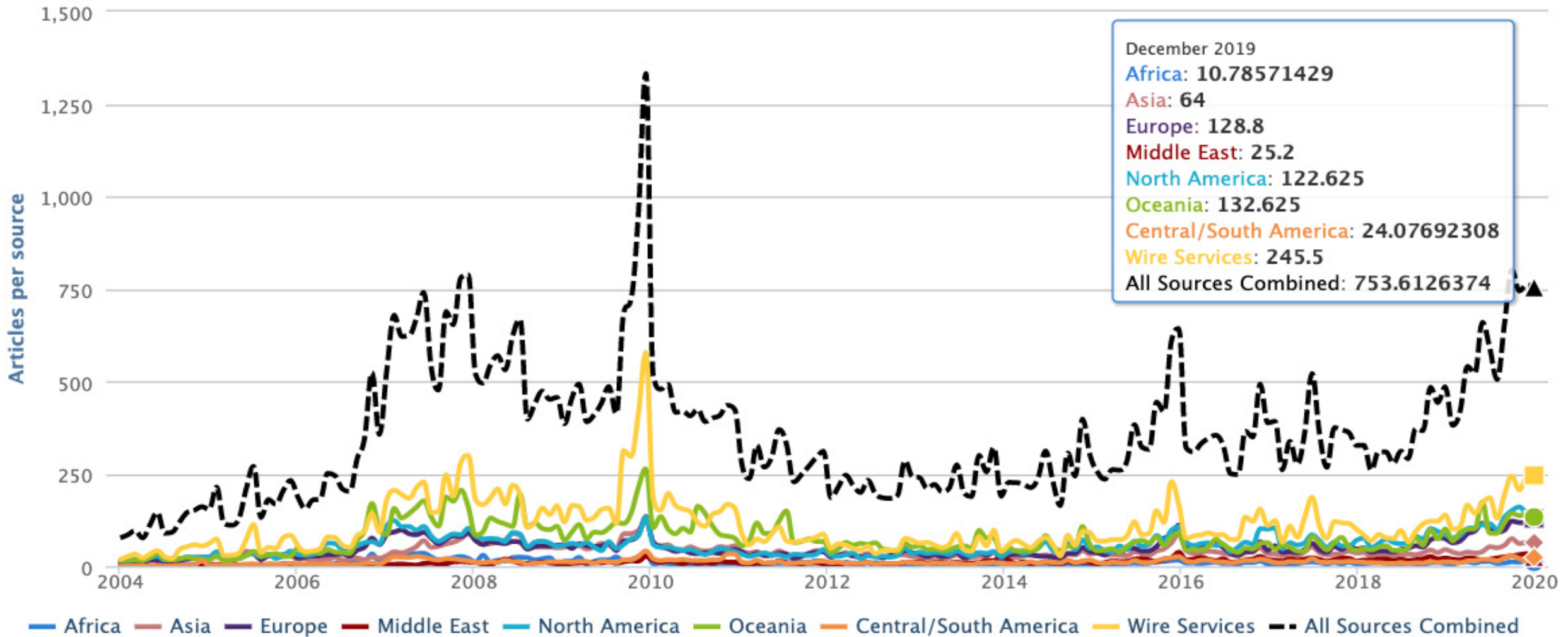
- ❑ To prevent the spread of mosquito-borne diseases worldwide, especially in the coastal environment, the '**Mosquito Alert**' initiative was created in 2013. This is a **citizen science project** that started in Catalonia, with the aim of mapping the distribution of the tiger mosquito.
- ❑ Inspired by projects like this, the **Global Mosquito Alert Consortium** was born years later in Europe, as an open, common set of protocols and toolkit that is augmented with modular components created to meet both global and local research and management needs.



Media and Climate Change Observatory (MeCCO)
MeCCO SPECIAL ISSUE 2019



2004–2019 World Newspaper Coverage of Climate Change or Global Warming



(MeCCO SPECIAL ISSUE 2019)

Abstract ID: 20

Newspaper media coverage of climate change or global warming in one hundred sources in seven different regions around the world, from January 2004 through December 2019.

Conclusion

- **Mass media**, and currently some **social media**, are considered as **interfaces between expert and lay knowledge**. This plays a crucial role in efforts to engage citizens and governments in decision-making related to climate change adaptation.
- Although climate change affects everywhere, **how the news media frame it** varies from country to country. Such a variation is related to each country's economic development, climate severity, and governance. (Vu H.T et al.,2019)
- Iberian media's coverage on climate change have shown an **important journalistic bias**, according to a study regarding the role of media between expert and lay knowledge. (Areia N. et al., 2019)
- **Certain types of framing may be more effective** than others at encouraging support **for climate action and policy**. This includes positive, personally relevant framing. (Harrison S. et al., 2019)



Hurricane Irma damage on Sint Maarten, 2017. AFP

Conclusion

- Adapting to climate change requires actions that reduce the negative impact of climate change. It involves **adjusting policies and actions** in line with observed or expected climate changes.
- **Island(er)s at the Helm** brings together researchers and societal partners to combine technical, traditional, and contemporary knowledge practices to **co-create sustainable and inclusive strategies** for social adaptation to climate change.
- To promote **efficient climate change adaptation measures**, it is necessary to address **socio-cultural, institutional, human capital**, and **economic perspectives**; in addition to **citizen science** and **science communication** strategies, as proposed by the research programme Island(er)s at the Helm.
- Communicating climate change adaptation also means taking into account the relationship and impact of **planetary health, global health** and **local health**.
- The **Mosquito Alert** is a citizen science initiative. Its app is now available in 18 from Europe and will help monitoring the spread of some insects, which can transmit viral diseases, such as dengue, Zika, yellow fever, chikungunya, malaria, and the West Nile Virus. The **Global Mosquito Alert Consortium** aims to leverage networks of scientists and volunteers for the global surveillance and control of mosquito species.



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Thank you, Gracias, Merci, Bedankt!

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