hace

Annual Report 2024

Internal document

MEDECINS SANS FRONTIERES

Mohamed Dayfour Diawara, Floodings in Tenenkou, Mali

FOREWORD

2024 marked an exciting year of “firsts” for HACE*. It was the year when our focus on climate and environmental adaptation truly took shape, leading to new initiatives and collaborations. It was also the first year for our colleague Jacob and first complete year for Aina.

In 2024, HACE contributed to launching the Climate Adaptation Community of Practice (p.5), launched the Regional Seasonal Outlooks (p.3), and supported the first Climate Scenario workshops (p.4) in Brussels and Nairobi. These “firsts” reflect not only the dedication of our team but also the growing momentum across MSF.

We see it firsthand: resources are being increasingly allocated, adaptation groups have formed across operational directorates, and commitment to action is steadily growing. Yet, as the challenges we face continue to reshape humanitarian action, there is a pressing need for a shared vision across the movement. Climate and environmental adaptation must be a collective priority—one that not only reinforces our ability to respond to converging crises but also upholds our commitment to those most affected.

Let’s move forward together,

Léo

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*What is hace ?

HACE stands for Humanitarian Action on Climate and Environment; it is an MSF Canada choice initiative which aims to bolster climate change and environmental adaptation efforts in the MSF movement. HACE was founded in 2020.

HACE TEAM

Léo L. Tremblay
HACE Lead - Meteorologist / Hydrogeology background

Dr Aina Roca-Barceló
Climate Adaptation Specialist - Environmental Epidemiology

Dr Jacob Levi
Climate Adaptation Specialist - Infectious Diseases

OPERATIONAL REQUESTS

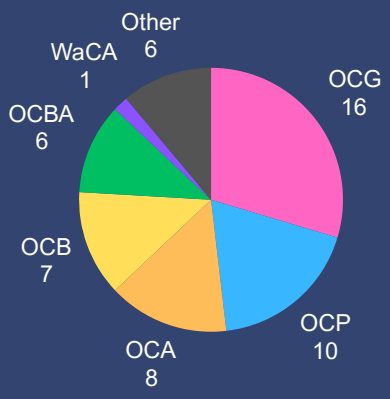
HACE provides meteorological support to MSF field operations, with most assistance delivered on demand. However, due to the severity of certain hazards and the high risk for our teams, certain services—such as tropical cyclone forecasting and some flood updates—are provided systematically when MSF projects are exposed.

In 2024, **HACE received 54 requests** to directly support MSF operations. Flooding (13 requests) has been a major challenge in the Sahel and South Sudan this year, leading to HACE support requests from Nigeria, Chad, and several locations in South Sudan, including Old Fangak, Leer, and Ulang. In Old Fangak, HACE worked closely with GIS teams to develop a forecasting dashboard that compares water levels to the remaining freeboard of dikes. This tool was crucial in advocating for additional dike reinforcement resources from the World Bank and WFP and in informing the Old Fangak community about the anticipated overflow risk.

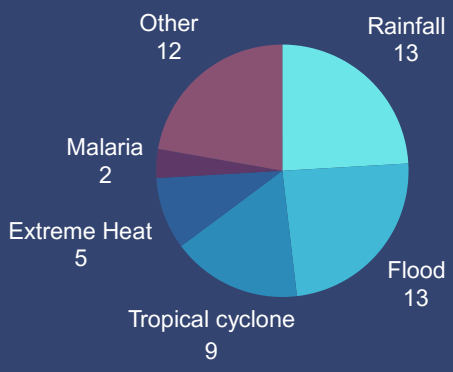
HACE also provided forecasts and analysis for tropical cyclones ALVARO, ELEONORE, FILIPO, and CHIDO in the Southwest Indian Ocean, as well as hurricane BERYL in the Atlantic.

Among the other topics most frequently requested, were access to historical rainfall data and/or rainfall predictions (13 requests), monitoring of extreme heat and/or developing an extreme heat preparedness plan (2 requests), malaria (2 requests) and wildfire (1 request).

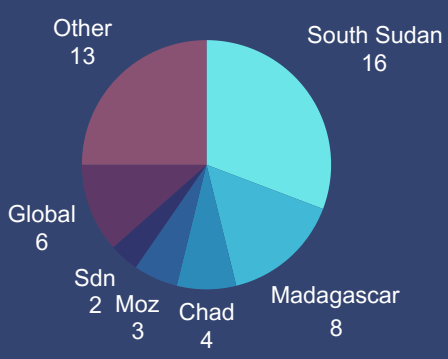
OPERATIONAL DIRECTORATE



TOPIC



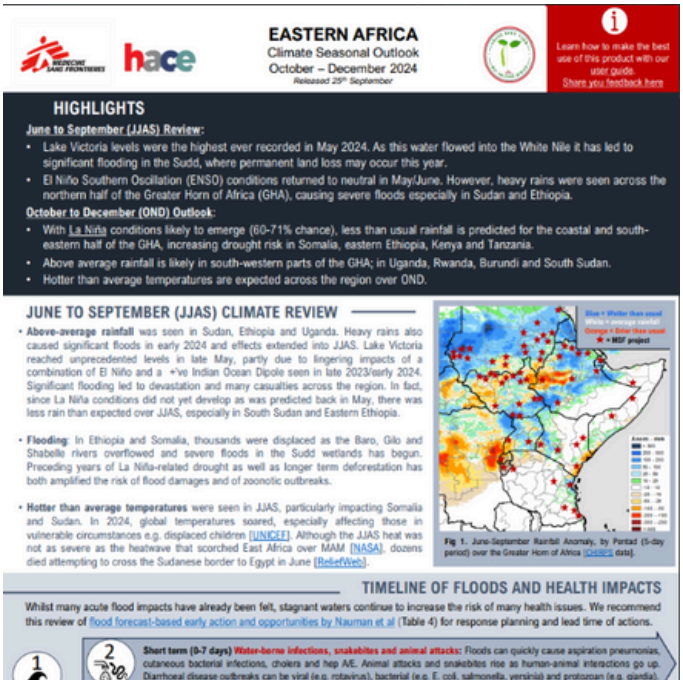
REGION



REGIONAL SEASONAL OUTLOOKS

“What will the weather be like during the upcoming rainy season?” “What impacts on health might this bring?” These are questions that many MSF staff in the field grapple with regularly. Advances in long-range weather forecasting over the past few decades, particularly in tropical regions, have significantly improved the accuracy of seasonal rainfall and temperature predictions, due to a better understanding of major climate drivers. At the same time, a growing body of scientific research is strengthening the connections between weather patterns and health outcomes in specific contexts.

Building on these scientific developments, HACE, in collaboration with MSF regional partners (MSF EA, WaCA, MSF SA), has begun creating **Regional Seasonal Outlooks** to help field teams anticipate heightened health risks linked to expected rainfall and temperature patterns. Background information, including **seasonal calendars** and lists of surveillance and prediction services have also been developed to complement the Outlooks.



EASTERN AFRICA
Climate Seasonal Outlook
October – December 2024
Released 25th September

HIGHLIGHTS

June to September (JJAS) Review:

- Lake Victoria levels were the highest ever recorded in May 2024. As this water flowed into the White Nile it has led to significant flooding in the Sudd, where permanent land loss may occur this year.
- El Niño Southern Oscillation (ENSO) conditions returned to neutral in May/June. However, heavy rains were seen across the northern half of the Greater Horn of Africa (GHA), causing severe floods especially in Sudan and Ethiopia.

October to December (OND) Outlook:

- With La Niña conditions likely to emerge (60-71% chance), less than usual rainfall is predicted for the coastal and south-eastern half of the GHA, increasing drought risk in Somalia, eastern Ethiopia, Kenya and Tanzania.
- Above average rainfall is likely in south-western parts of the GHA; in Uganda, Rwanda, Burundi and South Sudan.
- Hotter than average temperatures are expected across the region over OND.

JUNE TO SEPTEMBER (JJAS) CLIMATE REVIEW

TIMELINE OF FLOODS AND HEALTH IMPACTS

In February 2024, HACE/MSF EA launched its first regional seasonal outlook, and since then, six reports have been produced across the year, covering four regions: East Africa (3 reports), West Africa (2 reports), Central America and the Caribbean (1 report), and Southern Africa (1 report). Each Outlook has been accompanied by a webinar to present key findings and address questions from colleagues working in the respective regions.

4 Regions covered

7 Reports in 2024

3 Internal partnerships

CLIMATE SCENARIO WORKSHOPS

MSF has a long history of responding effectively to complex and rapidly evolving humanitarian crises. However, we are now confronting an unprecedented reality. The humanitarian landscape is increasingly shaped by intersecting challenges, including climate change and environmental degradation, which disproportionately affect the most vulnerable communities. These challenges have the potential to exceed the capacity of traditional humanitarian responses, including our own. To remain effective, we must adapt swiftly as a Movement, strengthening our understanding of emerging risks and reshaping our approach to humanitarian action.

Inspired by this new paradigm, MSF's International Medical Secretary, Maria Guevara, developed a type of event that utilizes strategic foresight to explore future scenarios where the climate crisis plays a central role. The ifirst event took place in **Brussels in February**, drawing participants from all operational directorates, including medical and operational directors, as well as heads of emergency and country desks. HACE provided the technical support on climate and environmental topics.

To build on this momentum, another event was held in **Nairobi in November**, this time with a focus on Eastern Africa. It brought together 60 MSF participants alongside representatives from UN agencies and other organizations working in the region on these converging crisis.

~140
Participants to both workshops

6
Alll Operational Directorates involved

4
Future scenarios developed

Credit: Emmanuel Yussuf, MSF

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THE CLIMATE ADAPTATION COMMUNITY OF PRACTICE (CACoP)

The **Climate Adaptation Community of Practice (CACoP)** is a platform for exchanging ideas, sharing updates, and coordinating climate change and environmental adaptation efforts within MSF. It brings together key operational centers, MSF partner sections, key units and is supported by HACE and the IO, to adapt MSF's operational strategies and responses to evolving climate-related health challenges. The first meeting of the CACoP was held in April '24.

The principal objectives of the group are to develop an exchange platform on climate change adaptation, to develop shared workstreams, to cultivate cooperation amongst climate adaptation initiatives, to facilitate mutual learning and to minimize redundancy whenever possible.

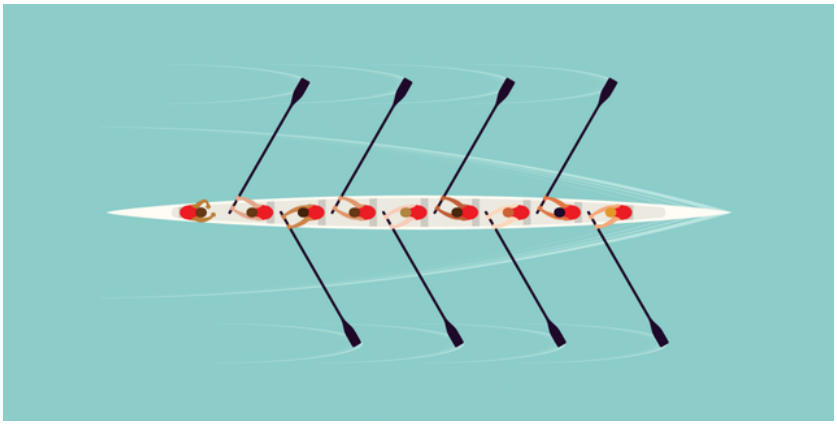
At the end of 2024, the community of practice drafted a **Vision Statement**. **Climate Adaptation Focus E-groups (CAFÉs)** were also established as task-driven working groups. In early 2025, new CAFÉs will be launched, focusing on flooding, heat, and the development of a climate and environmental adaptation fhandbook for the movement.

As momentum builds around climate adaptation within MSF, the group is remaining flexible to evolving needs. As a Community of Practice endorsed by the MedOp platform, it serves as a key channel for informing decision-making on climate and environmental issues.

8
CACoP meetings in 2024

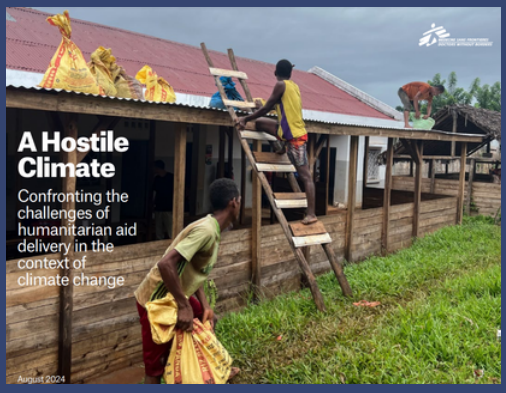
6
All ODs Participating

12
Participants on average



OPERATIONAL RESEARCH

In 2024, **A Hostile Climate** —a public-facing version of the internal report **This Scorching Heat**—was released. It highlights the humanitarian and health impacts of climate change and environmental degradation on vulnerable populations, as observed by MSF colleagues. The report documents how extreme weather, food insecurity, and climate-sensitive diseases are straining MSF operations while proposing solutions for the future. A publication also appeared in the Journal of Climate Change and Health.



The HACE team contributes to the **Malaria Anticipation Project (MAP)** through co-leadership and technical support. The MAP was presented at MSF Scientific Day in May 2024, in London. HACE also contributed to the **Lancet Countdown Joint Brief,** by adding a piece on our Seasonal Outlooks and Seasonal Calendars.

A pilar in our mission is to support research on climate-related topics. As such, we have been a key partner in an operational research study looking at the **health impact of heat among refugee populations** and exploring potential adaptation measures, co-led by Lachlan McIver (OCG) and Aina Roca-Barceló (HACE).

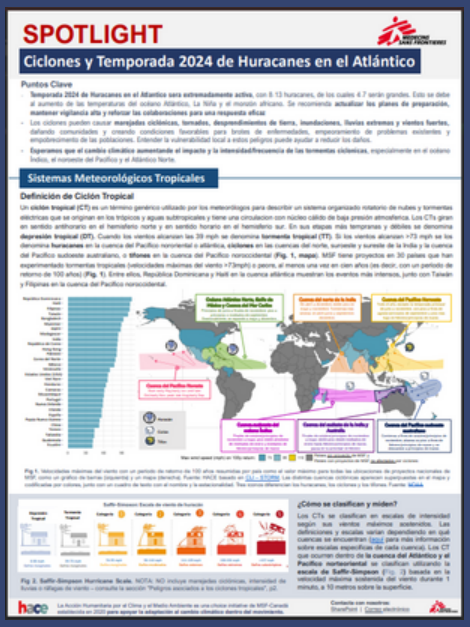
HACE is also supporting a **research project on climate communication for operational use**, led by Olive Toran. The study aims to better understand how colleagues in East Africa are using the information currently shared by HACE. The findings will help refine our communication, making it more practical and actionable.

At the start of the year, we also took on the endeavour to map climate-induced hazards and assess the likelihood of being affected across all MSF project sites, the **Hazards Project.** This tool will enhance emergency planning and support health programming at specific project locations.

HACE has also supervised two **Master students studies:** a systematic review on the mechanisms linking climate and malnutrition in Africa (under review for publication), and a study on the links between El Niño Southern Oscillation (ENSO) and dengue incidence in Brazil.

CAPACITY-BULDING AND KNOWLEDGE-SHARING

Spotlight reports have become a cornerstone of HACE's efforts in sharing knowledge. Our first Spotlight published in June drew attention to the impending South Sudan floods, prompting important discussions and collaborations, including a widely-read advocacy piece and >30 attendees from multiple ODs participated in the webinar. Our second report on the Atlantic Hurricane Season complimented the launch of our Seasonal Outlook for Central America and the Caribbean, informing preparedness efforts. Our third Spotlight focused on the forecasted La Niña, improving awareness and understanding of this critical phenomenon. Most recently, our fourth Spotlight addressed the topic of Air Pollution, highlighting this overlooked hazard.



HACE participated in the CRASH event in Paris in June 2024, titled **Heatwaves: Mortality Rates and the Challenges for MSF**, where Aina Roca-Barceló delivered a presentation on heat and adaptation efforts within the movement, highlighting innovative strategies to combat the effects of rising temperatures. Later, in October 2024, we co-hosted an interactive workshop on Anticipatory Action for climate-sensitive infectious diseases at the **Global Dialogue Platform** in Berlin, alongside colleagues from the Red Cross Climate Center, IFRC, and OCHA.

Additionally, HACE has developed educational material for community doctors in Bolivia as part of an **educational webinar series,** focusing on the role of climate change and environmental degradation on the disappearance of Lake Poopó in Bolivia. This session (**recording**), held in collaboration with the NGO Kay Pacha, explored the profound consequences on the health and livelihoods of the Urus population.

Finally, HACE has collaborated with Climate Smart MSF to develop an **interactive online educational module on mitigation and adaptation**. This will be a valuable resource for raising awareness, highlighting the synergies and benefits of mitigation and adaptation and will improve literacy around this important topic.

HACE IN 2025

Our focus for the beginning of the year will be on developing -within the Climate Adaptation Community of Practice- a **Climate and Environmental Adaptation Handbook** for the movement as many colleagues are seeking guidance on where to start and what concrete actions to take. In parallel to this, and in collaboration with operational directorates and within the Climate Adaptation community of practice, we will work on the topics of extreme heat and flooding—pooling efforts across the movement, identifying gaps, and defining key priority areas.

Our work on **Regional Seasonal Outlooks** will continue in the four existing regions, with Central Africa being added, and potentially a sixth region as well. We will also continue our commitment to research at different levels, continuing to support the heat-impacts project with OCG, as well as other operational research opportunities that may arise. HACE will also facilitate new climate scenario workshops, likely taking place in the Americas and Asia.

We are also finalizing the **Climate Hazards Project,** which assesses all MSF sites based on their exposure to water scarcity, air pollution and extreme weather events (floods, droughts, extreme heat, and tropical cyclones). This tool will enhance emergency planning and support health programming at specific project locations.

This year we're working on streamline our **operational support,** facilitating scale up through existing workstreams, like a closer integration with the GIS Center. This will include support for the development of reports essential to translating climate and environmental adaptation into operational actions.

Finally, we will l**aunch an updated version of the Climate Hub**, hosted on the international MSF site, to more effectively disseminate insights on climate adaptation, mitigation, and advocacy.

Flooding near Khulna Bangladesh,
Photo: Jacob Levi