

# 3rd ESP Africa Conference

8-10 June 2022 | Musanze, Rwanda

Ecosystem services for the future: Delivering value  
for Nature, Livelihoods and Economic Investment

HYBRID EVENT

ESP  
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## BOOK OF ABSTRACTS

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### I. SESSION DESCRIPTION

ID: G4

Early-career researchers engaging with NGOs and the private sector to enhance the delivery of ecosystem services in Africa / Jeunes chercheurs s'engageant avec des ONGs et le secteur privé en faveur des services écosystémiques en Afrique

#### Hosts:

	Title	Name	Organisation	E-mail
Hosts:		Abdoulaye Djibril Diallo	West Africa Biodiversity and Ecosystem Services (WABES)	djibrildiallo87@gmail.com
		Ange Diedhiou	West Africa Biodiversity and Ecosystem Services (WABES)	bouramanding@gmail.com
		Yves Olatoundji	Organisation pour le Développement Durable et la Biodiversité	yolatoundji@gmail.com
		Nada Saïdi	NESCO Centre for Water Law, Science & Policy	nada.saidi@protonmail.com

#### Abstract:

French version below / Version française ci-dessous

Ecosystem services research has been providing critical knowledge on the relationships between nature and human societies, with the intention to inform policy and practice. Recent years have seen ecosystem services science making increasing efforts towards transdisciplinarity, whereby research is co-constructed and co-conducted both by scientists and other stakeholders, in order to deliver real-life impacts in terms of protection and enhancement of ecosystem services. In particular, these approaches allow the consideration of different types of knowledge in addition to the one generated by scientists, including local, on-the-ground knowledge held by practitioners in NGOs and the private sector.

The hosts of this session are early-career researchers and practitioners from the Young Ecosystem Services Specialists (YESS) community of ESP. We have identified a need to foster the engagement of African early-career researchers with their peers in NGOs and private organisations, who are involved in the protection and restoration of African ecosystems. As such, the session intends to showcase good practices of cross-sectoral engagements; identify and discuss challenges faced by early-career researchers and practitioners; and shape solutions to these challenges collaboratively. We welcome any of the following contributions:

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- Presentations by early-career researchers of how they engaged with NGOs and the private sector, including challenges and success factors;
- Presentations by early-career researchers who have not had the opportunity to engage with NGOs and the private sector: What is your research and what have been challenges for engagement? How could you engage in the future? (we are looking for in-depth and researched reflections);
- Presentation by practitioners from NGOs and the private sector: have you engaged with early-career researchers? How do you use scientific information? What could science bring to your practical work and how could it enrich your own knowledge?

We accept contributions in English and French. We strongly encourage submissions from French-speaking researchers and practitioners. If you are delivering your presentation in French, your slides should still be written in English. The audience will be able to ask questions in French and English. There will be no simultaneous translation, but questions will be translated by the hosts.

The session will start with presentations, followed by a Q&A and a group discussion on a set of topics raised in the presentations. Depending on the size of the audience, the discussion could happen in smaller groups.

## Goals and objectives of the session:

The session aims to foster knowledge exchange and collaboration among early-career African researchers and practitioners in the field of ecosystem services. More specifically, the session intends to raise the awareness among the early-career African community of the opportunities to engage with one another within the YESS network.

## Planned output / Deliverables:

We expect the session to provide a framework for an African network of researchers and practitioners within YESS. The discussion part of the session will allow participants to identify the key aspects of their network (themes, means of communication,...). We expect the sessions to create a collaboration environment for joint projects among early-career researchers and NGOs/private sectors. Potential projects could be outlined during the session, between participants sharing the same interests and/or thematics. We also expect the session to provide the initial structure and content for guidelines of collaboration between researchers and practitioners, in order to strengthen cross-sectoral collaboration.

## Related to ESP Working Group/National Network:

Other

## Version française - Jeunes chercheurs s'engageant avec des ONGs et le secteur privé en faveur des services écosystémiques en Afrique

## Résumé

La recherche sur les services écosystémiques a fourni des connaissances essentielles sur les relations entre la nature et les sociétés humaines, dans le but d'éclairer les politiques et les pratiques. Ces dernières années, la science des services écosystémiques a fait des efforts croissants vers la transdisciplinarité, dans laquelle la recherche est co-construite et co-menée à

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la fois par des scientifiques et d'autres parties prenantes, afin d'avoir des impacts réels en termes de protection et d'amélioration des services écosystémiques. En particulier, ces approches permettent de considérer différents types de connaissances en plus de celles générées par les scientifiques, y compris les connaissances locales de terrain détenues par les praticiens des ONGs et du secteur privé. Les hôtes de cette session sont des chercheurs et des praticiens en début de carrière de la communauté des jeunes spécialistes des services écosystémiques (YESS) d'ESP. Nous avons identifié un besoin de favoriser l'engagement des chercheurs africains en début de carrière avec leurs pairs dans les ONG et les organisations privées, qui sont impliqués dans la protection et la restauration des écosystèmes africains. À ce titre, la session entend présenter les bonnes pratiques d'engagements intersectoriels ; identifier et discuter des défis auxquels sont confrontés les chercheurs et les praticiens en début de carrière ; et façonnner des solutions à ces défis en collaboration. Nous accueillons les contributions suivantes:

- Présentations par des chercheurs en début de carrière de la façon dont ils se sont engagés avec les ONGs et le secteur privé, y compris les défis et les facteurs de réussite;
- Présentations par des chercheurs en début de carrière qui n'ont pas eu l'occasion de s'engager avec des ONGs et le secteur privé : quelle est votre recherche et quels ont été les défis pour l'engagement ? Comment pourriez-vous vous engager dans le futur ? (nous recherchons des réflexions approfondies et recherchées) ;
- Présentation par des praticiens d'ONGs et du secteur privé : vous êtes-vous engage avec des chercheurs en début de carrière ? Comment utilisez-vous les informations scientifiques ? Que pourrait apporter la science à votre travail pratique et comment pourrait-elle enrichir vos propres connaissances ?

Nous acceptons les contributions en anglais et en français. Nous encourageons fortement les soumissions de chercheurs et de praticiens francophones. Si vous présentez en français, vos diapositives devront être rédigées en anglais. Le public pourra poser des questions en français et en anglais. Il n'y aura pas de traduction simultanée, mais les questions seront traduites par les hôtes. La session commencera par des présentations, suivies d'une séance de questions-réponses et d'une discussion de groupe sur un ensemble de sujets soulevés dans les présentations. Selon la taille de l'auditoire, la discussion pourrait se dérouler en petits groupes.

## Objectifs

La session vise à favoriser l'échange de connaissances et la collaboration entre les chercheurs et praticiens africains en début de carrière dans le domaine des services écosystémiques. Plus précisément, la session vise à sensibiliser la communauté africaine en début de carrière aux opportunités de s'engager les uns avec les autres au sein du réseau YESS.

## Résultats prévus

Nous nous attendons à ce que la session fournit un cadre pour la création d'un réseau africain de chercheurs et de praticiens au sein de YESS. La partie discussion de la session permettra aux participants d'identifier les aspects clés de ce réseau (thèmes, moyens de communication,...). Nous nous attendons à ce que les sessions créent un environnement de collaboration pour des projets communs entre les chercheurs en début de carrière et les ONG/secteurs privés. Des projets potentiels pourront être ébauchés au cours de la session, entre participants partageant

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les mêmes intérêts et/ou thématiques. Nous attendons également de la session qu'elle fournit la structure et le contenu initiaux des lignes directrices de la collaboration entre les chercheurs et les praticiens, afin de renforcer la collaboration intersectorielle.

## II. SESSION PROGRAM

**Date of session:** Wednesday, 8 June 2022

**Time of session:** 11:30–12:00

### Timetable speakers

Time	First name	Surname	Organization	Title of presentation
11:30–11:45	Yves Adélani	Olatoundji	World Commission on Protected Areas WCPA/IUCN	Perception des populations sur le rôle des aires protégées dans leur résilience face au changement climatique : cas du Parc National de la Marahoué (Centre-Ouest, Côte d'Ivoire).
11:45–12:00	Abdoulaye Djibril	Diallo	CABES (Capacities on Biodiversity and Ecosystem Services)	Evaluation of Land use/cover change impacts resulting from mining on ecosystem services in Boké prefecture, Republic of Guinea

## III. ABSTRACTS

*Abstracts are ordered based on the session program. The first author is the presenting author unless indicated otherwise.*

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## 1. Type of submission: Abstract

G. General sessions: G4 – Early-career researchers engaging with NGOs and the private sector to enhance the delivery of ecosystem services in Africa

### Perception des populations sur le rôle des aires protégées dans leur résilience face au changement climatique : cas du Parc National de la Marahoué (Centre-Ouest, Côte d'Ivoire).

*Presenting author:* Yves Adélani Olatoundji

*Other author(s):* Djakalia Ouattara, Yao Konan, Akpo François Junior Ohouko

*Affiliation:* World Commission on Protected Areas WCPA/IUCN

*Contact:* yolatoundji@gmail.com

Protected areas represent a key tool to mitigate climate change, as they provide several ecosystem services to people, especially the surrounding communities. However, their multiple roles in adaptation or resilience to climate change are often overlooked. In addition, the ecosystem services they provide to populations are mostly unknown, which affects their appropriation by neighbouring communities and, therefore, their protection. Our study consists of evaluating the knowledge of local communities on the role played by the Ivorian Marahoué National Park (MNP) and the ecosystem services it can provide. More specifically, the study aims to question the surrounding communities on the importance of the MNP at the local and national level and the ecosystem services that it can provide as a regional biosphere. The results show that local populations have different perceptions of the role of the MNP, assets, and ecosystem services. However, knowledge is not evenly distributed among neighbouring communities. Teachers and those with higher levels of education better understand the roles of the MNP and have different knowledge about ecosystem services. Although a large part of the population wishes to be involved in the MNP management process, the majority believe that the management of the protected area is poor, and therefore its restoration is unnecessary. To better integrate the surrounding communities into the park's management processes, this research highlights the need to develop awareness-raising projects on the benefits and ecosystem services offered by the MNP at the local level.

*Keywords:* protected areas, Climate Change, Ecosystem services, Marahoué, Ivory Coast

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## 2. Type of submission: Abstract

G. General sessions: G4 – Early-career researchers engaging with NGOs and the private sector to enhance the delivery of ecosystem services in Africa

### Evaluation of Land use/cover change impacts resulting from mining on ecosystem services in Boké prefecture, Republic of Guinea

*Presenting author:* Abdoulaye Djibril Diallo

*Other author(s):* Prof. Alpha Issaga Pallé Diallo

*Affiliation:* CABES (Capacities on Biodiversity and Ecosystem Services)

*Contact:* djibrildiallo87@gmail.com

Land use and land cover change (LULC), especially conversion and degradation of forest land, is the key factor causing terrestrial carbon stocks declines and affecting their dynamics in ecosystems. Detecting changes in LULC is extremely important for obtaining continuous and accurate information for any type of development planning. Geographical information systems and remote sensing technologies have shown strong capabilities in detecting LULC. This study, therefore, aimed to analyse the dynamics of LULC and to assess the variation of terrestrial carbon stocks in response to land use/cover changes. Remote sensing was used to map and quantify LULC changes and the Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST) model to quantify and evaluate the changes in carbon storage under land use conditions in 1975 and 2020. Maps were classified based on seven LULC categories, including wasteland, forest, grassland, agricultural land, shrubland, water bodies, and barren land. The results indicate that, Within the period between 1975 and 2020, baren land and Built up/Settlement have been identified as the main factors behind the alteration of the land cover showing that the built-up area and the barren land increased from 22,608 ha (2%) and 51,702 ha (5%) to 72,041ha (7%) and 199,922ha (18%), while the forest and agricultural lands decreased from 18,2314ha (18%) and 311,792ha (31%), respectively to 116,434 ha (8%) and 200,227ha (15%) respectively. These changes are key factors of terrestrial carbon stocks declines in the area. Based on these findings, we recommend to science and research institutions to provide relevant policy options for better biodiversity conservation and sustainable development; to the Ministries of Environment and Mining, to integrate mine site

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restoration into the national environmental policy and to develop a standardised guide for ecosystem restoration in mining areas.

*Keywords:* Land use/cover changes, Ecosystem services, Mining, Carbon stocks, Prefecture of Boké