Citizen Science Report

Nile Equatorial Lakes

Summer 2021

10 years to heal the Nile Equatorial Lakes

We are committed to preventing, halting and reversing the degradation of River Nile Equatorial Lakes and Ecosystems

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SUMMARY

Over the next ten years 2020 - 2030, we are committed to preventing, halting and reversing the degradation of Nile Equatorial Lakes.

The Nile Equatorial Lakes Citizen Science Program aims to raise awareness in preventing, halting and reversing the degradation of ecosystems and wetlands, through training and the education of local communities to gather vital evidence about the state of the ecosystem soil, water, trees and wildlife, as well as promoting sustainable livelihoods, conservation and waste management activities.

In support and in partnership with the UN Decade on Ecosystem Restoration (2020 - 2030), we launch the Citizen Science Program on World Environment Day, June 5th, 2021.

To register for the program please visit: http//www. netafrica.be

Nile Equatorial Lakes Citizen Science 10 Year Program

Content

Fadeke Ayoola
CEO, NET Africa

Introduction

The UN Decade on Ecosystem Restoration is a rallying call for the protection and revival of ecosystems all around the world, for the benefit of people and nature. It aims to halt the degradation of ecosystems and restore them to achieve global goals. Only with healthy ecosystems can we enhance people's livelihoods, counteract climate change, and stop the collapse of biodiversity.

The UN Decade runs from 2021 through 2030, which is also the deadline for the Sustainable Development Goals and the timeline scientists have identified as the last chance to prevent catastrophic climate change.

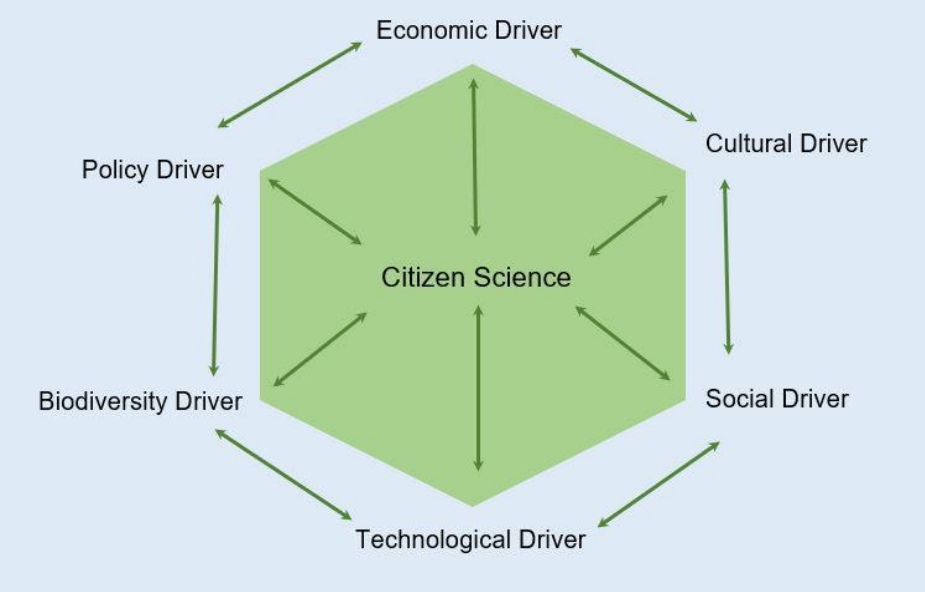
The United Nations General Assembly has proclaimed the UN Decade following a proposal for action by over 70 countries from all latitudes.

Led by the United Nations Environment Programme and the Food and Agriculture Organization of the United Nations, The UN Decade is building a strong, broad-based global movement to ramp up restoration and put the world on track for a sustainable future. That will include building political momentum for restoration as well as thousands of initiatives on the ground.

In response to this call to prevent, halt and reverse degradation of ecosystems, the Nile Equatorial Lakes Citizen Science Program is launched.

Citizen Science Drivers

Biodiversity Driver - To promote across all key stakeholders' conservation and sustainable use of biodiversity with the objective of reducing the loss of habitats and forests across the Nile Equatorial Lakes. To promote sustainable and legal approaches to managing and harvesting fish and invertebrate stocks.



Cultural Driver - Traditional ecological knowledge (TEK) can contribute to science, economic growth and community wellbeing. The library within the citizen science app invites local communities to contribute their TEK.

Economic Driver - Wetlands provide goods and services that play a vital role in determining economic output and human wellbeing. However, the unsustainable use of natural resources within wetlands is a problem. This citizen science app includes a library of resources that promote alternative approaches to achieving income that does not degrade natural resources.

Technological Driver - The citizen science app aims to narrow the digital divide between groups who do and do not have access to modern technology. The citizen science app includes a library of resources that reduce technological inequality.

Social Driver - To promote citizen science research groups, working groups, community groups to support life-long learning and prompt behavioural change. To raise awareness of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Policy Driver - Citizen science can contribute towards various stages of the policy-making cycle. For example, through systematic observations supported by scientific evidence, problems, issues and concerns can be communicated to high-level decision-makers. Citizen science can facilitate the inclusion of diverse societal perspectives in decision-making, since the inclusion of a broad representation of society is included in the data gathering. Through citizen science the implementation of policies become more meaningful, since such policies have legitimization and endorsement by local citizens.

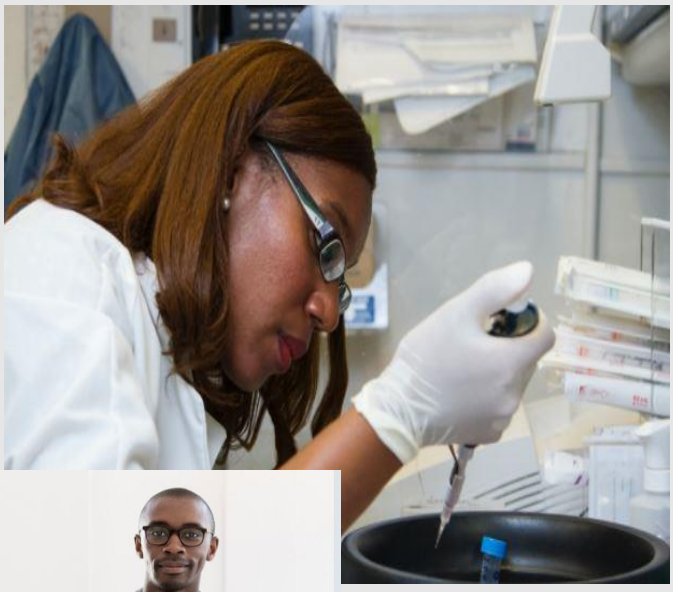
The Nile Equatorial Lakes

Interview

NELSAP-CU
NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

Q1. Introducing NELSAP
Thank you for participating in this interview, could you introduce yourself and tell us what role you play in the management of the Nile Equatorial Lakes?

My name is Maro Andy Tola Ag. Regional Coordinator and substantive Program Officer for Water Resources Management & Development. As the Regional Coordinator, I am the head of the Nile Basin Initiative/ Nile Equatorial Lakes Subsidiary Action Program Coordination Unit (NBI/NELSAP-CU) for the implementation of the Subsidiary Action Programs. In my role, I contribute towards the realization of the objective of NELSAP which is to work towards the eradication of poverty, promotion of economic growth and reversal of environmental degradation. The Regional Coordinator plays a leading role in facilitating, supporting, and strengthening the identification, preparation, and implementation supervision processes for NELSAP projects for the benefit of riparian countries. The Regional Coordinator reports and is accountable to the Nile Equatorial Lakes Council of Ministers (NELCOM) through the Nile Equatorial Lakes Technical Advisory Committee (NELTAC) in a format and schedule as required. The Regional Coordinator supervises the Program Officer for Water Resources Management & Development, Program Officer for Regional Power and Trade, Senior Economist, Finance and Administration Manager, and the Procurement Specialist and other senior officers.
As the Program Officer in charge of Water Resources Management and Development, I facilitate, support and strengthen the identification, preparation, implementation and supervision processes for NELSAP irrigation, fisheries, energy, water and natural resources management and development projects for the benefit of all riparian countries. The Program Officer assists the NELSAP Regional Coordinator in areas of planning, management and monitoring of the NELSAP sub-program of Water Resources Management and Development. The Program Officer report and is accountable to the NELSAP Regional Coordinator in a format and schedule as required. He/she supervises the Project Managers, the Water Resources Engineer, the Environmental Management Specialist, the Water Resources Officer (Database/GIS and modeller) and other Regional Staff underwater resources portfolio.



Q2. Young People
Many of the ecosystems within the Equatorial lakes face numerous challenges including: the overexploitation of resources, unsustainable resource management practices, weak institutional and enforcement capacity as well as rapid population growth. Considering this, almost 60% of Africa's population is under the age of 25, making Africa the world's youngest continent. To what extent is NELSAP's management plans incorporating young people? Does NELSAP visualize young people as an opportunity for creativity and innovation in areas such as renewable energy? Are there special programs designed for them? For example, environmental apprenticeship schemes where young people are paid to work alongside farmers and land managers to protect and enhance the environment and wildlife to become better farmers of tomorrow? How are you engaging with young people given NELSAPs vision? Do you think citizen science could play a role in engaging young people (schools, colleges, and local communities) in environmental issues within NELSAP?

We are aware that the youth represent most of the population in the River Nile Basin. We, therefore, consider this as an advantage because the youth are the leaders of tomorrow in all aspects of water resources management and development. In recognition, NELSAP has an internship program targeting young people who have completed their university education. The objectives of the internship program include the following:(a) To promote the work of the NELSAP within the youth

community and create advocates for the Nile after they have completed their Internships; (b) To promote a wider and better public understanding of the challenges confronting Nile Basin member states, including insight for Interns into how the NELSAP works with its members to overcome these challenges; (c) To attract and develop a future talent pool within the region; (d) To provide Interns with the opportunity to participate in areas of the NELSAP's activities to gain work experience; (e) To create an opportunity for professional development for students potential from Nile Basin member countries and to empower young people to gain experience and prepare themselves for the labour market. In addition, the data collection in the hydro-meteorological stations depends on the youth, who are contracted to read and transmit the river gauging and weather stations daily readings from the basin to the data centres. Many of the hydro-meteorological stations are in schools and placed under the Geography Club. As well as reading and learning how the station operates, the school children are helping the countries to transmit the data to the data centres. Citizen science plays a significant role in engaging young people. I am aware that citizen science is taking advantage of the IT backbone within the Lake Region and the fact that the young generation is knowledgeable in IT, the citizen science program will procure smartphones and distribute them to the communities where they can be used to upload information of flora and fauna to a database centre, which could inform future development and management of the basin resources.

Question 3: Gender

In your management reports, you acknowledge the diverse and complex competing interests of all stakeholders, with this is in mind, over 70 per cent of the *female population in Africa* live in rural areas, where they carry out 60-80 per cent of the agricultural work. How are you engaging with these diverse groups? Do you think citizen science could play a role in targeting women in agriculture for restoring ecosystems and improving livelihoods within NELSAP?

NELSAP-CU has developed a gender mainstreaming policy that ensures gender representation in all its activities. The use of the gender mainstreaming policy is monitored during all our activities as well as at the point of project conceptualization, preparation and even during the implementation of our activities. It is important to us that the gender mainstreaming policy is adhered to.
I am sure the citizen science program could supplement NELSAP-CU on the ground to ensure gender mainstreaming is effective and is working effectively.

Question 4: Corporate Engagement

The East African Crude Oil Pipeline (EACOP) is under construction, planning to traverse the Sango Bay - Minziro wetland landscape, along the western boundary of Minziro National Park and crossing the SAMUKA Ramsar wetland system - do you support the EACOP?

It must be noted that the East African Crude Oil Pipeline (EACOP) is a major infrastructure that will support economic growth in the region and improve livelihoods as well as reduce poverty levels. This project, therefore, complements the mission of NELSAP, which is "to contribute to the eradication of poverty, economic growth and reversal of environmental degradation in the Nile Equatorial Lakes Region". In my opinion, I support the project if a detailed Environmental and Social Impact Assessment (ESIA) has been completed, as well as an Environmental Management Plan (EMP) developed. Each of these reports should highlight the pipelines positive and negative impacts and outline mitigation measures to minimise or eradicate such impacts. In the absence of such an elaborate EMP, I will be sceptical that such a project could reverse environmental degradation, improve livelihoods, or support economic growth in the region.

Question 5: Conservation
The inadequacies in policy implementation, participation of the local communities and institutional collaboration are leading to ineffective conservation and management of wetland and ecosystem resources. Do you think the citizen science program could play a role in addressing some of these issues – taking into consideration that it is over ten years (2020-2030)?

Citizen Science plays a critical role in engaging local and national communities towards conservation, for example, the introduction of smart applications that provide platforms for feedback and utilising them to provide information from ecosystems and nature. Citizen Science has the potential to fill this gap, where policymakers due to resources constraint, could not effectively engage with these communities.

Question 6: Sustainable livelihoods
What is NELSAP's approach in promoting business and enterprise models for smallholders and value chain actors?

Generally, NELSAP's role is to provide a platform to the member countries to jointly identify projects, prepare them, resource and mobilise them to the point of implementation. The projects that NELSAP are supporting within member state countries involve large-scale water use projects such as irrigation development and hydropower generation. Given this, enterprise models for smallholders and value chain actors are just part of these larger-scale programs/projects. These activities complement the overall goals of NELSAP.

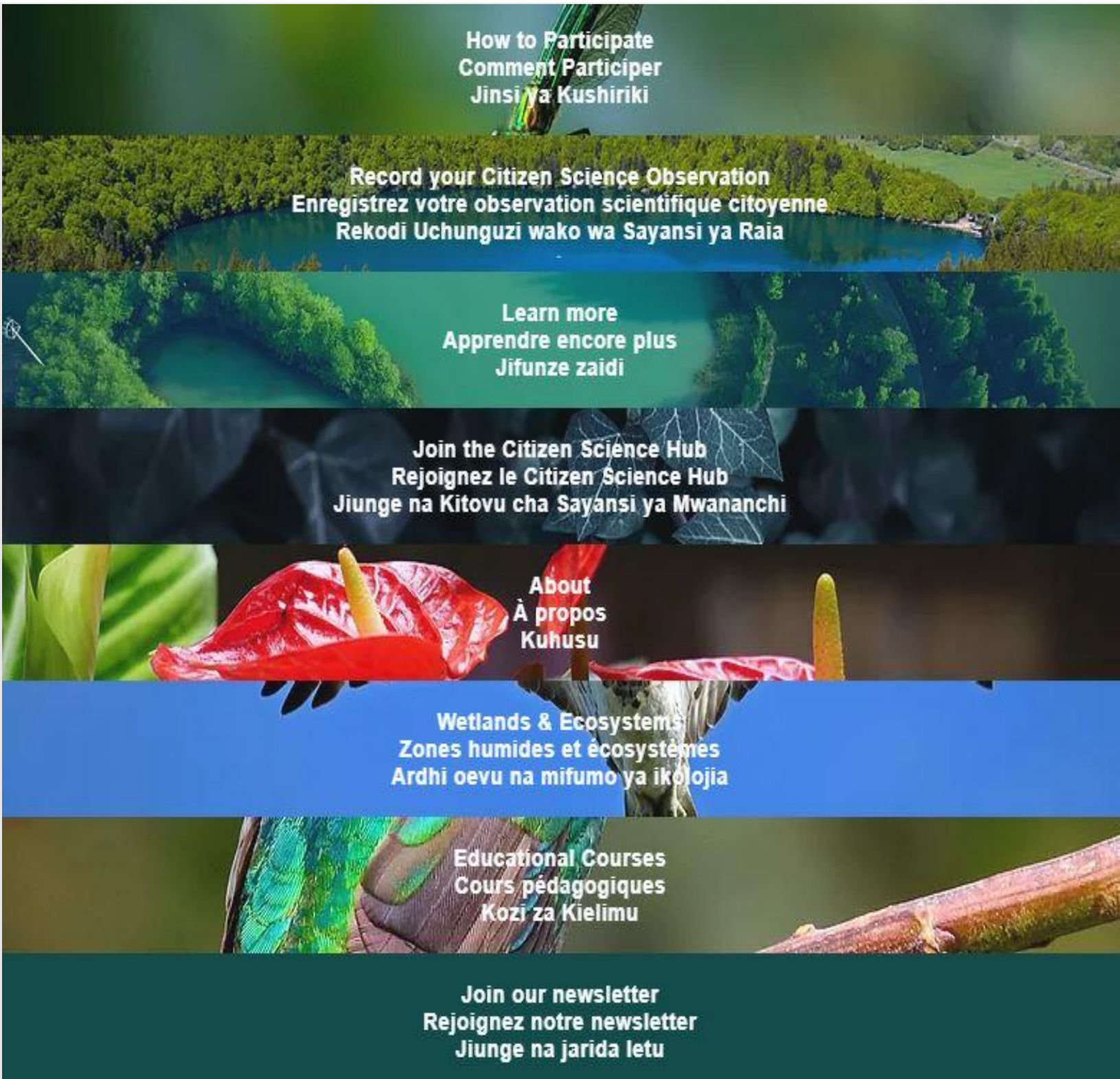
Question 7: Technology
The citizen science program will offer technology apps/tools in climate-smart agriculture for farmers within the Nile Equatorial Lakes. What is NELSAP's vision on the use of technology to tackle some of the environmental challenges within the lakes?

The Nile Basin Initiative Secretariat (Nile-SEC), together with NELSAP CU and the Eastern Nile Technical Regional Office (ENTRO), provide capacity-building workshops on climate change modelling for the benefit of all member-states. The results and outputs of these workshops are disseminated and shared with community members such as farmers. Other stakeholder groups, such as the National Meteorological institution and Citizen Science groups together with the private sectors also develop climate-smart applications and tools to help farmers adapt to climate change.

Question 8: Communication, education and public participation and awareness
The citizen science program aims to strengthen community groups to champion conservation activities as well as support education and awareness campaigns at the transboundary level. Would NELSAP be supportive of these activities?

Unquestionably, NELSAP would like to be a partner in this innovative idea. NELSAP will provide the platform for the transboundary communities to learn from one another through exchange programs and north to south visits.

Protecting Ecosystems is everyone's responsibility
Join the Nile Equatorial Lakes Citizen Science
http//www.netafrica.be/cit-science



Wetlands and the SDGs

NELSAP-CU
NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

Global Water Partnership