



'Fulfilling Food System Needs Without Compromising Ecological Balance'

Food Security and Biodiversity in Lagos State
with Adeniran Akanni

Jane Clause: Thanks so much for joining us to talk about food systems in Lagos, Adeniran! Can we start off with the biodiversity that exists in Lagos, Nigeria? Can you paint us a picture of that?

Adeniran Akanni: Thank you very much. Before we talk about biodiversity in Lagos, it's important to understand the landscape. Lagos has the smallest landmass, and about 40% of that is aquatic. Also, we have the largest population in any state in the country, a population of 20 million people.

So, you can appreciate having a small landmass, and more of an aquatic ecosystem, and then having to face the challenge of urbanization because of rapid population growth? The geography of Lagos is such that it is bounded by the Atlantic Ocean on one side and then Lagos Lagoon on the other. So, over the years, based on a growth in population and commercial development pressure, most of the landscape, you know, has given way to infrastructure.

And how has that impacted biodiversity in the area?

So, Lagos is mostly wetlands, marshland, forest, mangroves. We still have some endangered species in Lagos, which we are trying to conserve, and we conduct monitoring of these species. Notably, we have sea turtles, we have sea manatees, and we also have pangolins. And that means we must preserve the ecosystem to be able to keep this biodiversity.

In reading one of your publications, I was struck by the discussion of the cultural and socio-economic significance of these biodiverse areas. Can you speak to that a little bit?

Yeah, you know, some of these landscapes are very significant in terms of culture, not only in Lagos State but also in Nigeria generally. Historical sites and sacred groves are recognized in the country, and some of these sites are tourist centres of international importance – for example, the Yoruba Osun-Oshogbo Festival in Osun State. Apart from that, even with Lagos being an urban landscape, we still have territories dotted with many important cultural sites and sacred groves.

And then, on the socio-economic side, some of the wetlands provide a means of livelihood for some Indigenous communities. Like fishing communities, and palm wine industries that people make a livelihood from. Yeah. All of this underscores the importance of conserving this landscape.

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That's amazing, thank you. Can you speak to some of the work being done to conserve these areas? Perhaps related to your extensive involvement in the Lagos State Ministry of Environment & Water Resources?

The government is trying to restore those ecological balances. This includes identifying some pristine wetlands and their ecological functions, their level of biodiversity, and then trying to preserve them and, you know, trying to make them wetlands of international importance.

My work in the Ministry exposed me to the challenges of urbanization and associated biodiversity loss. We received funding from Lagos Research and Development Council to do an assessment on the wetlands in Lagos with other stakeholders, people in academia, people in NGOs. We were able to do a rapid assessment and make recommendations and communicate our findings on the state of these wetlands, and in particular, why we need to preserve them through wetlands management plans.

Can you speak more to the challenges you mentioned?

Yeah, there's been a lot of challenges to preserving our wetland ecosystem. An important one is a lack of legal structures in place. So, when there's no boundary, it's easier to degrade the wetlands, cut down the forests. The pressure of urbanization for settlements, housing, and infrastructure are impacting the ecological balances of the states, and without laws, this can go unchecked. So then, when you have something like a flash flood, the whole city is inundated, there is loss of property, sometimes loss of lives.

Another challenge involves policy coordination by the government. You know, when you have too many departments or agencies in government doing multiple things, and no central coordination. This leads to fragmentation.

When it comes to developing wetlands management plans, there are challenges there, too. Some of this land belongs to the community. Developing a plan involves advocacy efforts and education on the importance of these wetland ecosystems

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and the need to protect them. Here we must rely on the power of stakeholder consultation, site visits, and assessments of biodiversity. All these are geared towards the development of wetlands management plans.

It sounds like the community work can be a long and involved process. Can you tell us a bit more about those relationships?

Yeah, you know, some stakeholders readily imbibe the idea of conserving the wetland. You know, some are well-informed, but there are some challenges, too – especially with complicated relationships between community and government. With persistent advocacy, bringing the community to meetings, developing workshops in the community, educating key stakeholders who are critical to overall community perception, people can become champions who go on to spread this important news. I believe eventually we win their hearts.

Yeah, that sounds really rewarding. It sounds like important work. I wonder if we can shift gears and talk about your current PhD research. Does it have the same focus as your previous work?

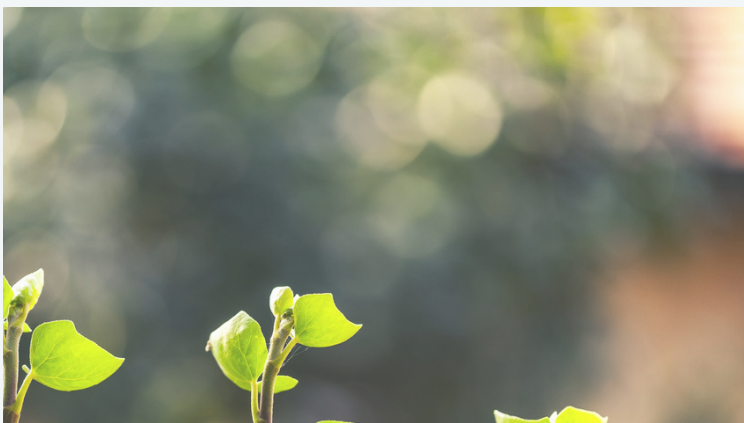
Yeah, I have shifted focus. This time around, my work in the Balsillie School of International Affairs focuses on food security from the perspective of urban areas like Lagos.

Can you share a little bit about the motivation behind this research?

Yeah, urban areas in Lagos were already largely dependent on food brought in from the hinterland and far north of the country. With Covid-19, we faced spikes in transportation costs and rising food prices. During the Covid-19 lockdown, I mean, it's a situation that just grew worse in Lagos. Movement was even more restricted, and people also lost their livelihoods. Hunger and starvation were glaring problems. And this informed my decision to study this situation and how we can go about food system transformation in Lagos in the face of the Covid-19 pandemic. So, my work will be taking me to Lagos in 2025 to conduct an assessment of the Lagos State Ministry of Agriculture's 2020-2025 Strategic Plan, and to conduct participatory workshops, and scenario planning, to discuss some strategies or drivers in terms of availability, access, agency, food sufficiency, stability, and the desirable pathway of the city's food system.

Thanks for sharing that. I'm curious – do you see your food security work and your biodiversity work as connected, or as somewhat separate issues?

Yeah, I think for the food security work now, I'll be working more with the Lagos State Ministry of Agriculture, but then it also provides an opportunity for sustainability paradigms to be integrated into our food systems. This will ensure we sustainably get enough food and allow us to fulfil food system needs without compromising the ecological balance of the state.



“IT NEEDS TO BE PART OF THE STRATEGY, TO LOOK INWARD AND CONSIDER HOW WE CAN INCORPORATE SUSTAINABILITY INTO EVERYTHING WE DO IN OUR AGRICULTURE, IN OUR LANDSCAPES, AND OUR INFRASTRUCTURE DEVELOPMENT.”

Absolutely. It's been great hearing about all your work in biodiversity and food security. Before we wrap up, is there anything you think Lagos can teach other urban centres about sustainability and resilience?

I've seen similarities in the challenges Lagos is facing when I studied in Japan, with wetlands in Chiba Prefecture. Similar challenges of urbanization, and loss of habitat, in Manila, Philippines. Las Piñas – Parañaque Critical Habitat and Ecotourism Area (LPPCHEA) faced many threats. The transboundary wetlands between the Netherlands and Germany, Dinkel Valley River, is another example. So, the same challenge of urbanization as in Lagos. And we've realized that the danger of climate change is real. And it will continue being a danger if we carry on business as usual. Lagos may be a sinking city in the next 50 years. And so, the government realizes that they have no choice but to factor sustainability and ecosystem preservation into planning, and into anything we do, so that we can limit the risks. I mean, we are aware of changing weather patterns all around the world; the projections by the IPCC, the UNFCCC for coastal cities.

It needs to be part of the strategy, to look inward and consider how we can incorporate sustainability into everything we do in our agriculture, in our landscapes, and our infrastructure development.



Adeniran Akanni is a PhD student in Global Governance at Balsillie School of International Affairs, Wilfrid Laurier University, specializing in Global Environmental Governance. Adeniran is a seasoned environmentalist and has worked in the last twenty years with the Lagos State Ministry of Environment and Water Resources in Nigeria where he coordinated sustainable development planning as the head of the Environmental Planning Unit within the Ministry.