



Africa 21's Environmental Meetings

Episode 2

Seas and Oceans: Challenges for Africa

Wednesday, February 4, 2026

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=ZjF1uUWgRyg&t=567s>

Moderation :



Marthe Akissi, environmental journalist and news anchor at Radiodiffusion-Télévision Ivoirienne (RTI).

Guests :



Nassim Oulmane, Chief Economist and Head of the Green and Blue Economy Section at the United Nations Economic Commission for Africa.



Ludovic Arnaud, Associate Economic Affairs Officer in the Trade, Environment, Climate Change and Sustainable Development Section at the United Nations Conference on Trade and Development (UNCTAD), and expert on data and analysis related to the ocean economy.



Robin Degron, former Director of Plan Bleu (UN Environment/Mediterranean Action Plan), Professor at the University of Paris 1 Panthéon-Sorbonne (HDR in Geography), member of the Social Dynamics and Spatial Reconfiguration Laboratory (UMR 7566), magistrate at the Court of Auditors, and author of several books on the Mediterranean.

The Roundtable Discussion

Marthe Akissi – Good morning everyone. We are now ready to begin the second edition of Africa 21 Environmental Talks.

Today, we are focusing on the challenges and opportunities that seas and oceans represent for Africa. As we know, in 2025, seas and oceans moved to the center of the international agenda: the United Nations Ocean Conference, the High Seas Biodiversity Treaty, the WTO Agreement on Fisheries Subsidies, the 30x30 target, and the ongoing negotiations on plastic pollution — all major developments that are reshaping the future of our oceans.

What is Africa’s place in this dynamic, and what role have African states played? Above all, what opportunities do these developments offer the continent, particularly in terms of the blue economy?

These are the questions we will be addressing with our distinguished guests, whom I will now introduce.

Ludovic Arnaud is Associate Economic Affairs Officer in the Trade, Environment, Climate Change and Sustainable Development Section at UNCTAD. He is also an expert in data and analysis related to the ocean economy.

We are also joined by Robin Degron, former Director of Plan Bleu, an organization under UN Environment in the Mediterranean. He is Professor at Paris 1 Panthéon-Sorbonne University, member of the Social Dynamics and Spatial Recomposition Laboratory, magistrate at the Court of Auditors, and author of several books on the Mediterranean.

Finally, we have Nassim Oulmane, Chief Economist and Head of the Green and Blue Economy Section at the United Nations Economic Commission for Africa.

Nassim, I will turn to you for our first question. We are hearing more and more about the blue economy in Africa. Concretely, what does this concept encompass, and why has it become a strategic priority for the continent in your view?

Nassim Oulmane: So, indeed, it has now been roughly ten years that we’ve been talking about the blue economy in Africa. It used to be a topic that was quite neglected. It was only from 2016 that we began working on strategic documents at the continental level to better understand the importance of the blue economy for the African continent. We have always had a rather cautious approach towards the sea and oceans on the continent. But what needs to be understood is that today, the blue economy represents an economic potential of around 300 to 400 billion dollars across Africa, supporting approximately 50 million jobs in the 38 coastal countries. Gradually, strategic frameworks have been put in place, particularly at the level of the African Union, with a

strategy for the blue economy. Subsequently, there have been sub-regional and national implementations. Currently, we are in a phase where, after recognizing the economic potential in this field, we are trying to align economic development with the protection and regeneration of oceans, which are under heavy pressure, knowing that countries have very limited resources to address this aspect. This dimension is integrated into development plans, into the African Union's Agenda 2063, and into aspirations for inclusive growth and sustainable development. The entry point is the connection between sustainable development, environmental protection, and ecosystem regeneration. Because, indeed, it is immediately apparent that ecosystem degradation has a direct negative impact, including economically. For example, if I take the case of sustainable coastal tourism, it is immediately affected in the event of severe marine pollution. We are truly at the heart of sustainable and inclusive development.

Marthe Akissi: Thank you very much, Nassim. I will now turn to Ludovic Arnaud. We are talking about a sustainable blue economy, as Nassim mentioned today. How can international trade become a key tool in the transition toward this sustainable blue economy?

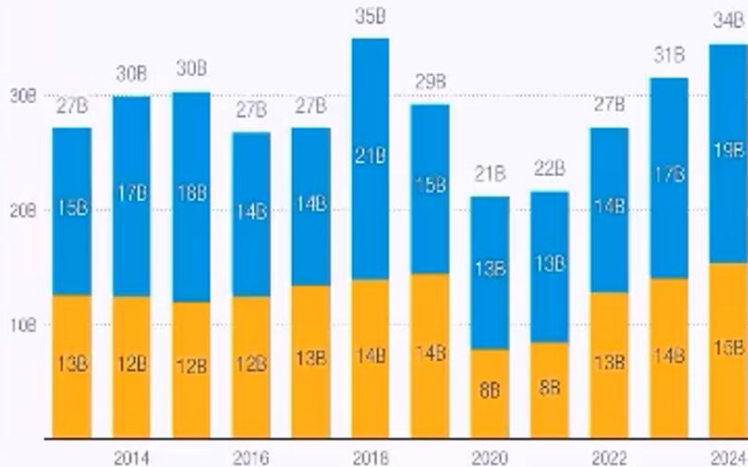
Ludovic Arnaud: Thank you. To complement what Nassim said, there are some key figures: 300 billion dollars per year in terms of added value. In terms of international trade, we are at around 60 to 70 billion dollars, which is still very low compared to the potential of the blue economy in Africa. Within UNCTAD, now called "UN Trade and Development," the agency where I work, we have several databases available on the trade of ocean-related goods and services. These databases are accessible online in French and English and provide fairly precise analytical tools at the continental, sub-regional, and national levels regarding the export profiles of different countries. In terms of goods, we focus on five main oceanic products: fisheries, processed fish products, and minerals. By minerals, we include salt and sand extracted from the oceans. Then there are ships and port equipment. And finally, blue high-tech products. At the African level, oceanic goods represent about 25 billion dollars per year in 2024. But there is a clear distinction between North Africa and Sub-Saharan Africa. Sub-Saharan Africa is largely specialized in exporting oceanic goods, whereas North Africa is mainly specialized in exporting oceanic services, particularly tourism and maritime transport. So, if I may, I'd like to share my screen with you. I have a few charts I wanted to show.



66 pour cent des exports d'Afrique subsaharienne liés à l'océan sont des biens

Exports d'Afrique subsaharienne liés à l'océan, biens et services, en \$

Services Biens



Source: UNCTAD, 2025. Bases de données sur le commerce de biens et services océaniques
Note: *Les exports de biens pour l'année 2024 sont estimés

This concerns the exports of oceanic goods and services in Sub-Saharan Africa. As you can see, goods account for 66% of exports in 2024. Now, if we look at North Africa, the picture is very different.



81 per cent des exports d'Afrique du Nord liés à l'océan sont des services

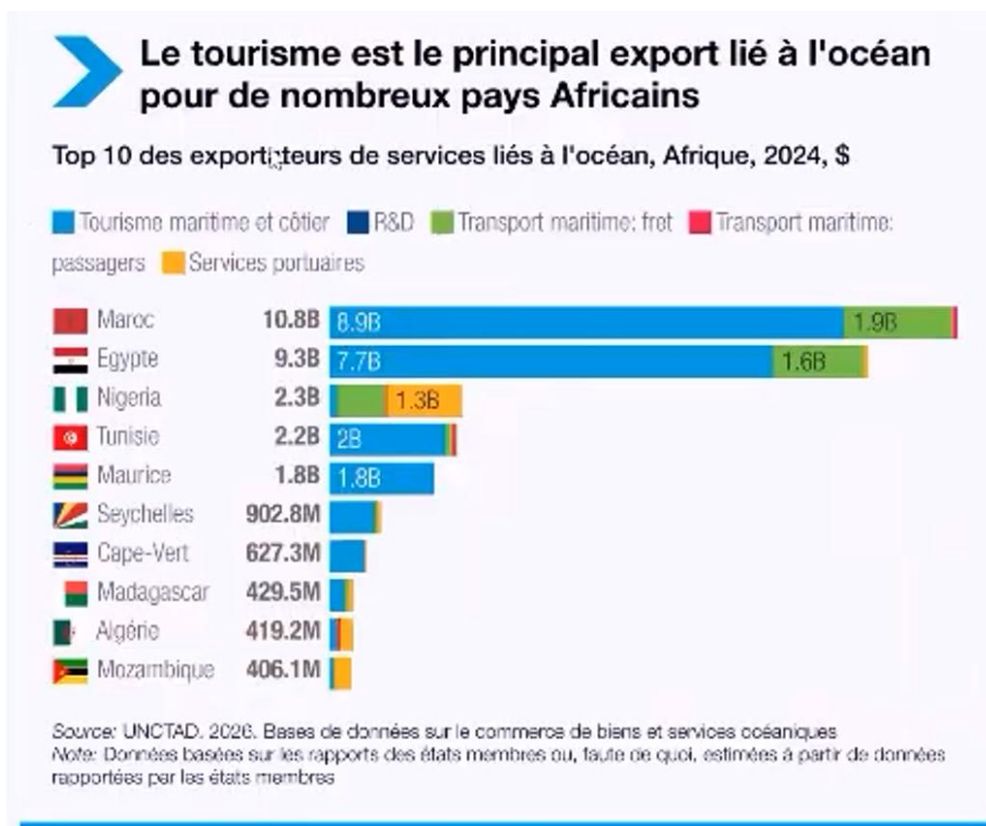
Exports d'Afrique du Nord liés à l'océan, biens et services, en \$

Services Biens



Source: UNCTAD, 2025. Bases de données sur le commerce de biens et services océaniques
Note: *Les exports de biens pour l'année 2024 sont estimés

You can see that services account for 80% of exports. There are really two different specializations, partly linked to geography, with many more European tourists in North Africa than in Sub-Saharan Africa. From our databases, we also have country-level analyses.



Here, you can see the top 10 oceanic service exports for African countries by sector: tourism, research and development, maritime transport—both freight and passenger—and port services, with a strong specialization in coastal and maritime tourism.



Les exports de biens océaniques des pays Africains sont plus diversifiés



Top 10 des exportateurs de biens liés à l'océan, Afrique, 2023, \$

Produits de haute technologie Pêcheries et aquaculture marines Minéraux marins Transformation des produits de la mer Bateaux et équipements portuaires



Source: UNCTAD, 2026. Bases de données sur le commerce de biens et services océaniques
 Note: Données basées sur les rapports des états membres ou, faute de quoi, estimées à partir de données rapportées par les états membres

And finally, the last chart: oceanic goods exports. Again, this shows the top 10 African countries. Here, you can see a much greater diversification in the products exported. There is significant variability depending on the country. In both cases, Morocco is the African leader in exports, whether of goods or services.

Finally, in terms of maritime transport, we know that globally, about 80% of cargo transport is by sea. In Africa, it's 90%. But the big challenge for the continent is that 95% of vessels fly a foreign flag, which creates costs and also a dependence on other countries.

Marthe Akissi: Thank you. I will now turn to Robin Degron to talk about the third United Nations Ocean Conference. Robin Degron, we know that the third UN Ocean Conference and the ratification of the BBNJ Treaty marked an important milestone in ocean governance. What do these developments actually bring?

Robin Degron: Indeed, I had the opportunity to go to Nice for the Ocean Summit, where I met representatives from Africa 21. Regarding the BBNJ Treaty—Biodiversity Beyond National Jurisdiction—it is a treaty for the protection of biodiversity beyond national waters. So what does it cover? It is a treaty designed to regulate the exploitation of the high seas, outside territorial waters and what are called exclusive economic zones. These are maritime zones extending up to 200 nautical miles from the coast, although sometimes extensions based on the development of the continental shelf are negotiated. The high seas are, first and foremost, international waters. Until now, they were essentially a lawless area.

The BBNJ Treaty required ratification by at least 60 states to enter into force, which was reached in June 2025. It officially came into force on January 17, 2026. I was in Nice for its launch, since Nice was where it was presented. We are now entering a new process where an annual Conference of the Parties (COP) will be held, similar to what is done for climate or biodiversity. In 2026, there will be COP 1 for the BBNJ Treaty. Nice, it should be noted, was somewhat like the 1992 Earth Summit in Rio, but this was the 2025 Ocean Summit. So it's something new and contributes to a revival of multilateralism—albeit in a global context that is generally unfavorable to multilateralism. But this is still progress.

Now, it's important to temper expectations. The BBNJ Treaty is a blank slate—it will be what we make of it. It's a framework defined by the participating states. The United States did not join the treaty, and they are still the world's largest maritime power.

Marthe Akissi: Why didn't they ratify it?

Robin Degron: Because they didn't want to. They refused to sign. Currently, the U.S. administration is not very invested in multilateralism. The U.S. is outside the treaty, unlike China or other major countries, and they have chosen not to be involved. This means they consider themselves outside the BBNJ Treaty and can act as they wish on the high seas. That is a significant limitation of the treaty.

However, the BBNJ Treaty itself is a blank slate. It will become what we make of it—how we establish marine protected areas, regulate deep-sea mining on the high seas, and share the benefits from exploiting seabed resources. This is very important for our African friends. The essence of the BBNJ Treaty is the wealth of the high seas—it is considered a kind of global common. If it is exploited prudently, the benefits of this exploitation should be shared among countries worldwide, particularly in Africa. This is beyond economic zones; we are talking about international waters. The key issue of the BBNJ Treaty is the equitable sharing of the resources of international waters, and we are just at the beginning of this process.

Marthe Akissi: The BBNJ Treaty concerns the high seas, as you said, but the area under the most pressure today is the coastal zone, particularly in the Mediterranean. Is this now the main blind spot in marine protection policies?

Robin Degron: Yes, absolutely. However, the merit of the BBNJ Treaty is that it exists, which should not be underestimated. But the main action happens near the coast, in reality. Most issues occur within territorial waters and exclusive economic zones, in terms of pollution and overfishing. Here, competence rests with the states, as these zones fall under national jurisdiction. States can collaborate, coordinate, and this is what has been done in the Mediterranean under the Barcelona Convention, where recently, in Cairo, the new

Mediterranean Sustainable Development Strategy for 2026-2035 was validated. The goal of this document is to regulate and coordinate states on nearshore protection.

The Mediterranean is a relatively small sea with no international waters. Everything is regulated by national exclusive economic zones. States must therefore agree to work within their jurisdiction and administrative control over the environment. There is much to do. For example, regarding overfishing: the primary problem in the Mediterranean and on African coasts is industrial overfishing by countries arriving with giant tuna vessels that scrape the seabed in territorial waters or exclusive economic zones—outside the BBNJ perimeter—and deplete traditional fisheries. This is a problem that only states can address.

Marthe Akissi: Thank you for these clarifications, Robin. I now turn to Nassim Oulmane. We know that Agenda 2063 places the blue economy at the heart of African development. Today, is this vision really reflected in national and regional policies? Could you give some concrete examples?

Nassim Oulmane: As I mentioned earlier, there is an African strategy for the blue economy. It is embedded in Agenda 2063, particularly through Aspirations 1 and 6, which concern inclusive growth, sustainable development, and an economy based on sustainably managed natural resources. This provides a continental orientation that is implemented according to the importance of the blue economy in each country as part of national strategies. The UN Economic Commission for Africa works, among other things, on assessing the potential of the blue economy in countries.

Some countries, like Seychelles, have a blue economy approaching 30% of the archipelago's GDP. Other countries, such as Seychelles, Mauritius, Kenya, and in West Africa, Senegal, have long recognized the importance of the blue economy for development and have dedicated strategies. Other countries are less advanced but still integrate the blue economy into their national development plans. This framework is important because it allows them to access funding.

The sub-regional level is also crucial, as marine ecosystems often extend beyond national boundaries, and their fragility requires coordination—for example, on overfishing—to maintain stocks sustainably. Some regional organizations, such as the SADC, have a blue economy strategy. ECOWAS is also developing its strategy for the Gulf of Guinea. These regional entities fully understand the importance of coordination and collective governance in these areas.

Marthe Akissi: Thank you very much. I will now ask Ludovic Arnaud, since we are talking about fisheries. 2025 was marked by the WTO Agreement on Fisheries Subsidies. What does this agreement actually change for African countries, particularly for artisanal and sustainable fisheries?

Ludovic Arnaud: The Fisheries Subsidies Agreement entered into force on September 15, 2025. It is a World Trade Organization agreement that prohibits three types of subsidies:

- Illegal, unreported, and unregulated subsidies.
- Subsidies to overfished stocks if no rebuilding measures are in place.
- Subsidies for unregulated fishing on the high seas.

The agreement also requires transparency and notification. Each country must identify the subsidies granted to different vessels and notify the WTO. Several mechanisms have been created to support this, especially for African countries. The first is a Fish Fund to help implement the agreement and support transparency measures. The second includes special and differential treatment, where some notifications are only required for developed countries. There are also transitional measures for developing countries.

For context, illegal fishing costs Africa around 10 billion dollars per year. This agreement should help reduce, or at least limit, incentives for illegal and overfishing. But as Robin said, the main problem remains overfishing. To address overfishing—especially on the high seas or in exclusive economic zones—beyond reforming subsidies, a key measure is at-sea monitoring. Better regulation of exclusive economic zones, where foreign vessels sometimes enter, is essential. Then, there are fisheries agreements, where some African countries grant access to their fisheries for small fees to foreign vessels, which affects artisanal fishers.

Implementation of the agreement will bring several benefits for Africa: first, compliance and traceability, improving commercial reputation; second, better value addition in products, with restrictive measures helping artisanal fishers access more resources and demonstrate that their fishing is sustainable.

To conclude, the WTO Fisheries Agreement is in its early stages. In Geneva, negotiations are ongoing for a second agreement to regulate additional subsidies, including structural subsidies linked to capital costs, operating costs, and revenues, sometimes supporting fishers directly. Special and differential treatment is also under discussion, meaning developing countries will have fewer obligations than developed countries. This refers mainly to notifications: developing countries may have a two-to-three-year grace period, and the least developed countries may be exempt from some notifications. This is the state of negotiations today.

Marthe Akissi: Understood. Robin Degron, regarding overfishing, marine protected areas are also central. Where do we actually stand in the Mediterranean, and what progress is still essential to achieve credible protection goals?

Robin Degron: Thank you, Marthe, for this question. It refers to another international treaty, the Convention on Biological Diversity, which is an older treaty dating back to the 1992 Earth Summit,

contemporary with the UN Framework Convention on Climate Change. Initially, it was less successful than the UNFCCC on climate change. Its implementation text, the Nagoya Protocol, arrived late, in 2010. Its most significant moment recently was in 2021 with COP 15 of the UN Convention on Biological Diversity, which produced the Kunming-Montreal Global Biodiversity Framework. This conference was supposed to take place in China but was held in Montreal due to COVID-19. An agreement was reached to protect 30% of land and seas.

This is an essential goal, but progress is slow. The Mediterranean is a small sea, only 1% of the world's surface, but it contains about 15% of global biodiversity, making it a biodiversity hotspot. Currently, only about 10% of the Mediterranean is under marine protection. So we are three times below the target for a particularly rich sea.

One last point regarding the BBNJ Treaty: it allows for the establishment of marine protected areas on the high seas, which brings challenges of implementation and monitoring. But as Marthe pointed out earlier, the key issues are nearshore. We must avoid the BBNJ Treaty being used only to protect distant high seas areas, where there is relatively little to protect, while neglecting the protection of biodiversity near the coast, which is threatened by overfishing, tourism, and desalination for freshwater production. The treaty is generous, positive, and ambitious, but its implementation could be relatively disappointing.

Marthe Akissi: Understood, thank you. Nassim Oulmane, which sectors of the blue economy do you consider the most promising for African countries in terms of growth and employment?

Nassim Oulmane: Thank you, Marthe. Before answering directly, I want to build on what Robin said about marine protected areas in the Mediterranean and across the continent. We have two leaders that have already surpassed the 30-30 goal: Seychelles and Cape Verde. Seychelles protects around 32% of its maritime territory, and Cape Verde reached 30% in 2025. Other countries are around 10–12%, including Kenya, Mozambique, and Tanzania, which are active in this field.

However, creating marine protected areas is one thing; making them operational is another, which requires funding. Currently, only about 10% of marine protected areas on the continent are effectively managed, with financial and human resources, monitoring, and enforcement to protect high-protection zones and fisheries.

Seychelles advanced quickly using innovative financing methods, notably blue bonds, which allowed them to ambitiously reach 30% marine protected areas.

Regarding your question, the fishing and aquaculture sector is fundamental, especially for employment. It accounts for over 80% of blue economy jobs in Africa. Sustainable management and stock replenishment are essential. Cooperation with non-African actors is also critical. About 80% of illegal and unregulated fishing in Africa is carried out by vessels from only 8–10 countries, mainly in Asia and Europe. Working with these countries can quickly improve stock management. The WTO agreement is helpful here. International biodiversity agreements beyond national jurisdiction will also enable high-seas cooperation, significantly reducing illegal and unregulated fishing.

Another key issue for Africa is improving value chains—cold chains, regional fisheries value chains—to ensure sustainability, stock management, and food security. The seas and oceans have huge potential to contribute to food security, which is underutilized. Local processing of seafood is critical, supported by financing mechanisms to increase added value.

Ports are also vital. Ludovic mentioned that 90% of African trade passes through ports. Developing maritime trade corridors is linked to the African Continental Free Trade Area (AfCFTA), a key framework for regional value chains in fisheries, aquaculture, and blue economy products. Modernizing ports and greening them with renewable energy is a priority.

Sustainable tourism also has huge potential, especially when local communities are involved in ecosystem protection. Marine and offshore energy is developing, particularly in Africa's nine island states, due to high fossil fuel import costs affecting daily life and trade balances. New ocean-based energy sources include offshore wind and green hydrogen. Namibia is ambitious in green hydrogen, combining coastal wind with desalination. Mauritania is also investing heavily.

Finally, marine biotechnology and ecosystem services are emerging sectors. Efforts are underway across Africa to develop biotechnologies based on marine biodiversity.

Africa's demographic dynamics demand millions of jobs annually, while facing climate and biodiversity challenges. The continent's biodiversity is declining rapidly, with major economic impacts.

Marthe Akissi: Thank you, Nassim, for all those details. I'll now open questions from participants via the chat. Julien will read them to our experts. Meanwhile, I continue with my series of questions for Ludovic. Ludovic, we've discussed promising sectors of the blue economy and the WTO agreement. Do some African countries fear additional constraints? Is this agreement more of an opportunity or a challenge for African economies?

Ludovic Arnaud: Thank you. To build on two points Nassim mentioned: First, the AfCFTA—the African Continental Free Trade Area. Our data show that intra-African oceanic goods and services trade is 39%. That seems high but is lower than other regions: Europe is 65%, the Americas 54%. So intra-African trade still has major growth potential within the free trade area.

Second, regarding your question on decarbonizing maritime transport, another agreement is expected to be ratified in 2026: the International Maritime Organization's agreement on maritime transport decarbonization, aiming for zero emissions by 2050. This imposes constraints on countries, port infrastructure, and vessels, but also creates opportunities.

UNCTAD is implementing projects on maritime transport decarbonization using AIS data (Automatic Identification System) to track vessels for safety and carbon emission estimates. Under the IMO agreement, failure to comply could incur financial sanctions. Being able to measure maritime carbon emissions will directly impact international trade, helping countries avoid penalties.

Regarding the WTO fisheries agreement, yes, there are obligations. Notification of subsidies is required. But two mechanisms ease the transition: special and differential treatment for

developing countries, and a fund, mainly financed by wealthy countries, to help developing countries implement the agreement.

Marthe Akissi: Understood. Robin Degron, we know environmental ambitions often clash with financial realities, particularly the current decline in official development assistance (ODA). How does this financial constraint hinder marine protection policies?

Robin Degron: This is a sensitive, timely question. ODA has declined notably over the past two years. Since the 2001 Monterey agreements, developed countries pledged 0.7% of GNI to ODA, reaffirmed in 2016 in Addis Ababa for the UN 2030 Agenda. Today, we're far from this goal, around 0.3% of GNI, varying by country. The trend is downward. For example, France is cutting aid for budgetary reasons. The situation is worse in the U.S., where USAID has been downsized, though some aid continues for geopolitical reasons (e.g., Egypt). The EU risks further reductions in ODA under its 2028–2034 budget, diverting funds to military or defense priorities.

What can we do? Beyond public funds, the private sector is crucial. There are private blue economy funds, tourism revenues, and fishing concessions. Some countries undersell fishing rights, often to the detriment of local fishers, generating minimal public revenue. So private revenues can complement shrinking public subsidies. Regional cooperation and shared management will be essential to do more with less.

Marthe Akissi: You mentioned the private sector, but the challenge is reconciling economic development with environmental preservation. How can economic growth occur while protecting marine ecosystems, given private interests may conflict with the common good?

Robin Degron: Absolutely. I'll focus on two areas due to time: fishing and tourism.

Fishing: African countries undervalue their fisheries in territorial waters and exclusive economic zones. They sell the resource cheaply, sometimes intentionally or due to corruption or ignorance. This money should stay in Africa and benefit local fishers. Industrial foreign fleets exploit African waters, harming artisanal fishers in Senegal, Benin, or Côte d'Ivoire, who lose both food and income. This is in national waters, not international waters—so the revenue is there and must be claimed.

Tourism: The bulk of the blue economy, in the Mediterranean and elsewhere in Africa, is tourism. The Mediterranean is a biodiversity hotspot and climate adaptation hotspot. Tourism should be taxed because it generates wealth. Visitors with high purchasing power contribute to the public value of coastal and cultural resources. Countries, particularly in North Africa, should derive revenue from their natural and cultural assets.

Marthe Akissi: Thank you. Nassim Oulmane, financing is key. How are African countries progressing in mobilizing funds for sustainable blue economy projects, particularly blue bonds? Are these tools widely used?

Nassim Oulmane: Yes. The first global blue bond was issued by an African country, Seychelles. They innovatively adapted state bond tools to marine conservation. Their blue bond generated revenue and helped protect maritime space, reaching 32% marine protected areas.

Regarding fisheries agreements, regional cooperation is crucial. Over-competition drives down prices. Standardizing and controlling agreements ensures fair prices.

Historically, economic models treated nature as free; pollution had no cost. Now, the challenge is assigning real value to nature, incentivizing private economic activity to support ecosystem regeneration. This involves taxation based on ecosystem degradation, biodiversity loss, and environmental damage. Sustainable tourism is also essential.

Financing channels differ: public, budgetary, and innovative financing. Integrating the blue economy into national budgets and development plans unlocks public funds. Blue bonds, debt swaps, and other innovative instruments allow countries like Cape Verde or Gabon to invest in renewable energy and ocean protection, with multiplier effects.

Ocean ecosystems regenerate rapidly if properly managed and financed. Mangroves are a key example: paying local communities to preserve mangroves supports ecosystem health, carbon capture, and fish stock replenishment. Carbon markets, including blue carbon, need high-integrity frameworks across Africa to standardize payments and avoid a race to the bottom.

Infrastructure investment, especially for offshore energy and green hydrogen, requires public-private partnerships. ODA is declining, so African actors must mobilize new funding sources, including philanthropy, regional development banks, and climate funds, to place a value on nature, protect biodiversity, and reconcile socioeconomic activity with ocean preservation and regeneration.

Marthe Akissi: Thank you very much, Nassim Oulmane. We are entering the final segment of the show, with time allocated for journalist questions. Julien, have you received any questions?

Julien Chambolle: I have received several questions, some overlapping, so I'll group them.

- **Géraud Hadoukonou, Le Matinal (Benin): How is the sea a strategic lever for development in a country like Benin, particularly in terms of youth employment and value creation for the Port of Cotonou?**
- **Samira Imadolou (El Watan) and Wasila Ulda Mouda (Horizon, Algeria): What role can the African Continental Free Trade Area play in reconciling sustainable development and ocean protection? How can African states coordinate on these issues?**
- **Yacine Sey, Futur Média (Senegal): What are the impacts of climate change and marine pollution on the blue economy?**
- **Garé Amadou, Le Canard Déchaîné (Niger), and Ezekiel Mousalia: What measures exist to counter illegal fishing that affects artisanal fisheries in coastal African countries?**

Marthe Akissi: Thank you. Nassim, perhaps you can speak specifically about Benin.

Nassim Oulmane: I don't have detailed knowledge of Benin or the Port of Cotonou specifically, but generally, these developments create opportunities, particularly in greening ports. Ludovic mentioned the IMO agreement for maritime transport decarbonization by 2050. This will bring new funding and a chance for strategic positioning. Cotonou could become a reference port in this trend. Regional development banks, such as the African Development Bank, are powerful levers to fund the greening of port infrastructure, attracting more activity and financing related to the agreement.

Robin Degron: In Benin, opportunities in fishing and tourism are enormous. For coastal African countries, promoting artisanal fisheries over industrial overfishing helps sustain youth employment. Regulating fishing to allow locals to benefit from their resources is key. Tourism is another example: Benin has great natural, cultural, and human resources, supporting cultural tourism, not just beaches. This adds value to the blue economy. Regarding ports, Cotonou can differentiate itself through environmentally high-quality infrastructure, aligning with IMO decarbonization targets, and reinforcing Benin's green and blue positioning.

Julien Chambolle: Is there an estimate of employment potential in the blue economy, and what training will be needed?

Nassim Oulmane: Currently, Africa's blue economy is valued at \$300–400 billion, potentially reaching \$1 trillion by 2030–2035 if sustainability is integrated. About 50 million jobs exist today in the blue economy. This could triple to meet the 14 million young people entering the workforce annually in Africa. For comparison, Europe has about 10 million jobs in the sector.

The African Continental Free Trade Area (AfCFTA) is one of the few successful pan-African initiatives, but it currently incorporates little environmental consideration. African countries are now trying to "green" the agreement by encouraging green and blue value chains, faster tariff reductions on relevant products, and measures facilitating sustainable trade. Africa's rich natural capital is a comparative advantage, but it must be both leveraged and protected.

Marthe Akissi: Thank you. Ludovic, do you want to add something?

Ludovic Arnaud: On pollution, UNCTAD studies show fisheries contribute 0.1–0.5% of global carbon emissions, maritime transport about 3%. Tourism is also critical: degraded ecosystems negatively affect tourism quality. UNCTAD projects like Blue Biotrade focus on high-value biodiversity products to integrate sustainable development costs.

High-potential growth sectors include seaweed, which has grown 400% in exports over the past 20 years and 300% in production. Seaweed addresses low-carbon protein production and marine pollution issues. A global UN initiative on seaweed was launched at the UN Ocean Forum (March 2025), co-chaired by France and Costa Rica, with leadership by Madagascar. This plan runs through 2035 and involves Madagascar, France, Indonesia, Chile, and Brazil. The initiative aims to standardize regulations, allowing developing countries like Madagascar and Tanzania to expand exports of seaweed-derived products, including biodegradable plastics and nutritional supplements.

Marthe Akissi: Thank you, Ludovic. Julien, any more questions?

Julien Chambolle: Yes.

- **Christophe Nyemeck, CN Magnews (Cameroon): How can economic development, such as the Douala Autonomous Port extension, be balanced with mangrove ecosystem management?**
- **Samira Imadoulou, El Watan (Algeria): Are there observable results from blue economy support programs in Algeria, and can these results be generalized to other African countries?**
- **Mohamed Tafraouti, Maroc Environnement: What role can media play in raising public awareness about the importance of Africa's seas and oceans?**

Robin Degron: On media, transparency is key. Europe's progress on environmental protection benefited greatly from the Aarhus Convention (1998), guaranteeing free access to environmental information. Africa could benefit from a similar continental or regional convention on environmental transparency, which empowers journalists and strengthens environmental protection.

Nassim Oulmane: Regarding Douala, development meets multiple, sometimes opposing, challenges: demographic growth and job creation require infrastructure expansion, but this can harm mangroves. Valuing nature through ecosystem service pricing ensures development is more respectful, generating funding for mangrove projects.

In Algeria, aquaculture has grown about 15% in the last 2–3 years with stronger regulatory frameworks, supporting sustainable investment. Strong regulations enable public and private investment, contrasting with lawless zones where exploitation favors external actors. Regional cooperation and enforceable regulatory frameworks are crucial.

Marthe Akissi: Thank you very much. Nassim, thank you for all the details. Julien, is there any question that has not yet been answered?

Julien Chambolle: Perhaps just the question on the role of the media?

Ludovic Arnaud: We are fortunate to still have functioning multilateralism for the oceans. This is not the case in many other sectors. For example, in Nice, more than 100,000 visitors attended the Green Zone open to the public, showcasing ocean issues for local populations. The media covered this extensively for three to four weeks.

Now, negotiations continue on topics such as the plastic pollution treaty, maritime pollution agreements, the BBNJ treaty COP, the IMO decarbonization agreement, and WTO fisheries agreements. These offer numerous opportunities for media coverage. At the continental level, the Blue Africa Summit will take place at the end of 2026 in Rabat, aiming to establish a roadmap for ocean economy development in the coming years.

Marthe Akissi: Thank you, Ludovic. Julien, any final questions?

Julien Chambolle: Yes, some participants raised their hands. For example, let's allow Ismaël Angoh to ask his question before concluding.

Ismaël Angoh: Hello everyone. I'm a journalist at Radio de la Paix in Côte d'Ivoire. My questions:

How are seas and oceans a strategic economic issue for coastal countries like Côte d'Ivoire?

Do international decisions on oceans have concrete consequences for African coastal countries?

What are the risks for a country like Côte d'Ivoire if ocean protection is not integrated into economic development?

Robin Degron: Complementing what Ludovic said, this year we have COP 31 of the UN Climate Convention in Turkey (November 2026). Climate adaptation is central, which ties directly to your question.

The risks of inaction are severe. Without intervention:

Coastal erosion will destroy assets—hotels, homes, infrastructure.

Overfishing will deplete stocks, harming local economies in Côte d'Ivoire, Benin, Senegal, and elsewhere.

Inaction does not just mean standing still; it means regression. Coastal Africa faces a growing risk of rural exodus as populations lose livelihoods in agriculture and fishing, concentrating in coastal cities increasingly threatened by rising seas. Addressing climate change is urgent for Africa in the 21st century. COP 31 and future conferences will focus on this vital issue for African lives and economies.

Nassim Oulmane: Adding to Robin's points, the stakes are enormous. Ocean acidification, plastic pollution, and phytoplankton decline could disrupt food chains, leading to famine and threatening humanity. Marine ecosystems are highly vulnerable yet underappreciated. Strategic involvement is essential, both in exclusive economic zones and in adjacent high seas.

For example, Cameroon is developing research centers for marine biodiversity-related professions with regional impact, aiming to become a hub for biotechnology and youth employment in ocean-related sectors.

Marthe Akissi: I believe we have completed the questions. I will now invite our guests to make concluding remarks.

Robin Degron: The most important challenges are ahead. Africa's demographic growth increases exposure to climate risks. This is just the beginning.

Marthe Akissi: Thank you. Ludovic Arnaud?

Ludovic Arnaud: Thank you for the invitation. UNCTAD has held several international-level training sessions on agreements such as BBNJ, the plastic pollution treaty, and ocean governance. These sessions often focus on global issues rather than regional needs, highlighting the value of forums like this one. I would be happy to participate in future sessions.

Marthe Akissi: Thank you, Ludovic. Nassim Oulmane?

Nassim Oulmane: Thank you. Regular webinars and discussions on these critical issues are essential, especially for a continent as exposed and vulnerable as Africa. Solutions must be tailored nationally and locally, with regional cooperation and complementarity. As this session has shown, African countries can accelerate their response and scale up their impact by working together.

Marthe Akissi: It has been a pleasure. This concludes the second episode of Africa 21 Environmental Forum. Thank you to our experts:

- Ludovic Arnaud, Deputy Director of Economic Affairs, UNCTAD, expert on oceans economy data and analyses.
- Robin Degron, former Director of the Blue Plan, UNEP Mediterranean, Professor at Paris 1 Panthéon-Sorbonne, member of the Laboratory on Social Dynamics and Spatial Recomposition, magistrate at the Court of Accounts, author on Mediterranean issues.
- Nassim Oulmane, Senior Economist, Head of the Green and Blue Economy Section, UNECA.

Thank you to our participants for your questions and engagement. We could not fully cover oceans and seas in just two hours; future sessions will continue this vital discussion.

Marthe Akissi: Goodbye, and thank you all.