Foreword

This project is part of the Africa 21 Association's programme (www.africa21.org) entitled Network of African Journalists Specialised in Sustainable Development and Climate Change, an initiative that brings together more than 1,000 journalists across 47 African countries who share a common interest in sustainable development issues, the impact of climate change, and the evolution of production and consumption patterns on the continent

The Africa 21 Association would like to thank the institution that made the launch of this new activity possible, namely the Dudley Wright Foundation (https://hdwright.org/en/), which is based in Geneva and whose mission is to promote science and make it accessible to the general public.

This new activity is part of the international effort to combat misinformation, particularly on issues related to the environment, sustainable development, and climate change (similar to the Global Initiative for Information Integrity launched by UNESCO and highlighted during COP 30 in Belém, Brazil: https://www.unesco.org/en/information-integrity-climate-change)."

The Environmental Meetings aim to build bridges between expert communities within organisations, scientists, and journalists based on the African continent by providing analytical insights, sharing reliable information sources, and connecting journalists with high-quality experts or institutions.

This is a monthly online event, held in the form of a roundtable, with each episode focusing on a current topic related to sustainable development, climate change, and Africa. These meetings also aim to encourage high-quality reporting on our themes of interest in African media and to raise public awareness across Africa on all these issues.

The full episode can be watched on Africa 21's YouTube channel:
https://www.youtube.com/watch?v=DbV5QMUr_wA&t=907s

Roundtable Moderation :

Marthe Akissi, journalist specialized in environmental issues and news anchor for the Ivorian Broadcasting Corporation (RTI)

Invités :

Brigitte Perrin, Head of Communications at the World Meteorological Organization

Dr. Al Hamndou Dorsouma, Acting Director of the Climate Change and Green Economy Department (PECG) and Head of the Climate Change and Green Growth Division (PECG2) at the African Development Bank

Dr. Khadija Kabidi, Climate and Operations Officer at the Directorate General of Meteorology of Morocco

Durrel Halleson, Policy and Partnerships Manager at WWF Africa

The Roundtable

Marthe Akissi – Hello everyone. I am very happy this afternoon to be moderating this roundtable. This is the first "Environmental Meeting," which will allow the experts gathered around this virtual roundtable to analyze the environmental, climate, and sustainable development challenges that are at the heart of major international gatherings such as COP 30.

As we have just seen, COP 30 has concluded, bringing both its ambitions and significant announcements. We will discuss this at length.

Today's roundtable will be structured in three parts: the first will focus on the year 2025 and the climate events that Africa has experienced; then we will address COP 30; the second part will respond to questions sent by journalists from the Africa 21 Network over the past few days; and finally, the last part will allow participants online to share their reactions.

Without further ado, I am very pleased to introduce our distinguished guests, starting with Brigitte Perrin. Brigitte Perrin is the Director of Strategic Communications at the World Meteorological Organization (WMO). Hello Brigitte, I am delighted to have you with us this afternoon to discuss this important topic. Welcome.

Following Brigitte, we also have the honor of welcoming Dr. Al Hamndou Dorsouma. You are the Head of the Climate and Green Growth Division at the African Development Bank.

We are also joined by Khadija Kabidi, who is also a doctor and meteorological engineer. She graduated from the Toulouse School of Meteorology. Khadija works at the Directorate General of Meteorology of Morocco. Khadija Kabidi, we are very happy to have you with us.

Finally, we have Durrel Halleson, Policy and Partnerships Manager at WWF Africa.

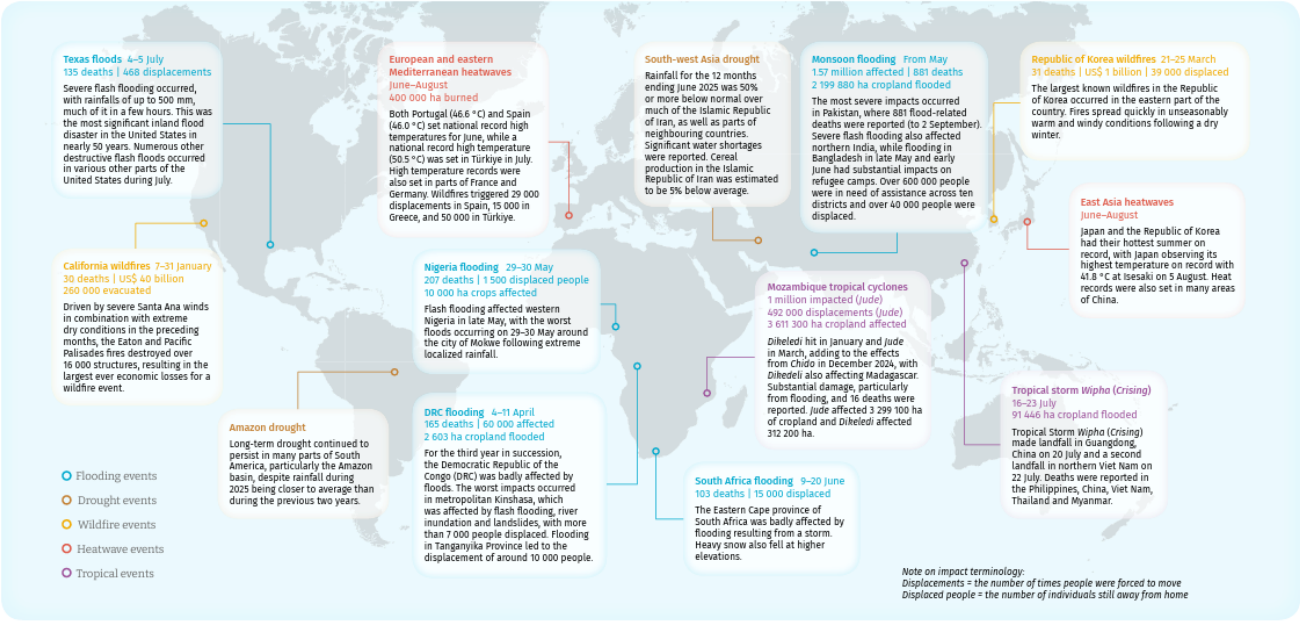
It is a great pleasure to have all of you here today.

We will now dive straight into the heart of the matter.

We are practically at the end of 2025. Perhaps we can already take a first look at what the climate year has been like across the continent. Brigitte, what weather events have marked the continent during 2025?

Extreme weather and climate-related events to August 2025 had major global impacts

The compounding impacts of these events have damaged cropland, eroded livelihoods and deepened poverty, and contributed to displacement across multiple regions.



Brigitte Perrin – Thank you for giving me the floor. There have been numerous extreme weather events this year, both globally and in Africa. I would first like to show you a map.

This is not a fully comprehensive view of all the events in Africa. This illustration comes from the Provisional Report on the Global Climate, which was published two days before the start of COP 30. Each year, this provisional report is released to provide a trend and highlight the major developments of the year. Of course, this data will be revised, and the final report will be published in March or April 2026, with the African version coming out in early May.

To answer Marthe's question and clarify an important point, these data cover only the period from January to August 2025. Already, certain events have strongly impacted communities:

- Nigeria, May 29–30, 2025: floods, 207 deaths, 1,500 people displaced, 10,000 hectares of farmland affected.
- Democratic Republic of Congo, April 2025: floods, 165 deaths, 60,000 people affected.
- Mozambique: several tropical cyclones hit the country. I would like to point out that Mozambique had relatively few casualties following these events, largely due to significant investments in early warning systems. These systems worked extremely well,

and we often use Mozambique as an example to demonstrate the usefulness and necessity of investing in early warning systems, as well as in observation systems that allow us to improve the reliability of forecasts for disasters and extreme weather events.

- South Africa, June 9–20, 2025: floods, 103 deaths, 15,000 people displaced.

This is just a brief overview. There are other events, some less spectacular perhaps, but equally serious. Later, perhaps during this meeting, I can also provide some figures on the development of these early warnings and how these systems have helped improve prevention in Africa.

Marthe Akissi – Durrel, do you have any points to add, you who work at WWF and are very often on the ground?

Durrel Halleson – Thank you for giving me the opportunity to speak. Over the past two years, we have seen many negative manifestations of climate change in Africa, notably recently in Kenya with floods that caused numerous deaths. WWF has been present in Africa since the 1960s, and since then, WWF experts have been able to observe how the situation has evolved. Climate change is very visible on our continent; we can no longer turn a blind eye to it.

Africa is aware of the challenges and is taking action, particularly through African climate summits, the most recent of which took place in September 2025 in Addis Ababa, Ethiopia. Africans do not want to be seen as victims, but rather as a continent offering solutions to the effects of climate change. For example, initiatives around the Congo Basin, the second-largest forest basin in the world, are notable.

However, the effects are real and well-known… impacting agriculture, food access, nutrition, and infrastructure. We must deal with them. States are vulnerable, yet at the same time highly resilient. I am glad that Dr. Dorsouma is with us this afternoon because we collaborate extensively with the African Development Bank.

For example, we have projects with communities in Cameroon, particularly an adaptation project in the agricultural sector with small cocoa producers. In this project, we demonstrate how, even on limited land, higher yields can be achieved. There are many solutions on the ground that deserve support. We are also working on projects such as improving energy access in East Africa.

Marthe Akissi – Thank you, Durrel. We will come back to you regarding COP 30, as I know you were there on behalf of WWF. I would now like to turn to Ms. Kabidi. What is the situation in Morocco? The media has been reporting a water crisis for several years—what is the current situation?

Dr. Khadija Kabidi – Thank you for asking me this question. Indeed, as you mentioned, Morocco is experiencing increasingly severe droughts. We are now in our seventh consecutive year of drought, which unfortunately means we are at a higher and alarming alert level.

If we look at the agricultural year, the most recent year for which we have complete data, 2023–2024, it was the driest year since the 1960s. The precipitation deficit was 46% below the 30-year

average (reference period 1991–2020). The water levels in dams are increasingly low, around 30%, and even lower in some areas.

This phenomenon is due not only to a lack of rainfall but also to higher evaporation rates caused by heat waves. We are now facing water stress that is no longer temporary but has unfortunately become structural for the Maghreb region, and particularly for Morocco.

Marthe Akissi – To follow up with you, Dr. Kabidi, which sectors are paying the highest price for climate change in Morocco?

Dr. Khadija Kabidi – Several sectors are affected by these climate-related hazards and this variability. Among the most impacted is water access, which has become extremely concerning in recent years, with some basins experiencing deficits of more than 60%. This affects access to drinking water as well as irrigation. Morocco is engaged in serious reflection aimed at bringing concrete and urgent solutions.

Incidentally, next week, from 1 to 5 December 2025, we will host the 10th World Water Congress, with several international organizations participating. Nearly 20 ministers are expected, and Africa will be well represented. On this occasion, a number of innovative solutions—already tested in Morocco—will be presented to address these challenges. This includes, among others, water highways between basins to connect the most vulnerable areas, which currently lack water, in order to ensure basic drinking-water needs. Also to be highlighted are the reuse of wastewater, low-cost desalination projects for irrigation and other uses.

Agriculture is a key sector in Morocco and is highly dependent on water resources… So less water means less agricultural production. The 2023–2024 year recorded a very significant deficit, with a production drop of more than 40%. Cereal production was heavily affected, causing price increases.

Another sector to mention is health, which is directly linked to climate hazards, with rising temperatures, heat waves, and sandstorms that are becoming increasingly frequent in the south and southeast of the country.

Marthe Akissi – Thank you for this information, Dr. Kabidi. I will now turn to Dr. Dorsouma. You work within the Climate and Green Growth Division at the African Development Bank. Tell us concretely, at the AfDB, how you perceive the current situation — and you probably produce your own reports as well — but also the actions you are taking in terms of adaptation across different African countries. Could you tell us a bit about the analyses produced by the AfDB and the conclusions that emerge from them?

Dr. Al Hamndou Dorsouma – Thank you, Marthe. I think my colleagues have already touched on the key issues concerning the current climate situation on the African continent. I would like to acknowledge the excellent work done by my former organization, the World Meteorological Organization, where I worked several years ago, regarding the state of the climate globally and particularly in Africa.

The picture is indeed worrying: climate events have intensified, and their frequency has shortened. Events that used to occur once every ten years now happen every two or three years. We have spoken about floods, tropical cyclones—the cyclones that hit Mozambique, for example: there were three this year. Cyclones Chido, Dikenedi, and Jude—and it was the same in 2024. But beyond that, there are droughts. We saw the droughts between 2020 and 2023 in the Horn of Africa, which decimated livestock and caused major losses in human life and agriculture. And it continues. The same is true in Southern Africa. If you visit countries like Malawi, Mozambique, South Africa, or Zimbabwe, the reality is clear. Droughts that used to appear once every 10 or 15 years now come almost annually.

So the challenges are there, climate events are happening, and we experience them almost every year. Each event has a major impact on people's lives, on communities, and— as you mentioned—on national budgets, because governments are forced to reallocate resources that were initially meant for other essential development investments to respond to these crises.

But I also fully agree with Durrel when he says that climate change is not only about problems—there are also solutions. And too often, these solutions are not sufficiently highlighted. For those of us working in the field, we know that beyond the challenges, there are opportunities. This is the approach we have adopted at the African Development Bank: identifying opportunities that can help us shift from current development models to more resilient, low-carbon ones.

There are many opportunities across numerous sectors. Take infrastructure, for example. Everyone knows that over 70% of Africa's future infrastructure has yet to be built. How can we ensure that these infrastructures are designed to be resilient and low-carbon? We must learn from the mistakes of richer countries that developed on models that are no longer viable today.

Take renewable energy: 45% of the world's technical potential for renewable energy is in Africa. How do we maximize these opportunities to ensure African populations gain access to electricity—given that today, more than 600 million Africans still do not have access? And how do we ensure that this electricity is based on renewable resources?

Consider urbanization: Africa is urbanizing rapidly, but often in poorly planned ways. How can we ensure our cities are built on more resilient foundations?

Then, agriculture: more than 65% of the world's arable land is in Africa. How can we ensure that this land is cultivated sustainably, on resilient and low-carbon bases?

Natural resources: Durrel mentioned the Congo Basin. It is now the world's largest carbon sink, surpassing even the Amazon. It holds extraordinary potential for carbon markets. How can we fully leverage this?

And critical minerals—essential to the global green transition—are largely found in Africa. How can we ensure that these resources support the development of local manufacturing industries?

I will not go too far into these details, but to return to your question on climate resilience: over the past few years, the AfDB has launched major programs. One example is the Africa

Adaptation Acceleration Program, a USD 25 billion program to expand adaptation initiatives on the continent. As you know, adaptation is Africa's top climate priority.

Yes, Africa has significant potential for mitigation—reducing greenhouse gas emissions—but in 2025, nine of the ten most climate-vulnerable countries in the world are in Africa. Nine out of ten. The first is my own country, Chad, followed by the Central African Republic, Eritrea, Sudan, the Democratic Republic of Congo, and others. Adaptation is therefore crucial.

This is why the African Development Bank has committed to ensuring that our climate finance flows more toward adaptation than mitigation. We set a parity target, which we surpassed several years ago. Today, about 60% of our climate finance goes to adaptation.

We also recently launched a new initiative, the Climate Action Window, introduced two years ago. Last year alone, it provided financial support to 41 adaptation projects across Africa. Another 39 projects are ready for financing and awaiting support. We want to accelerate and scale up this work. Of course, this cannot be done alone—we work closely with our partners, including the Green Climate Fund, and we want to move from smaller initiatives to much larger and more transformative ones.

Marthe Akissi – Thank you very much, Dr. Dorsouma, for all these details. I will now turn to Brigitte Perrin. You mentioned earlier some WMO data — are they available somewhere? And since Dr. Dorsouma and I were just discussing adaptation, how does the WMO integrate the notion of adaptation into its work?

Brigitte Perrin – Thank you very much, Marthe. Several sources are available, including the Provisional Report on the State of the Global Climate (available only in English) and its press release, which is available in French. The State of the Climate in Africa 2024 report is also available and has been published in French. These documents provide a good overview of the actions undertaken by the WMO, particularly in terms of adaptation. Another report on the world's most critical drought-affected areas was also released this summer.

In terms of adaptation, the WMO was mandated by the UN Secretary-General, together with UNDRR—the United Nations Office for Disaster Risk Reduction—to lead the Early Warnings for All initiative, which aims to ensure that all countries worldwide are covered by early-warning systems by 2027. The initiative was launched in 2022, and the first actions began in 2023.

A report was recently published providing figures on the progress of this initiative. Today, the numbers speak for themselves: multi-hazard early-warning capacities in Africa have improved by around 72% since 2015. Even though we started from a very low baseline, this demonstrates that investments made in African countries have proven extremely useful. Today, more than 50% of African countries have early-warning systems. Before the initiative, it was roughly 3 out of 10; today it is 5 out of 10. Obviously, this is still not enough—we need to go further. But we are beginning to see results that are becoming exponential, because each time we install observation stations, we can better predict extreme events.

When an observation station is installed in one country, it also benefits neighbouring countries, since—as you all know—weather has no borders. So, investments in a country like

Mozambique, which I mentioned earlier, have an impact across Eastern Africa, providing more accurate measurements that improve weather forecasts for the whole region.

Africa is the largest beneficiary of international funding for early-warning systems, receiving a total of USD 923 million worldwide.

There is still work to be done. For example, in Sudan, 67% of households were affected by climate hazards, but only 39% had access to meteorological information.

Adaptation is, of course, a major priority for the WMO. Early-warning systems consist of four pillars. First, preparedness—informing and educating people on how to protect themselves from weather-related hazards. The WMO is responsible for forecasting and observations, ensuring that accurate forecasts reach the right place at the right time.

Next, the International Telecommunication Union (ITU) plays a key role in ensuring that early-warning messages issued by meteorological services actually reach citizens via mobile phones, radio, television, and sometimes even community-based communication channels. This is an extremely important element.

Finally, the International Federation of the Red Cross and Red Crescent Societies handles the post-disaster response, ensuring that people can receive immediate assistance.

We work closely with these three other agencies to ensure that the full early-warning cycle can be implemented effectively.

Marthe Akissi – Thank you very much. Thank you, Brigitte, for all these details. Now, let me turn to Durrel. You attended the latest COP, and it wasn't your first… What were the outcomes of COP30? Some say it was a failure. What role did Africa play at the heart of this global gathering?

Durrel Halleson – Thank you, Marthe, for this question. I think it's the question everyone is asking. Did COP30, as announced by Lula in Sharm El-Sheikh in 2023, live up to its promises? The year 2025 was a major moment for reflection, ten years after the adoption of the Paris Agreement at COP21. We expected to see the same momentum as in Paris. It had been presented as the "COP of action." It was also a COP held at a very particular moment, marked by the rise of climate skepticism and the withdrawal of the United States from the Paris Agreement.

I would also like to remind you that Africa went to this COP not as a victim, but as a provider of solutions. Four priorities had been defined by African governments.

The first was strengthening adaptation finance — and I think Dr. Dorsouma touched on this — then advancing just and equitable transitions, supporting nature-based solutions, and finally reforming the financial architecture, particularly regarding climate finance.

When we look at the major decisions taken in this context, we can say that much more was expected, but there were still notable results. For example, the decision to triple adaptation finance was very welcome. The previous objective was to double it — that is, 40 billion dollars

by 2025. Now, significantly more funding will flow into adaptation, and as Dr. Dorsouma mentioned, prioritizing adaptation is directly linked to our development trajectory.

Another major decision taken at the COP was the adoption of a new voluntary indicator framework to monitor progress on adaptation. A total of 159 indicators were adopted. This is progress, as it improves transparency, accountability, and the targeting of financing toward concrete action.

The COP also adopted what is called "Gender Climate Action." The COP recognized the essential role of women — but not only women: also Indigenous peoples, Afro-descendant communities, and local governments — in climate action.

However, the real disappointment concerns commitments related to forests. No decision was taken on this issue. A parallel process was initiated to establish an expert group and a roadmap on deforestation by COP31.

No decision was taken either on phasing out fossil fuels.

It will be interesting to see how Africa positions itself, especially considering that it will host COP32 in Addis Ababa.

Marthe Akissi – I see. On that point, we will have the opportunity to discuss it later, and also to revisit the African positions that were presented at the recent African Climate Summit. But before that, I would like to give the floor back to Khadija Kabidi. Are the decisions taken at COP in line with the realities in the Maghreb?

Dr. Khadija Kabidi – In the Maghreb, particularly in Morocco, there are quite ambitious projects, notably the goal to triple energy production by 2030. This ambitious target relies primarily on solar energy, including the Noor project in southern Morocco, in the Ouarzazate region, as well as the Tarfaya wind farm.

These projects are very important for Morocco to ensure a transition toward a green economy and reduce dependence on fossil fuels, while also providing an alternative that will contribute to lowering greenhouse gas emissions.

Marthe Akissi – I see. Thank you very much. Dr. Dorsouma, I will turn to you now. You have participated in various COPs and were present at COP30. Could you tell us a bit about the outcomes, particularly the long-standing issue of climate finance? Can we get more details on this?

Dr. Al Hamndou Dorsouma – Thank you. It was quite a particular COP. As Durrel mentioned, it was the "implementation COP," but it was also called the "COP of truth." In other words, we need to face the facts and move forward. Regarding finance, I see five areas of progress, summarized in the minimum agreement reached in Belém.

First, finance. At COP29 in Baku last year, it was decided that by 2035, the international community would provide USD 300 billion per year in climate finance to developing countries. Unfortunately, this amount was insufficient given the needs, and negotiations continued toward

COP30 to aim for USD 1.3 trillion per year. A major achievement in Belém was precisely this decision to aim for USD 1.3 trillion per year by 2035.

Second, adaptation finance. As Durrel mentioned, a significant decision was made to triple adaptation finance, reaching USD 300 billion per year by 2035. These two decisions on finance, in my view, are of critical importance. The global adaptation goal had been stalled for ten years. While mitigation is straightforward — we can measure greenhouse gas emissions and assign a carbon cost — adaptation is harder to quantify. Which indicators should be used? They started with over 300 indicators, then reduced to 200, and eventually agreed on around 159. Work will continue. African countries emphasized that these indicators should be linked to financial commitments — and here no agreement was reached — but at least a set of indicators, around sixty, was agreed upon to measure adaptation in the coming years.

Third, just transition. It is one thing to say "we need to phase out fossil fuels," but there are people working in these sectors — oil, coal, gas. How do we ensure their transition is inclusive and just, providing decent work opportunities in other sectors when these industries close? A decision was made on a mechanism to ensure such a transition.

Fourth, new initiatives. The agreement introduced a Global Implementation Accelerator and a mechanism called Belém 1.5°C, referencing the Paris Agreement target to limit global temperature rise to 1.5°C. In 2024, this threshold was exceeded for the first time, highlighting the urgent need for action, hence the establishment of this mechanism.

Fifth, and where progress was limited, concerns the phase-out of fossil fuels. No agreement was reached due to divergences between oil- and gas-producing countries and those pushing for renewables. However, a process was initiated: over 80 countries agreed to continue discussions, with Colombia organizing an international conference next year to aim for a decision at COP31.

Regarding Africa, as Durrel said, much has already been noted. One key point is Africa's insistence on recognition of its specific situation: it emits less than 4% of global greenhouse gases, yet it is the most vulnerable continent. Nine of the ten most vulnerable countries are in Africa. Simultaneously, Africa receives the least climate finance — less than 3% of global climate funding. Africa sought formal recognition of this particular situation. However, other regions — Latin America, the Caribbean, Asia-Pacific — questioned why Africa should get special status. Africa continues to fight for this recognition.

Nevertheless, as Durrel mentioned, some progress was made in Belém: recognition of Indigenous peoples and Afro-descendant communities, and their role in protecting nature and fighting climate change. Regarding forests, there were also advances: Brazil launched a USD 5.5 billion Tropical Forest Forever Facility (TFFF), and a USD 2.5 billion financial commitment was made at COP30 for the Congo Basin forests.

I will stop there. Thank you.

Marthe Akissi – Alright. Thank you very much, Dr. Dorsouma. I will now turn to Brigitte Perrin. The WMO has published several climate reports in recent years. Dr. Dorsouma has just

presented a number of outcomes and decisions adopted at COP30. Do you believe these decisions are commensurate with the scientific warnings highlighted in your reports?

Brigitte Perrin – The decisions are made by the negotiators. Even though the WMO is present in the negotiation rooms, we are there to inform and to answer negotiators' questions; it is not our role to participate directly in the negotiations. Our aim is to produce the clearest possible science. Science is science. But then, how that science is interpreted and how decisions are made… of course, given the outcomes, we can only be disappointed that science may not always be taken at its full value, and that the decisions adopted tend to be somewhat minimal, let's say.

Now, I'm not in a position to tell you whether this is good or bad. The WMO community, generally speaking, is somewhat disappointed not to have been able to push for greater ambition, especially regarding the development of renewable energy. On the other hand, we were satisfied with the progress made on financing early warning systems. In that respect, we are quite pleased with what was communicated and with the emphasis on the need to invest more in adaptation and in establishing early warning systems. I think that message came across clearly.

Marthe Akissi – Thank you, Brigitte. So, Durrel? Let me come back to you regarding what you said earlier about the African Climate Summit in September 2025. To what extent did these African positions prevail at COP 30?

Durrel Halleson – Since its first edition in 2023 in Nairobi, the African Climate Summit initiative has become indispensable. When Kenya's President, William Ruto, launched this initiative with the support of the African Union and the UN Economic Commission for Africa, it was to say that the time had come for Africa to declare: "We have suffered enough, we refuse to continue this way. It is now up to us to take our destiny into our own hands." The outcomes of these summits are built around what is most important for Africans. Africa's voice is then carried as one by the African Group of Negotiators. This means that Africa does not speak with 54 separate voices. Africa speaks as one in the negotiation room—whether on climate change, biodiversity, plastics, or wildlife trade. Not everything is perfect yet, but we will see how this approach expands.

What was adopted in the Addis Ababa Declaration in September 2025 was already the result of the work conducted during the African Ministerial Conference on the Environment held in June 2025 in Nairobi. Addis then provided the political stamp through the official endorsement by Heads of State. The positions on finance, transition issues, and the Congo Basin forest are among the elements decided in Addis and defended at COP 30. The African Group of Negotiators defines our priorities. These priorities are endorsed by ministers within the African Ministerial Conference on the Environment. And when a summit such as the African Climate Summit is held, the Heads of State adopt these as the African position. This is what Africa brings to the international negotiations.

Marthe Akissi – All right. Dr. Dorsouma? Earlier, we talked about Africa polluting very little yet paying the price. How can we compel major polluters to take responsibility for compensating

for the pollution they generate? You were at COP 30, and this issue comes up every year on the negotiation table. We know who the major polluters are, but in your view, how can they be compelled?

Dr. Al Hamndou Dorsouma – In my opinion, it's not about coercion. So what should be done? Climate action requires collective effort. And as you have said, the climate has no borders. Greenhouse gas emissions produced by Chinese industries, for example, can cross borders and affect others—and they do. If we were to force countries… well, we certainly wouldn't be here today holding a thirtieth Conference of the Parties.

This is a process. The COP is not just attending an event for two weeks and then going home. It is a continuous process that moves from one year to the next. And if this process was created, it is precisely because we need collective action; we need multilateralism to address a problem of such global magnitude.

In my view, there is no body today that can force a State to shut down any particular industry. States are governed by their sovereignty. A sovereign State cannot be told what to do. But we create a framework in which sovereign States come together and take collective decisions to limit or reduce their carbon footprint. And that is what the COP offers under the United Nations Framework Convention on Climate Change.

I believe this framework is useful, even if it takes time. It is useful because, in my opinion, if coercion were the approach, we would achieve no results—States would simply say, "We are sovereign; we will do what we believe is right." So creating a space for dialogue, as we are doing now, is extremely valuable. And I think that despite how long it takes, we have indeed seen progress over the past 30 years of COPs. Of course, these efforts remain insufficient, because we are dealing with a very complex problem.

It's about reconciling development with climate action. Countries need to develop their economies. Today, without strong economies, we cannot survive on this planet. But at the same time, how do we grow our economies while taking into account the imperatives of climate change mitigation and adaptation? This is where many countries find themselves at a crossroads, especially African countries, which have a significant need to develop, and which have major opportunities and potential for development—yet must still consider climate constraints.

At the same time, we must acknowledge that the development model adopted since the industrial era is precisely the one that has brought us to the climate crises we face today. So the real question is: can we rethink our development model to create one that is more carbon-efficient, one that takes into account the negative impacts of climate change?

I believe this is where our reflection should focus, rather than trying to force States to do this or that. It will not work, because States will always invoke their sovereignty and insist that they have no lessons to receive from anyone.

Marthe Akissi – Thank you all. We now move on to our second part. We issued a call for contributions to journalists, and in response we received around thirty questions. We selected about ten of them.

Let me begin with the first question from Zenebe Hailu (Ethiopia), EBS TV: What should Africans do to prepare for and take advantage of the COP 32 summit, which will be held in Africa, in order to obtain greater results?

The question has been asked, the floor is open. So, dear experts, whoever wishes to respond may do so.

Durrel Halleson – Okay, I can answer, and perhaps Brigitte, Khadija, and Al Hamndou can add to it. This will be the sixth time that a COP is held in Africa, and each time it happens, the same expression comes back: "this is the African COP." Because we believed it would bring solutions to our issues and respond to our needs. Unfortunately, that has not always been the case.

Now, COP 32 is coming back to Africa, and we will once again hear the same narrative about the "African COP." It is up to Africans to take leadership this time, just as Brazil did. Brazil arrived with a roadmap and clear issues to negotiate. The presidency of COP 32 will be Ethiopian. African countries must clearly state what they want, while taking into account the outcomes of COP 30 and COP 31.

COP 26 in Glasgow established a methodology. Based on this methodology, we need to specify our priorities, which will be defined by our group of negotiators. For example, could Africa place emphasis on energy access at COP 32? I believe it is up to us to determine what we want.

Take the Congo Basin, for instance: it could be a great opportunity for COP 32. We also have the Great Green Wall. These are initiatives that already exist on our continent. Can we elevate these initiatives as global solutions, so that other countries can adopt them and support us in advancing them?

Marthe Akissi – Alright. Thank you very much. Thank you for all these clarifications. Would anyone like to add anything?

Dr. Al Hamndou Dorsouma – Thank you. I would just like to quickly respond to this question and say that Africa is, after all, the continent that has begun to prepare well for the COPs, and this should be acknowledged, with a fairly solid structure in place. We have the African group of negotiators, which reports to the African Council of Environment Ministers, and above them is the Committee of African Heads of State on Climate Change. Since 2009, Africa has been very organized on this front, and I believe that given this structure, I have no major concerns for COP 32 in Ethiopia.

However, I would like to clarify that hosting a COP on the African continent does not mean that the COP will only address African issues. The COP is a global event, and all issues will be on the table, including those raised by Africa, particularly the issue of the continent's specific association. But I mainly think that COP32 will operate, in my view, on two levels.

First, it will consolidate the gains achieved in previous COPs, notably those we discussed today, such as the decisions on mobilizing $1.3 trillion per year by 2035. What mechanisms will ensure that access to these resources is adequate for the African continent, which currently faces three main financing challenges: accessibility, cost, and availability of funds, not to mention the predictability of these funds? Precise details on access to these funds are important, and Africans will focus on this. Also, regarding financing and adaptation, which we discussed—the goal of tripling adaptation financing by 2035—how will this be achieved? Through what mechanisms, etc.

The other aspect, I will conclude with this, is the evaluation of initiatives launched to date. You know, ten years ago, at COP21 in Paris, Africa introduced two initiatives: one on renewable energy in Africa and another on adaptation in Africa. Ten or twelve years later, where do we stand with these African initiatives? Meanwhile, other initiatives have emerged. Perhaps now, and I believe Africa will undertake this exercise, it is time to ask whether these initiatives have borne fruit. If so, which ones? If not, why not? I believe these are legitimate questions that will need to be addressed in 2027 in Ethiopia.

It is Africa's COP. Africa's main points will be on the table, but it is not guaranteed that all the continent's issues will be discussed. Nevertheless, Africa will make its voice heard as the African COP on African soil.

Marthe Akissi – Thank you very much, Dr. Dorsouma, for highlighting African initiatives that deserve an assessment before participating in COP32 in Ethiopia. Just to clarify, COP31 will also take place in Turkey. I will now give the floor to Brigitte, and then to Khadija Kabidi. Brigitte, the floor is yours.

Brigitte Perrin – Yes, I just wanted to respond to this question about COP32. Sorry, I'm going back to COP32. From a communications perspective, there are two points that haven't been mentioned yet.

The first is that, as you know, the United Nations is undergoing restructuring and renewal, with a whole series of organizations physically relocating, including organizations as significant as UNICEF, UN Women, and others, whose headquarters are being moved to Africa, specifically to Nairobi. This will create an entire UN network, an ecosystem, establishing a stronger presence in Africa. This is important because the staff and experts who inform these organizations will be moving from the United States, Europe, or other UN centers to Africa. By the end of 2026, the organizations I mentioned will have relocated their headquarters to Nairobi. This will increase on-the-ground UN expertise in Africa—not necessarily specific to climate—but it will still have an impact and amplify African competence.

The second point I wanted to raise, and this is something we might have the opportunity to discuss further later, is the growing issue of climate disinformation about Africa. I discussed this a few days ago with the director of the Senegalese Meteorological Service during the WMO Congress. She explained that we are beginning to see a wave of climate disinformation hitting Africa, initially targeting Anglophone Africa, since disinformation often originates in English, but according to her, it will eventually reach Francophone Africa as well.

What does this mean for us and for you, journalists? It means you will have to face this wave and ensure you gather information in the most reliable way possible. So there is a lot of work to be done in my view, and we need to start today: collecting all reliable sources of information on climate, environment, and biodiversity in Africa, and making sure these resources are available to the media, communicators, and other stakeholders. The goal is to ensure that the information landscape is not a minefield, so that when people are looking for information in preparation for COP32 in Africa, they know where to find it.

I would also like to take this opportunity to thank all the participants in this panel and to commend the hard work of Julien Chambolle from Africa 21, who is doing an extraordinary job of bringing all these stakeholders together. He ensures that all speakers provide highly reliable, first-hand information, which is very important, and I wanted to highlight that today.

Finally, another extremely important point for COP32 is education. Education at all levels—not just schools, but also education on climate and the environment across various sectors, including the private sector, possibly defense, less conventional sectors like parliamentarians in different countries, etc. There is a significant task of disseminating information and integrating science so that it reaches all sectors. Thank you.

Marthe Akissi – Thank you very much, Brigitte. As you mentioned, the climate in Africa today has become a field of disinformation. It is important to pay close attention, which is precisely why Africa 21 is now organizing these environmental meetings, to give all journalists access to reliable information so they can properly inform their various communities. Khadija Kabidi, do you have anything to add before we move on to the next question?

Dr. Khadija Kabidi – Yes, to add to what Brigitte just said about information: with the boom of artificial intelligence today, we are able to do many things, including spreading fake news, which creates a lot of confusion. The media have a major role to play in countering this phenomenon.

Regarding the COP, I believe there are two important points to mention. First, there needs to be a rational mechanism for the use of financing for Africa. This is very important. We want to avoid increasing debt, so alternatives such as grants or concessional loans are necessary to help reduce debt, as high debt levels limit the capacity of African states to act.

The second point is that we want to ensure a green transition, particularly with clean energy, in order to achieve the set targets. For example, early warning systems also need to be fully implemented across Africa, as we have not yet reached 100% coverage.

Marthe Akissi – Thank you very much, Khadija. Thank you. We will now continue with the series of questions from our colleagues. The next question is from Sokhna Bator Sall of the Senegalese Press Agency: How can we compel the major polluting countries to financially compensate the international community, and in particular the poorest countries, for the transition to new models? I believe this question has already been addressed by Dr. Dorsouma.

The next question, also from the same journalist, is: How can we help African countries that depend on oil and gas revenues to gradually reduce this dependency, without making the transition too abrupt?

Dr. Al Hamndou Dorsouma – Yes, I think, just to add a few words on this, we touched on this question a little earlier, but I want to emphasize that regarding the phase-out of fossil fuels—as you said so well, Marthe—this transition must be gradual, inclusive, and just. The question that arises is: why should poor countries today not exploit their natural resources to develop, when rich countries have benefited from theirs for decades, even centuries? This exit must be fair and gradual. That's why we call it a transition. A transition doesn't happen overnight; it takes time. Accompanying measures must be put in place to progressively move away from fossil fuels. That is why, at the COP in Belém, a mechanism on inclusive transition was adopted, specifically to address this issue.

Secondly, on the question of compensation. You know, this issue has complicated negotiations for years. For many years, there was a division between rich and poor countries: "You are responsible for the problem. We expect you to compensate us because we are the victims of the problems you caused." This poisoned discussions for a long time.

That is why, at COP27 in Sharm El-Sheikh, a fund for loss and damage was established. This fund was created specifically to address the question of compensation, because rich countries did not want to discuss compensation, while poor countries insisted on it. The agreement that was finally reached was to create a fund to respond to loss and damage.

What does this mean? It means that the fund supports countries suffering from climate-related losses and damages. Fortunately, this fund was operationalized at COP28 in Dubai. Today, it has resources. They launched their first call for project proposals at COP30 in Belém, inviting countries and organizations to submit funding requests for loss and damage.

So, this question has also found a solution within the framework of COP negotiations. Thank you.

Marthe Akissi – Alright. There is a new question on financing from Ferdinand Mbonihankuye from Burundi for Ibihe News: Why are most African countries unable to access global climate financing? What are the obstacles, and how can they be overcome?

Dr. Al Hamndou Dorsouma – I'll take this one because I've been responding to it for several years. The challenges are multifaceted.

First, climate finance is quite complex and relatively new. The capacities in Africa to access it are limited. To access climate finance, you need projects that are what we now call "bankable"—projects that meet the requirements of these funds. One of the requirements is accreditation. This means having one or more institutions capable of approaching these funds, raising the financing, and deploying it. There is a process in place—for example, for the Green Climate Fund, the process is quite long. I know this because I was responsible for the African Development Bank's accreditation with the fund. It took us two years to complete the process. Now, imagine this at the scale of African countries with limited capacities.

The second major challenge, in my view, is the perception of risk in Africa. Climate funds are not only public funds—they also include private funds. Unfortunately, most climate finance currently coming to Africa is public simply because Africa is not yet able to attract private funding. And if it cannot, it is due to the high perceived risk on the continent. This perception is also linked to other issues, including the role of the media. The stereotypes portrayed about Africa, according to a recent report, cause the continent to lose $42 billion annually. So, if we cannot improve this risk perception, we will not attract financing. It's important to remember that globally, a large part of climate finance comes from the private sector. To attract private investors, this risk perception needs to improve.

The third and final point—though there are many—is the cost of financing. Accessing finance in Africa today comes at a very high cost. For example, a young entrepreneur in Africa may pay an interest rate of 15–30% to obtain a bank loan, whereas in rich countries, a young entrepreneur can access financing at 2–3%. This is very prohibitive and prevents initiatives from emerging to attract finance.

So, these are some key challenges. I believe there are others as well, underlying the ones I've just mentioned.

Marthe Akissi – Thank you very much. Durrel, did you want to add a few words?

Durrel Halleson – Thank you very much, Marthe. Thanks also to Julien and the entire Africa 21 team. One of the outcomes of COP30 also concerns journalism and disinformation, as someone mentioned earlier. There was a declaration on information integrity in Belém. I think this is a good thing. Our journalists also need to take matters into their own hands. Journalists should not always wait for events to happen. I think we need to go beyond that.

Today, our journalists need to start addressing issues at their core, such as climate change. I believe we shouldn't wait for the COP or the African Summit to talk about climate change. We need to go into our villages, into our daily lives, to see, for example, what we are eating and how what we eat today in Africa is affected by climate change. This is how we begin to change people's perceptions regarding these issues.

Marthe Akissi – Thank you very much. Thank you, Durrel, really, for sharing your knowledge. I would like to remind everyone that you are in charge of Policy and Partnerships at WWF Africa. Thank you for sharing your experience, because you have always been present at the various COPs and at the heart of the negotiations. And thank you for all these details. Brigitte, did you want to add something?

Brigitte Perrin – Yes, very quickly, to follow up on what was just said regarding information integrity. I just wanted to mention that one of the outcomes of COP30 was the signing of a declaration on information integrity in climate change. This declaration was signed by 15 countries. Several other countries are expected to sign it. I am not sure if any African countries have already signed, but this is part of the initiative for information integrity.

The goal is to bring together all kinds of actors—state and non-state, NGOs, private sector, and others—to create a fund supporting information integrity worldwide. This fund is currently

being established and has already financed a number of projects. We hope the fund will scale up, and of course, this will also be an opportunity for some African countries to submit projects, if they have specific initiatives related to information integrity.

This initiative was launched by the United Nations, with UNESCO and several other organizations, including the WMO, which has joined. It is an important development to follow ahead of COP32, particularly for the media and those active in climate communication.

Marthe Akissi – Thank you. All references to the documents mentioned can be found at the end of this document. We now move on to the next question. Danny Magadju from the Democratic Republic of Congo for Radio Kahuzi Bukavu asks: What benefits can African countries that are not major greenhouse gas emitters gain from protecting forests, which are essential to the global climate balance?

Dr. Al Hamndou Dorsouma – In my view, beyond the global stakes, forest protection is first and foremost a local issue. Communities that protect their forests well are able to use them effectively and gain numerous benefits: in agroforestry, traditional medicine, and protection against floods. There are many advantages to protecting forests, and these benefits are local. I believe we all have an interest in protecting our forests for the direct benefits to our own needs and populations, before it becomes a global climate protection issue.

Marthe Akissi – Speaking of benefits, a question from Rabah Karali from Algeria for DZ Charikati and Ebourse.dz: What tools currently exist on the African continent to support ecosystem restoration projects? How is the African Development Bank involved in these efforts?

Dr. Al Hamndou Dorsouma – The AfDB plays a major role in protecting Africa's forest ecosystems. We were the first institution to launch a dedicated forest fund, called the Congo Basin Forest Fund, in 2008. This fund was implemented over ten years and financed more than 100 projects in Central Africa to protect forests. We are also a major contributor to the Great Green Wall initiative in the Sahel, as Durrel mentioned earlier, mobilizing $6.5 billion to restore 100 million hectares of degraded land in Sahelian countries, sequester 250 million tons of carbon, and create 10 million green jobs. This is currently the largest land restoration initiative in Africa.

We are also involved in the Belém Call, which I mentioned earlier, focused on protecting Central African forests, mobilizing $2.5 billion to protect this major ecosystem. We have many other local initiatives, in Morocco, Kenya, Tanzania, etc., for ecosystem protection and resource mobilization for other ecosystems, such as water resources—both surface and groundwater—which are also crucial for ecosystems.

Marthe Akissi – Alright. Speaking of forest initiatives, a question from Christophe Nyemeck Beat from Cameroon: Are there mechanisms or initiatives to finance mangrove protection in the same way as more traditional forests?

Dr. Al Hamndou Dorsouma – To my knowledge, there is no global initiative specifically for mangroves. Perhaps I am mistaken, and Durrel might be able to shed light on this. However, I do

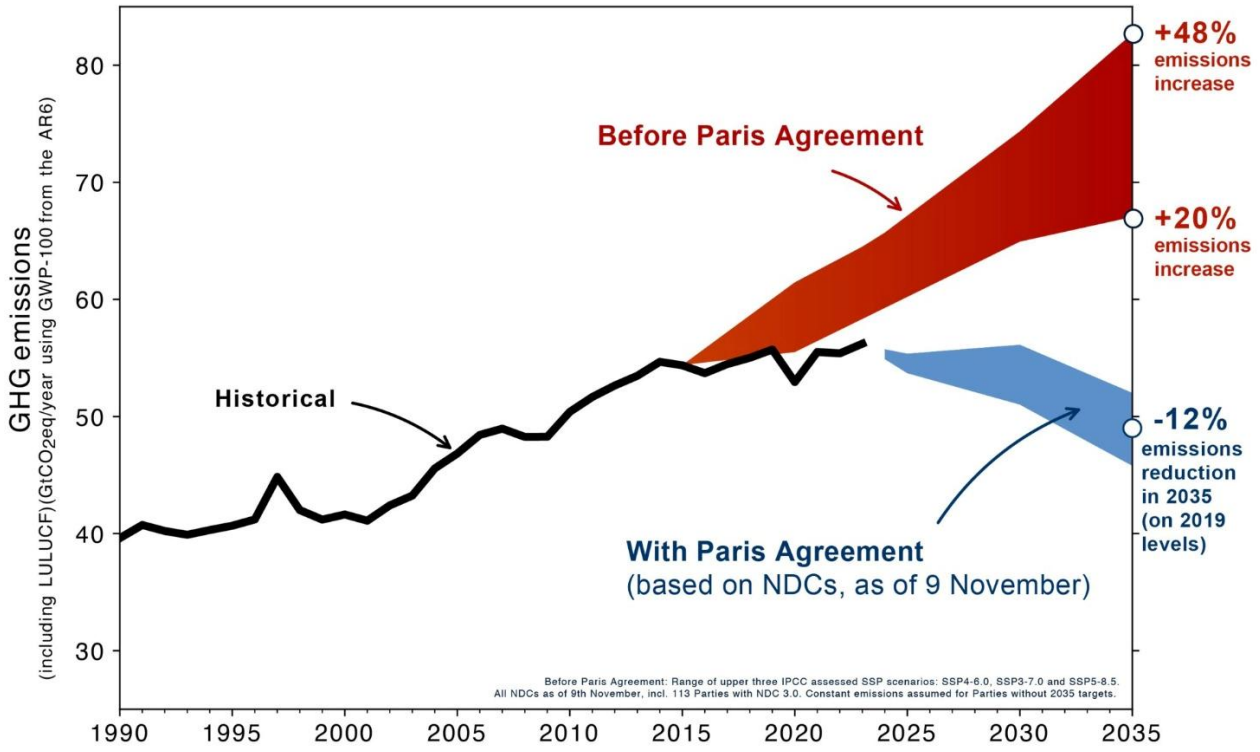
know there are many projects focused on mangrove protection. Everyone knows the importance of mangroves in protecting Africa's coastal regions. Mangroves also play a crucial role in ecosystem regulation. There are many projects, for example in Senegal and along the entire West African coast, particularly in the Gulf of Guinea. But these remain country- or region-specific projects; I am not aware of a large-scale global initiative for mangroves. This would need to be verified.

Marthe Akissi – Alright. The next question, I think Brigitte and Khadija Kabidi can address. This comes from Charles Kolou from Togo for Mongabay. He asks whether it is still possible to limit warming to 1.5 degrees as set out in the Paris Agreement, and if so, what measures or transition mechanisms in the energy or other sectors could make this possible?

Brigitte Perrin – I'll give a fairly simple answer. This is the response from the UN Secretary-General. He said it at the WMO a few weeks ago: it is virtually impossible to maintain the temperature at 1.5 degrees. What does this mean? Even if we stopped emissions now, it would be extremely difficult. For the year 2025, we were already at 1.42°C for the first eight months of the year. This is very high, even in a year when La Niña was relatively strong.

What does this imply? The analysis period required to determine whether we have exceeded or not exceeded 1.5°C is 20 to 30 years. We need 20 to 30 years of continuous monitoring above this threshold to say definitively that 1.5°C has been exceeded. But I think the question should be framed slightly differently. Even if we exceed 1.5°C, the relevant question is: what would have happened if the Paris Agreement had not existed? Where would we be? And where will we be if we do nothing?

So now, the question is not whether we are at 1.5°C or 1.6°C, but how we can, through the efforts undertaken and intensified since the Paris Agreement, limit warming as much as possible. The IPCC will release new reports providing guidance on climate trends. We look at annual figures, year by year, to see how temperatures are rising. Indeed, temperatures are rising consistently. The last ten years have been the warmest decade on record. For Africa, 2024 was +0.86°C above the 1991–2020 average. Therefore, 2024 was the hottest or second-hottest year ever recorded, according to the data. For reference, the WMO always considers six datasets to produce an average.



Marthe Akissi – Thank you very much, Khadija. Do you have a response?

Dr. Khadija Kabidi – I confirm what Brigitte said about temperature trends in recent years. A WMO report was published and served as the basis for COP30, providing projections for the next five years on temperature evolution, and confirming the trend of rising temperatures over the last decade in Morocco. Each year is hotter than the previous one. In 2024, we were at +1.49°C, and for 2025, current data indicates +1.66°C.

This warming is driven by the same phenomena: positive energy forcing from greenhouse gases, which continue to increase in the atmosphere, ocean warming, changes in global weather and precipitation patterns, particularly in Africa, and so on.

Marthe Akissi – Alright. Thank you very much. The next question is a new one from Rabah Karali, from Algeria, for DZ Charikati and Ebourse.dz: Did COP30 allow for decisions to be made or improvements in the development of disaster prevention tools and early warning systems?

Dr. Al Hamndou Dorsouma – I think disaster risk management is handled by another mechanism called the Sendai Framework on Disaster Risk Reduction. However, disaster issues are very closely linked to climate risk, of course. Now, when we talk about disasters, it's not just climate-related disasters. There are other non-climatic disasters. But COP is not really the ideal venue to discuss all types of disasters, apart from climate-related disasters, which are specifically addressed within the COP framework.

Marthe Akissi – Alright. Thank you very much, Doctor. I think we will now take some open questions or comments. Please get straight to the point when asking your question.

Badylon Kawanda Bakiman, from the Democratic Republic of Congo, Radio Diocésaine Tomisa and the website newsblogworld: What is Africa's share of the $300 billion adaptation fund discussed at COP30?

Charles Kolou, from Togo, for Mongabay: Will we exceed 1.5°C? What needs to be done to prevent exceeding this limit, or at least stabilize it around this value?

Dr. Al Hamndou Dorsouma – Regarding the $300 billion for adaptation, I think Africa needs to start preparing now to avoid missing the opportunity. In my view, these funds will be channeled through "bankable" projects. Africa should begin developing a portfolio of such projects, ready to receive investments. This is work we have already started at the AfDB, and we presented some of these adaptation projects at COP27. Funding is not divided by continent in a fixed way. It works through bankable projects that deliver results.

Regarding the other question on 1.5 degrees: as was mentioned at COP28, current trajectories are leading us toward 2.5°C. As Ms. Perrin noted, paraphrasing the UN Secretary-General, 1.5°C is the target, the ambition, but we are not there. I don't think we will get there. Data I have shows that Africa is warming 1.5 times faster than other regions of the world. So, in my view, we are already above 1.5°C.

How can we achieve it? That's why every country is asked to submit increasingly ambitious nationally determined contributions every five years, to raise ambition and implement large-scale initiatives to stay below the set limit. Unfortunately, even what we call the generation of NDCs 3.0 does not yet put us on a 1.5°C trajectory, but rather toward 2.5°C. I'll stop there and thank you for inviting me to this interesting panel discussion.

Marthe Akissi – It's we who thank you, Dr. Dorsouma, for all these details. Thank you so much for your presence and willingness to participate in this roundtable on climate and environmental issues.

I think we can ask our two remaining guests to conclude by giving their thoughts on the role of journalists and media in the fight against climate change. If you would like to say a few words in conclusion, and then we will thank everyone. I'll give the floor first to Dr. Khadija Kabidi, and then to Brigitte Perrin.

Dr. Khadija Kabidi – The role of the media is crucial. As we have said, we are facing increasing disinformation. Therefore, they play an important role in informing and raising awareness among the public and citizens. Media also helps mobilize, guide, and engage communities for local actions, by educating and informing them—it is a way to influence people toward sound decision-making. It is also a way to disseminate weather alerts in a timely manner. And in the opposite direction, information flows back to show the results of actions, adaptation measures, and the situation on the ground through data, feedback, and needs, allowing for adjustments and necessary initiatives. Thank you.

Marthe Akissi – Thank you very much. Thank you, Khadija Kabidi, truly, for sharing your knowledge, especially on the realities of the Maghreb and Morocco. I will now pass the floor to Brigitte Perrin.

Brigitte Perrin – Thank you very much, Marthe. I'll be very brief because we've already covered a lot. But I think there is one thing you should keep in mind: science is complicated. The reports I will share with you, if you dive into them, are difficult—difficult even for those of us working with them every day, even for the scientists producing them. Every number counts, every graph can be complex, sometimes containing too much information, and we don't always have the means to simplify it.

So just a word to encourage all of you to tell stories—this is extremely important. When extreme weather events occur, such as droughts, heatwaves, and other phenomena, go to the people, go to the citizens, go to those affected. Ask them how they feel, ask about their emotions, let them share their experiences.

I had this experience two years ago in Senegal, in a village. I was walking around with one of the women from the village and asked her about the harvest this year. She said, "Well, this year there was a drought… it was terrible. We hardly got anything… but next year will be better." I asked, "Why do you think it will be better?" She replied, "Because each year is different." In fact, she was missing a very simple piece of information: "No, maybe each year will be different, but it won't necessarily be better than the previous one." And that is not good news.

However, by raising awareness, asking people to share their experiences over the past five or six years, we allow a deeper understanding. I believe each of us is more likely to listen to people who are our neighbors, friends, or family than to scientists we don't know. The more we listen to the experiences and emotions of those close to us, the more impact we will have.

Do not hesitate to base your articles and reports on scientific data from our reports, but let people share their experiences and emotions from the events they have lived through. That is what will truly resonate. It's not the big reports or numbers, which are difficult for everyone to understand. Use the data as a foundation, but show examples, let the people speak, let the community speak. This is the best service you can provide to also fight disinformation. Thank you very much.

Marthe Akissi – Thank you very much. Thank you, Brigitte Perrin. With your words, this virtual roundtable comes to an end. I would like to thank each of our guests and panelists for making themselves available to share all this information on climate, to help us understand environmental and climate issues from COP30, while also giving recommendations and advice to us journalists on how to report environmental and climate information through a humanized narrative—by engaging with communities, understanding their needs, and integrating their daily realities in a climate that is increasingly changing and disrupting their way of life.

With all this information, of course, science provides the numbers, but we must always humanize our reporting so the public can better understand the climate challenges we cover daily as journalists. And with that, we conclude this roundtable.

Resources

Find here the documents that were shared by our speakers:

- Press Release: Extreme Weather and the Effects of Climate Change Hit Africa Hard; WMO, May 12, 2025.
  To access the document: https://wmo.int/news/media-centre/extreme-weather-and-climate-change-impacts-hit-africa-hard

- Press Release: 2025 set to be second or third warmest year on record, continuing exceptionally high warming trend; WMO, November 6, 2025.
  To access the document: https://wmo.int/fr/news/media-centre/lannee-2025-devrait-etre-la-deuxieme-ou-troisieme-annee-la-plus-chaude-jamais-enregistree-dans-un

- State of the Climate in Africa 2024; No. 1370, WMO, 2025.
  To access the document:
  https://library.wmo.int/viewer/69495/?offset=#page=1&viewer=picture&o=bookmark&n=0&q=

- Critical Drought Areas in the World (2023–2025); UNCCD, 2025.
  To access the document:https://www.unccd.int/resources/publications/drought-hotspots-around-world-2023-2025

- Global Status of Multi-Hazard Early Warning Systems: 2025 ; World Meteorological Organization (WMO); United Nations Office for Disaster Risk Reduction (UNDRR), 2025.
  Pour accéder au document : https://library.wmo.int/records/item/69684-global-status-of-multi-hazard-early-warning-systems-2025