




EIGHTH REGIONAL MEETING OF GBIF-AFRICA: SETTING THE SCENE

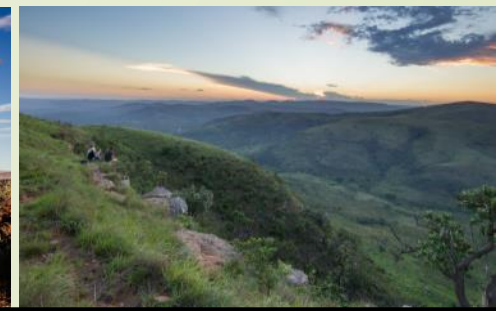
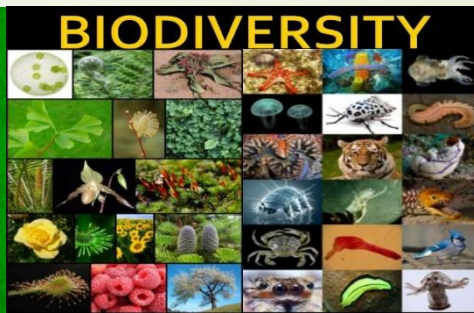
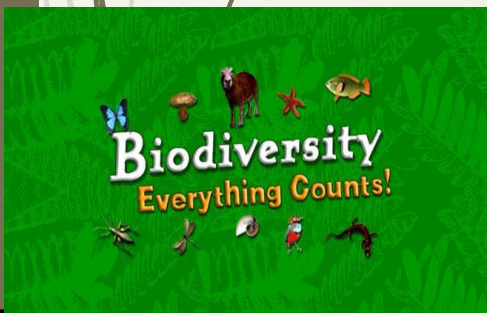
Dr. GANGLO C. Jean
Professor of Forest sciences
Node Manager of GBIF Benin
Regional Representative of GBIF-Africa
Virtual meeting 10-12 June 2020

OUTLINE

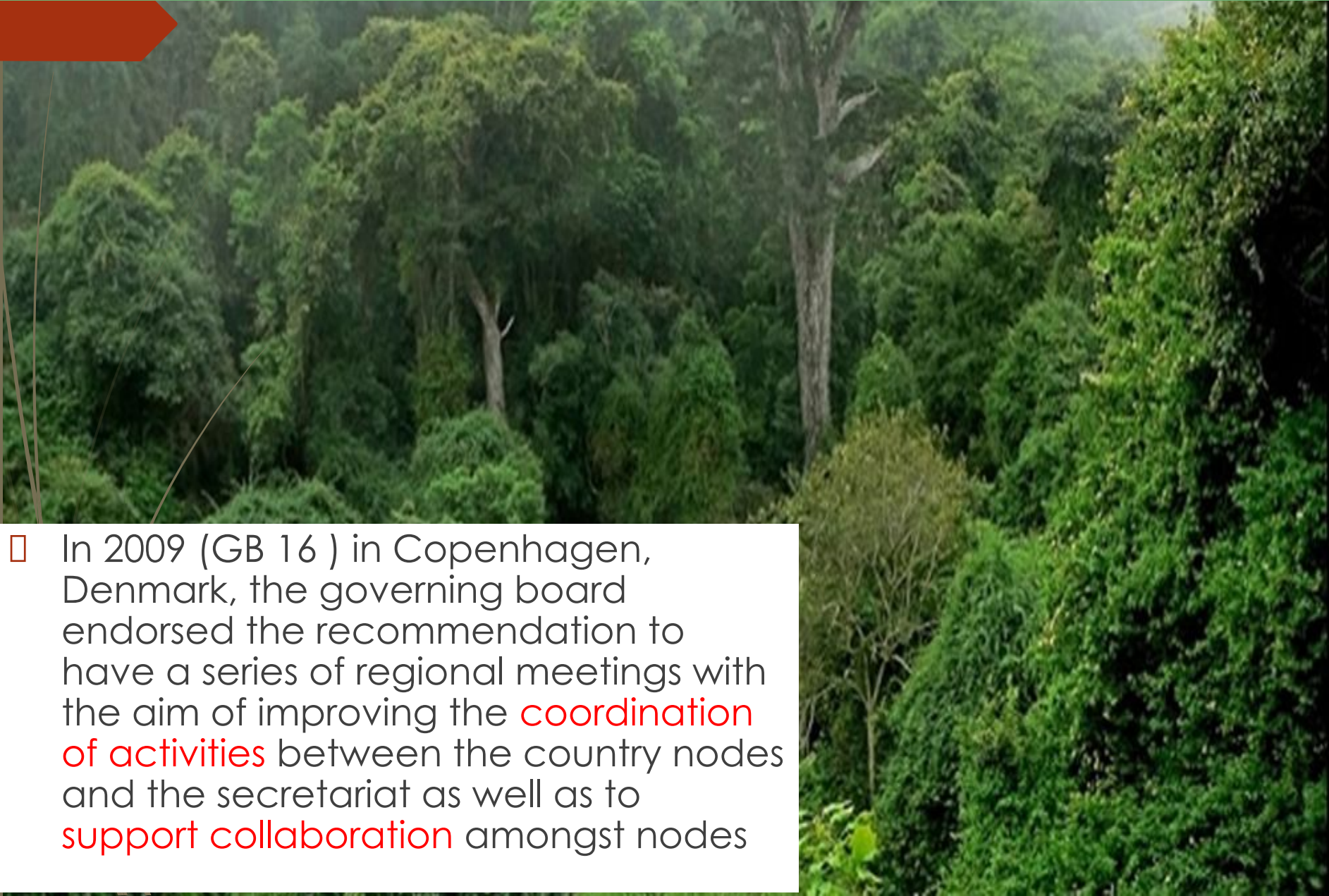
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- A photograph of a meeting room. Several people are seated at long tables, facing towards the front of the room. A man in a yellow patterned shirt is standing at the front, gesturing towards a large projection screen on the right wall. The screen displays a document with text and a logo. The room has large windows with yellow curtains, ceiling fans, and a patterned carpet. A blue semi-transparent box is overlaid on the bottom right of the image, containing a list of items.
- Welcome address
 - Aims and structure of the meeting
 - Concluding remarks

Welcome address

- Dear GBIF Executive Secretary, Dr. Joe Miller
- Dear staff members of GBIF Secretariat in your distinct and respectful functions
- Dear colleagues, node managers of GBIF-Africa
- Dear observers from different horizons
 - I am honored to welcome you at the eighth regional meeting of GBIF Africa, a virtual meeting as a consequence of the confinement due to COVID 19
 - I wish you robust health and the protection of God so that the health situation can be totally solved and enables again physical meetings.
 - I will be happy to meet again physically each of you



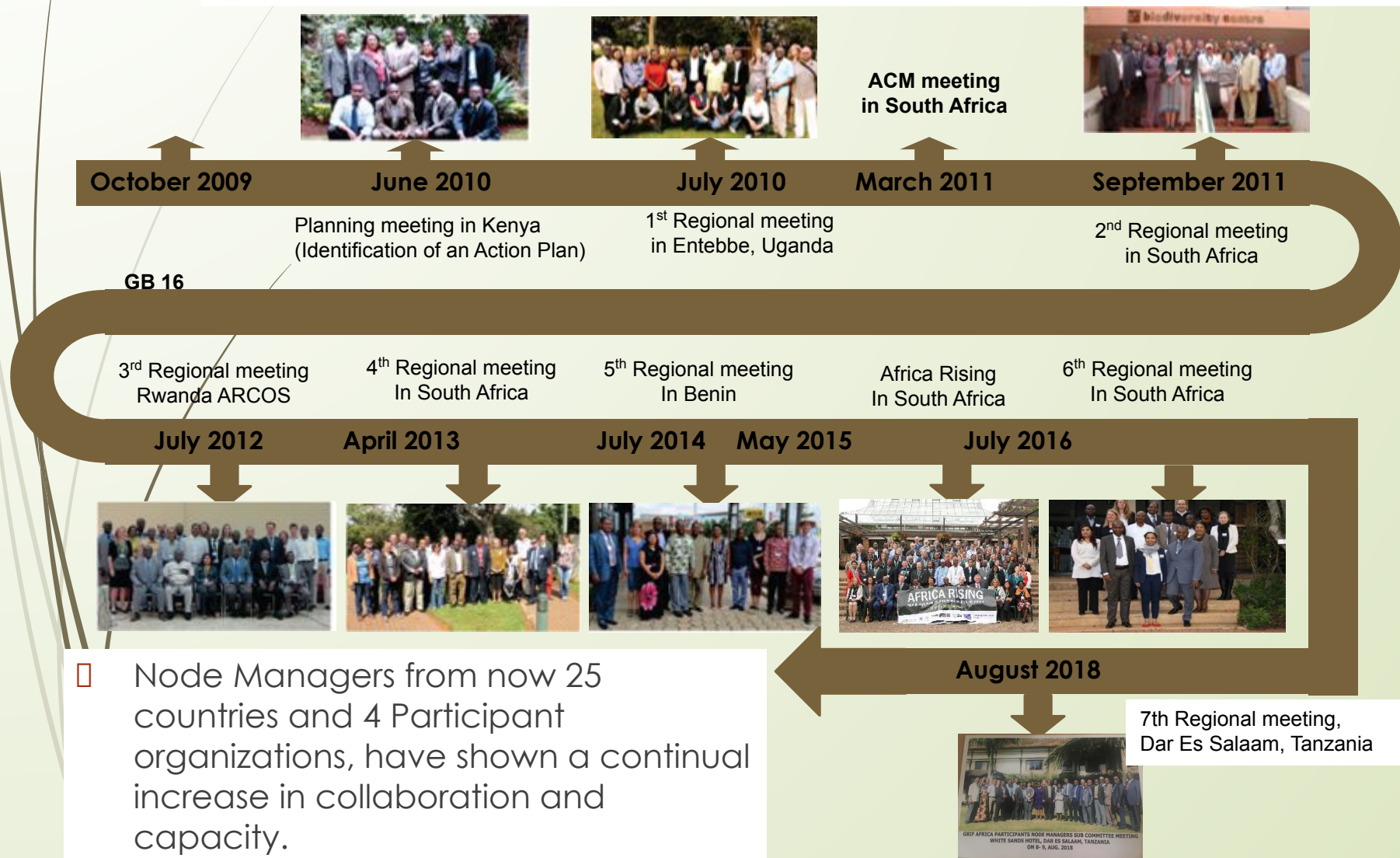
Aims and structure of the meeting



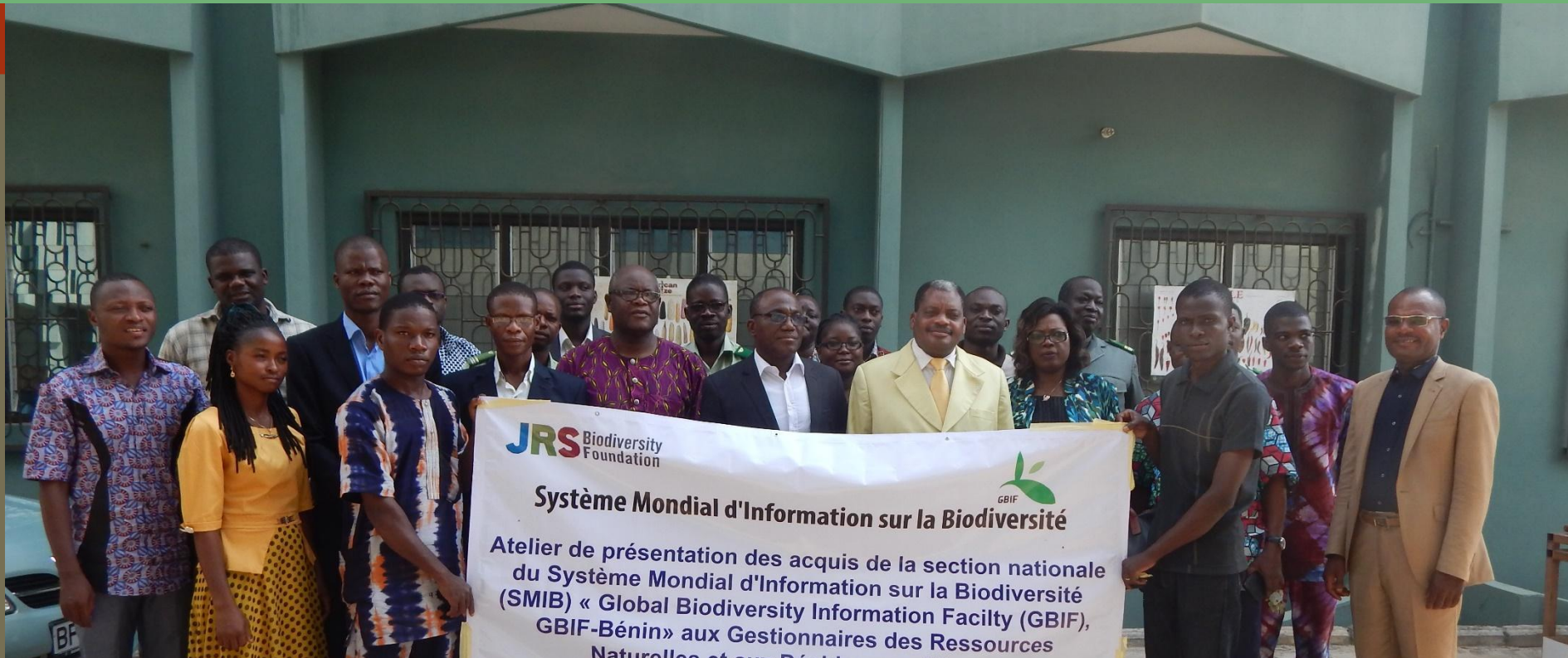
- In 2009 (GB 16) in Copenhagen, Denmark, the governing board endorsed the recommendation to have a series of regional meetings with the aim of improving the **coordination of activities** between the country nodes and the secretariat as well as to **support collaboration** amongst nodes

Aims and structure of the meeting

- A series of meetings and regional engagement opportunities were therefore enabled



Aims and structure of the meeting

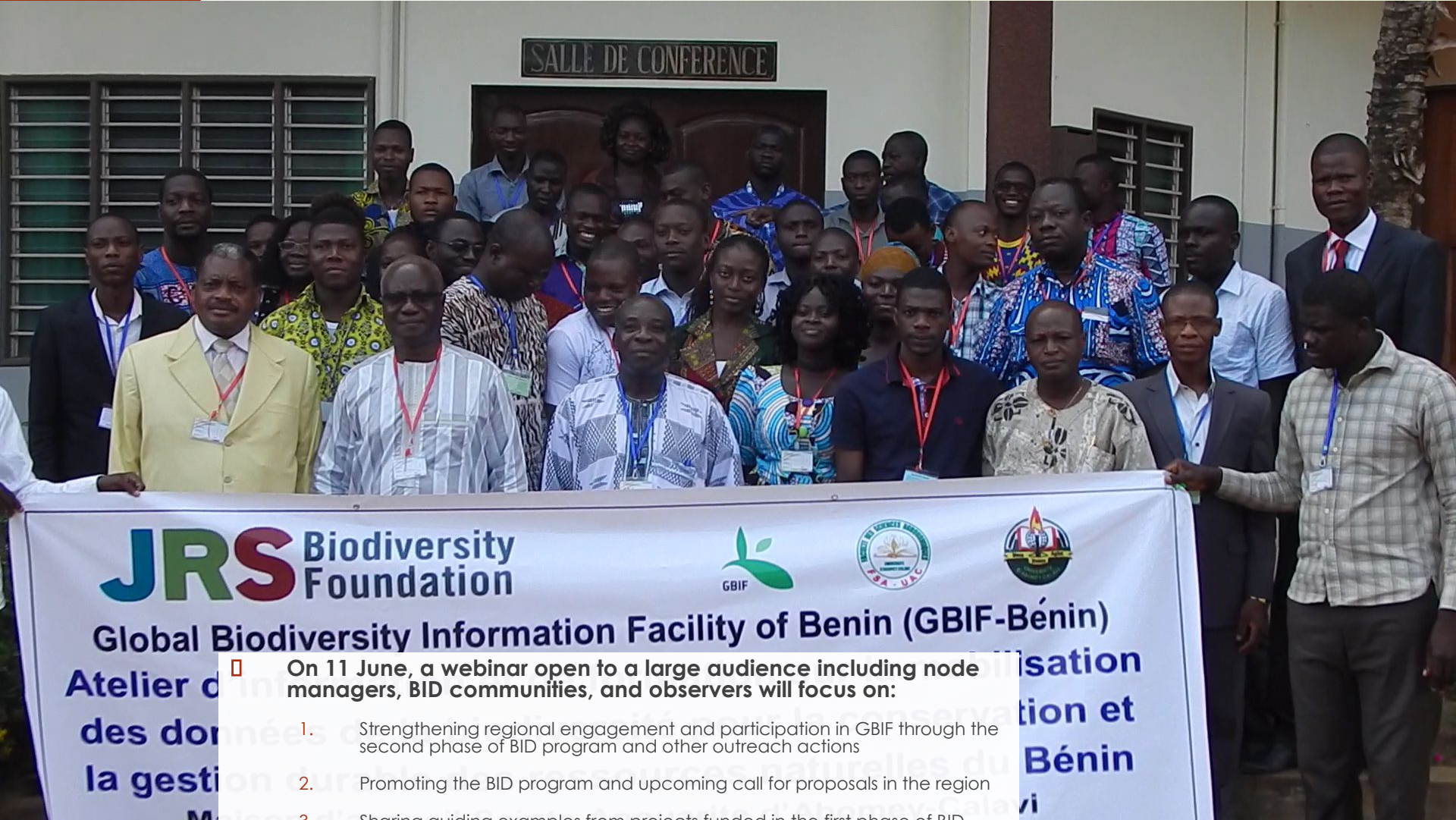


□ As for this event:

□ **On 10 and 12 June, the Regional meeting will take place and will help:**

1. Update on the progress towards the achievements of the activities of GBIF-Africa Action plan 2018-2020 as well as discussion of progress against the Global Nodes strategy 2020-2021
2. Update on the establishment of the African Coordinating Mechanism (ACM) and the recommendations of the 20 year review of GBIF
3. Discuss on the needs, priorities, and actions of the nodes and Find the way forwards
4. Develop / update the regional engagement strategy, and,
5. Find consensual solutions to strengthen communication in the region

Aims and structure of the meeting



On 11 June, a webinar open to a large audience including node managers, BID communities, and observers will focus on:

1. Strengthening regional engagement and participation in GBIF through the second phase of BID program and other outreach actions
2. Promoting the BID program and upcoming call for proposals in the region
3. Sharing guiding examples from projects funded in the first phase of BID program in Africa
4. Encourage new countries from Africa to engage with GBIF

Concluding remarks

- 
- Africa, despite its rich biodiversity is the continent which contribution to data on GBIF site is among the fewest (2.23% of GBIF data)
 - Insufficient capacity building and infrastructure as well as weak engagement are among the priority bottlenecks delaying the continent
 - This meeting is an appropriate opportunity for GBIF-Africa community, to reflect on the priority challenges in order to find the way towards more engagement, more visibility, and then more success
 - **I wish fruitful exchanges of ideas and memorable results to our meeting**



THANK YOU



GBIF KENYA

Lawrence Monda



GBIF

Global Biodiversity
Information Facility

Team and Roles

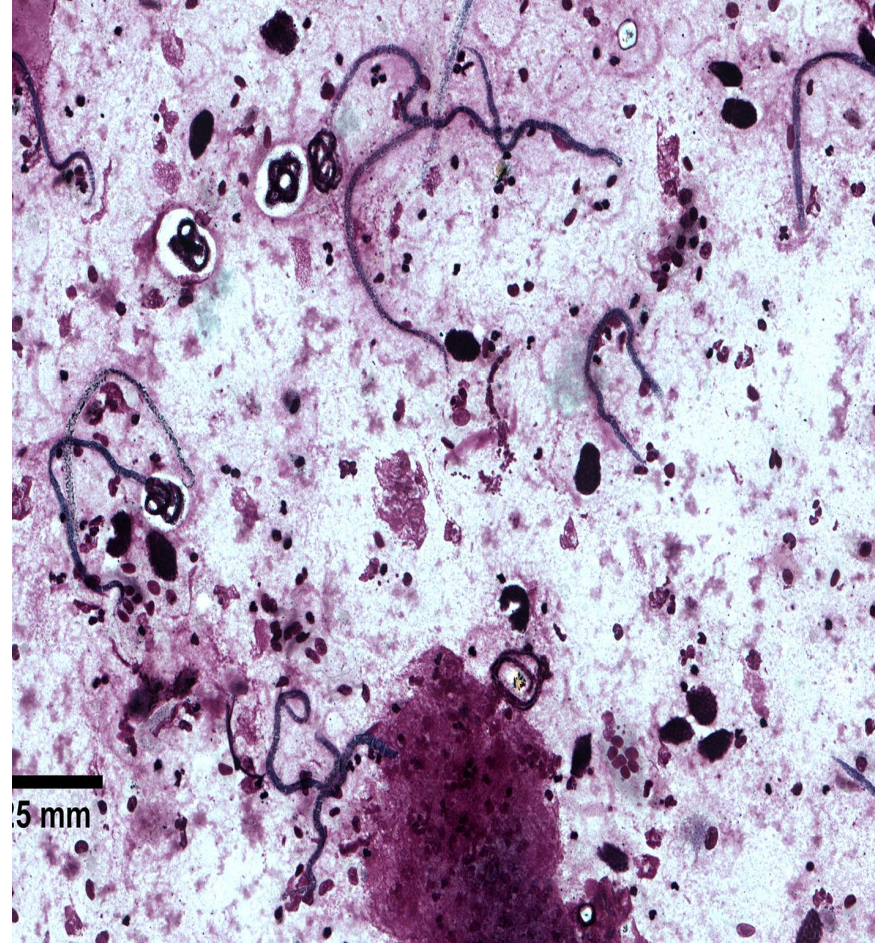
Dr Geoffrey Mwachala *Head of Delegation*

Lawrence Monda *Node Manager & Technical Liaison*

Gilbert Busolo *Technical Support*

Esther Mwangi *Data Mobilization and support*

Brenda Nyaboke *Data Mobilization and support*



Data mobilization plans and progress

Continue working with funded projects within the institution

Publicize and Publish datasets from various institutional projects in the country and the region

Capacity building on data quality

Occurrence data 38

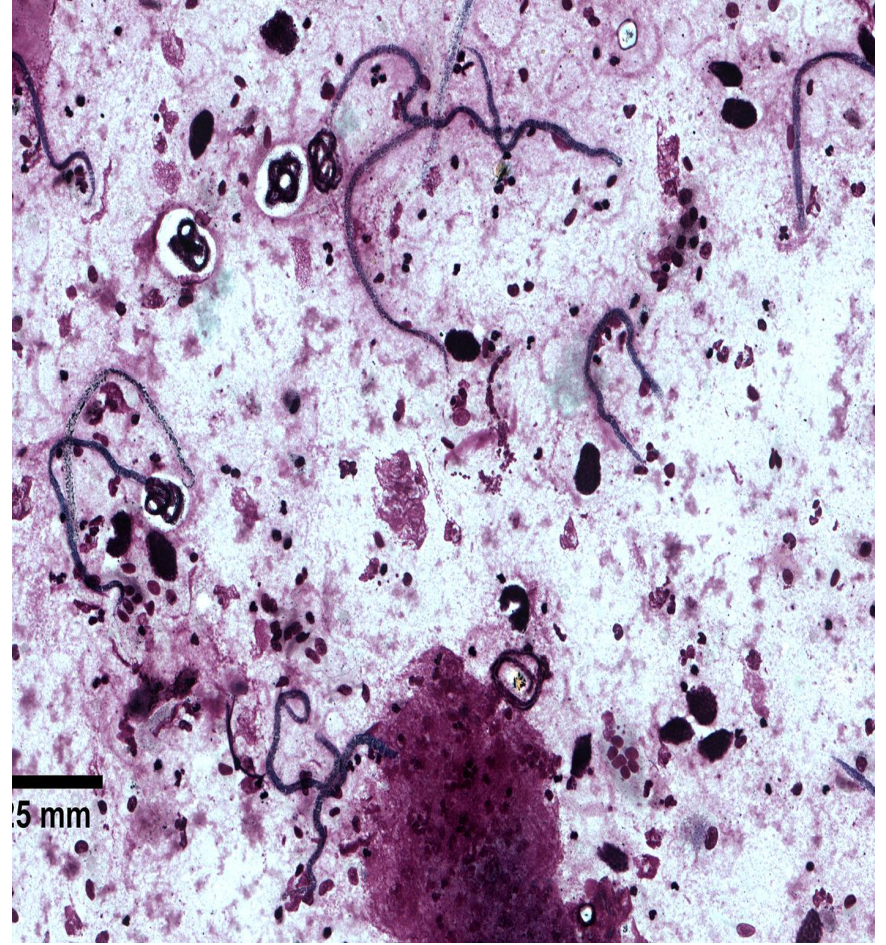
Checklist 6

Sampling Event 6



Node services

Helping others to publish their data (helpdesk support)	X
Providing training in digitization, publication, data quality, data use	X
Support for/participation in projects	-
Data cleaning at the node level	X
Node portal/website	-



Needs, priorities and actions

NEEDS

- Improve Geographical coverage of data Published
- Increased Cooperation between Afrcan Data holders/owners
- Enhanced Policy support for digitization /Data Sharing

PRIORITIES

- Enhance human capacity in digitization
- Enhance capacity of the data holding institutions
- Continuous sensitization of top policy makers

ACTIONS

- Seek Partnership in capacity building
- Appoint more team members & Enhance capacity in data management
- Lobby for GBIF Support to reach /sensitize policy makers

Data use



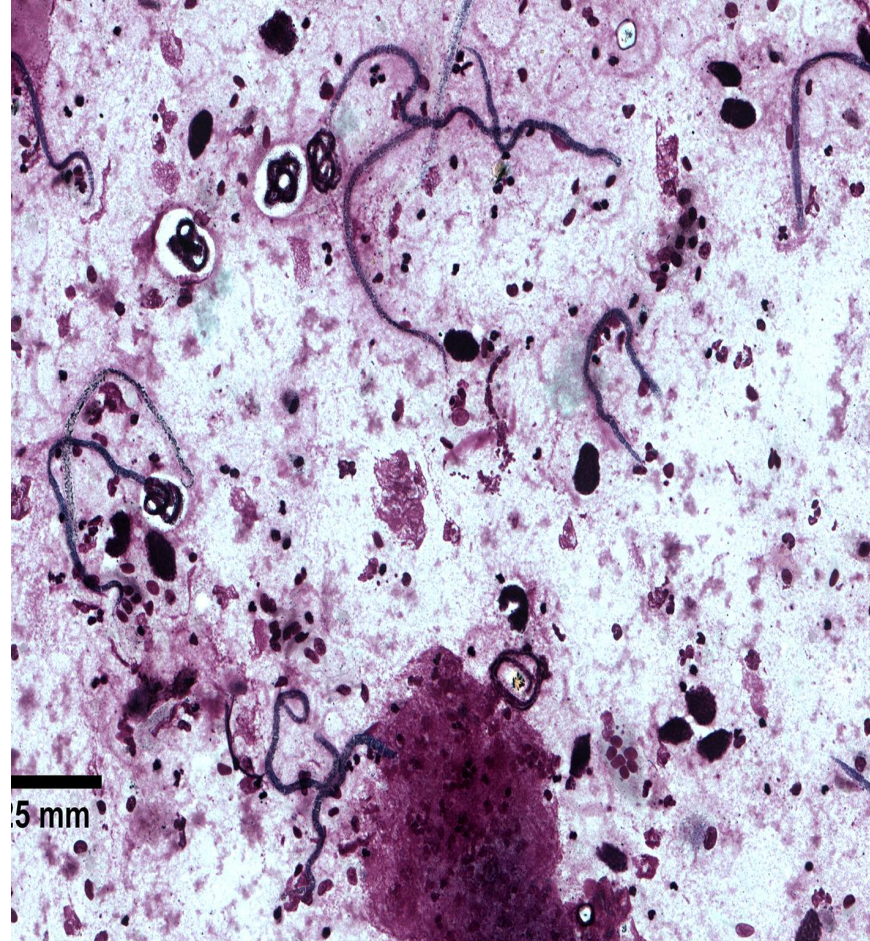
Support for national and regional initiatives

Support development of a Kenya biodiversity Atlas

Support the Clearing House Mechanism at NEMA

Support for the regional IGAD Biodiversity Management Program

Support regional institutions by providing IPT resource for publishing



Regional Vision

A platform that provides services to the policy makers and scientific community in the area of biodiversity research and conservation





Angolan National Node Africa Regional Node Meeting

By Esperança da Costa



GBIF

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Team and Roles

Domingos Neto - Supervising

Esperança da Costa - Node Manager

Domingos António Francisco - Member of data-base team

Manuela Pedro - Member of data-base team

Tomásia Saleth - Member of data-base team



Data mobilization plans and progress

Editores de dados

- Museu Nacional de História Natural
- Instituto Superior de Ciências da Educação da Huíla
- SASSCAL Angola
- Instituto de Investigação Agronómica – IIA
- Instituto Nacional de Biodiversidade e Áreas de Conservação, INBAC
- Instituto de Investigação Científica Tropical,
- Centro de Botânica, UAN

Angola data in GBIF

Tipos de colecção	Num. de registos
Herbário	85 360
Fungos	601
Mamíferos	4641
Aves	58 821
Herpetológica	7269
Peixes	9227
Artrópodes	11 480
Invertebrados	5425
Microorganismos	220
Não classificados	1046
Total	148 573

*Diversidade
Biológica*



Node services



Providing training in digitalizing, publication, data quality, and data use improving



Helping others to publish the data (helpdesk support)



Data cleaning at the node level



Mentoring /Support for participation project



Needs, priorities and actions

NEEDS

- 1-capacity building in node strategic plan writing
- 2-capacity building in data use
- 3-capacity building in data cleaning for quality data achievement

PRIORITIES

- 1-Elaboration of Node Strategic
-
- 2- Purchase of IT equipment
-
- 3- Set a Communications strategy

ACTIONS

- 1-Organising a National workshop with
- 2-To have a Mentoring Project with African Partners an Portuguese Node
- 3 -Liasion with others Institutions.

Data use

The Faculty of Science is using our data, during the Master Degree Programme on Environment Governance



Red List



Support for national and regional initiatives

Concept note made with Portugal Node collaboration and a final project proposal in a “Consolidation the Angolan participation in GBIF through community engagement at node strengthening”

Also with Benin Node Coordination we participate in a project proposal



Regional Vision

GBIF Africa is in a good way
mobilising and using GBIF data it is a
big challenge for biodiversity
conservation strategy

Thank you



Calandula falls, Malange



Ghana Biodiversity Information Facility (GhaBIF)

Alex Asase, University of Ghana

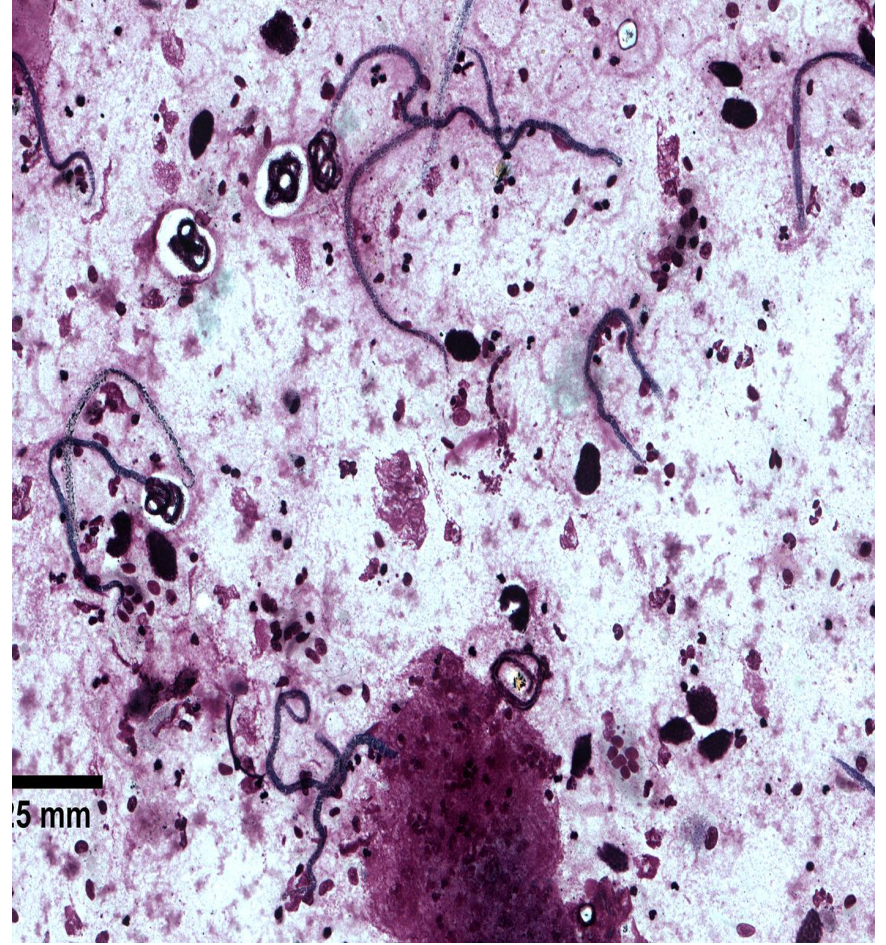


GBIF

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Team and Roles

- **Head of Delegation:** Prof. Alfred A. Oteng-Yeboah
- **Node Manager:** Prof. Alex Asase
- **Node Assistant:** Mr. Anthony Adu-Gyamfi



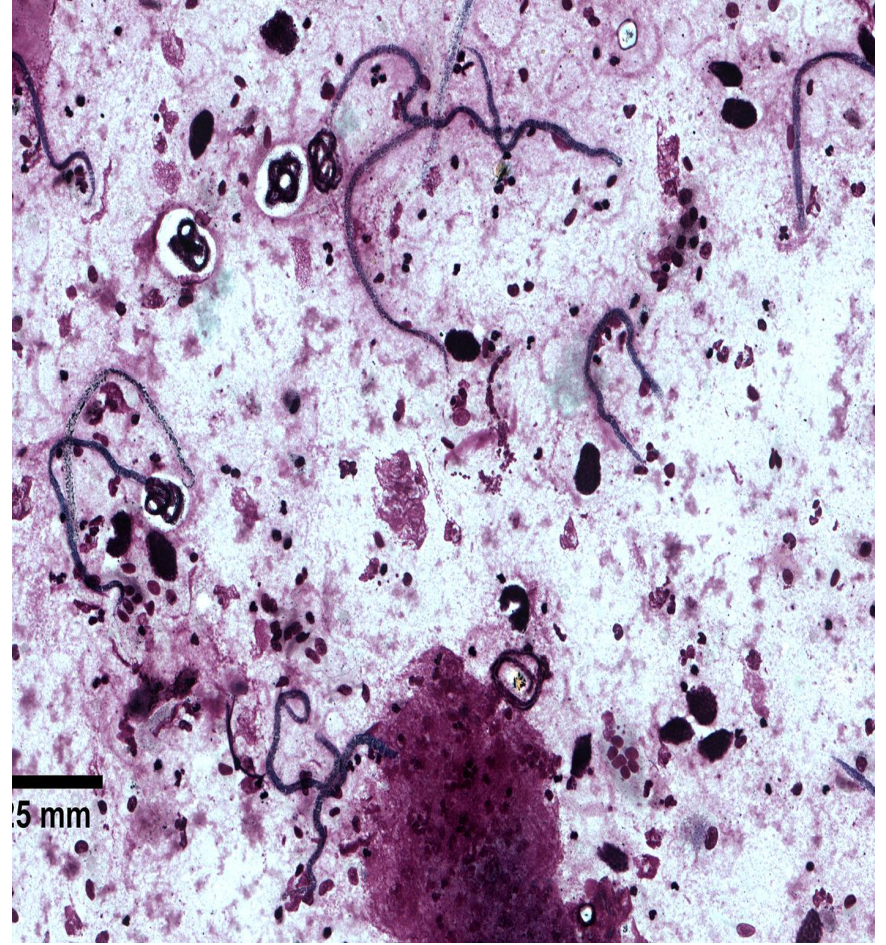
Data mobilization plans and progress

- occurrence data on plants, insects, vertebrates, fishes etc. published via GBIF.org since 2018.
- Basic data quality improvements regarding taxonomy, time and geography achieved before data were published.
- Plans are far advanced to publish abundance / sample-based data on plants.



Node services

Helping others to publish their data (helpdesk support)	X
Providing training in digitization, publication, data quality, data use	X
Support for/participation in projects	X
Data cleaning at the node level	X
Portal/website	X



Needs, priorities and actions

NEEDS	PRIORITIES	ACTIONS
Biodiversity data to support conservation and sustainable development.	Mobilize relevant data	<ul style="list-style-type: none">● Identify and define priorities for data mobilization.● Engage and partner with relevant data holder and user communities.● Support mobilization of relevant biodiversity data.
Biodiversity information at science-policy interface.	Promote use of biodiversity information in science and policy	<ul style="list-style-type: none">● Prioritise data needs at policy-science interface.● Promote integration of biodiversity data into national policy decisions.● Support development of user-friendly biodiversity information products.
Capacity to efficiently and effectively mobilize, manage, and use biodiversity data.	Enhance capacity in biodiversity informatics	<ul style="list-style-type: none">● Identify critical training and capacity needs and gaps.● Promote training and capacity enhancement activities.● Maximize opportunities offered by GBIF in training and capacity enhancement.

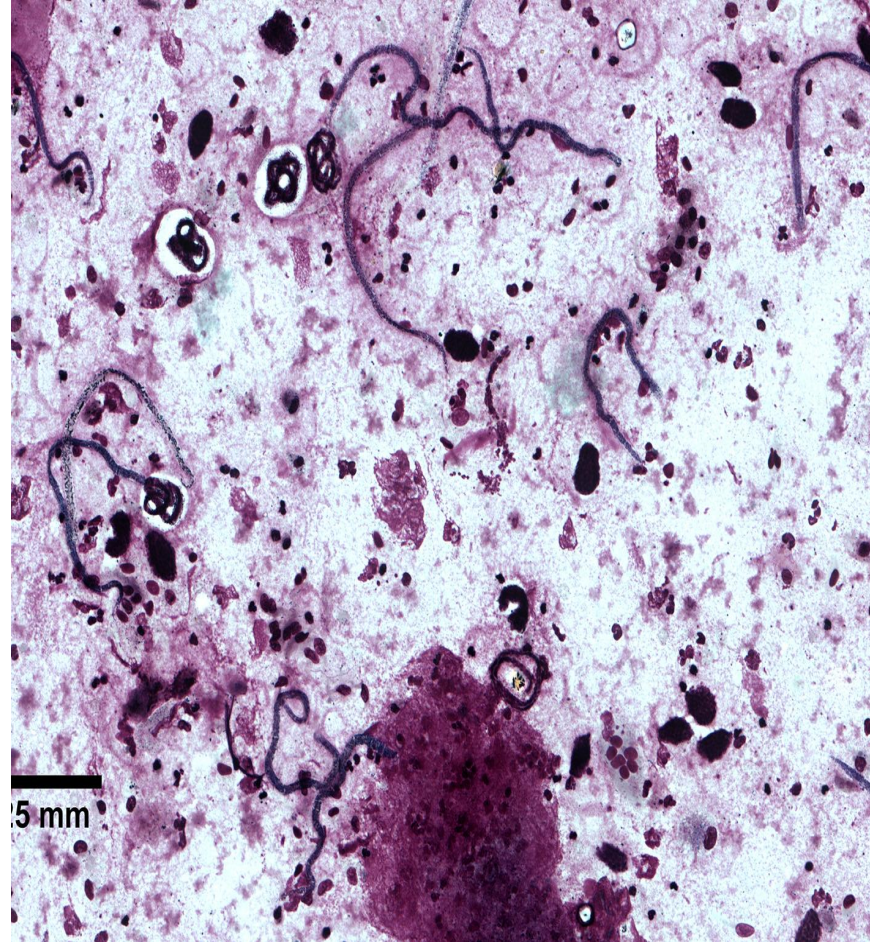
Data use

- 24 resources / use cases on modelling, climate change, database, invasives etc available on GBIF.
- UNEP-WCMC CONNECT project using data to develop BIPs for Ghana.
- National scientists and students using data for various research (e.g. Asase et al. (2020) *App Plant Sci* 8 (1) e:11318).



Support for national, regional and global initiatives

- Supporting activities of the National CHM of the CBD in Ghana & UNEP-WCMC CONNECT BIPs for Ghana.
- Leading a capacity enhancement project on data mobilizing and use in support of sustainable development in West Africa.
- Contributor to “Advancing the catalogue of World’s Natural History Collections” (<https://docs.gbif.org/collections-idea-paper/en/>)



Regional Vision

Vision for GBIF Africa- To become an excellent biodiversity information network dedicated to biodiversity data mobilization, management and use for sustainable development in Africa.





GBIF Cameroon

Jean-François MOUSSA



GBIF

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Team and Roles

Node Manager:

Name: Jean-François MOUSSA

Phone: +237698684584

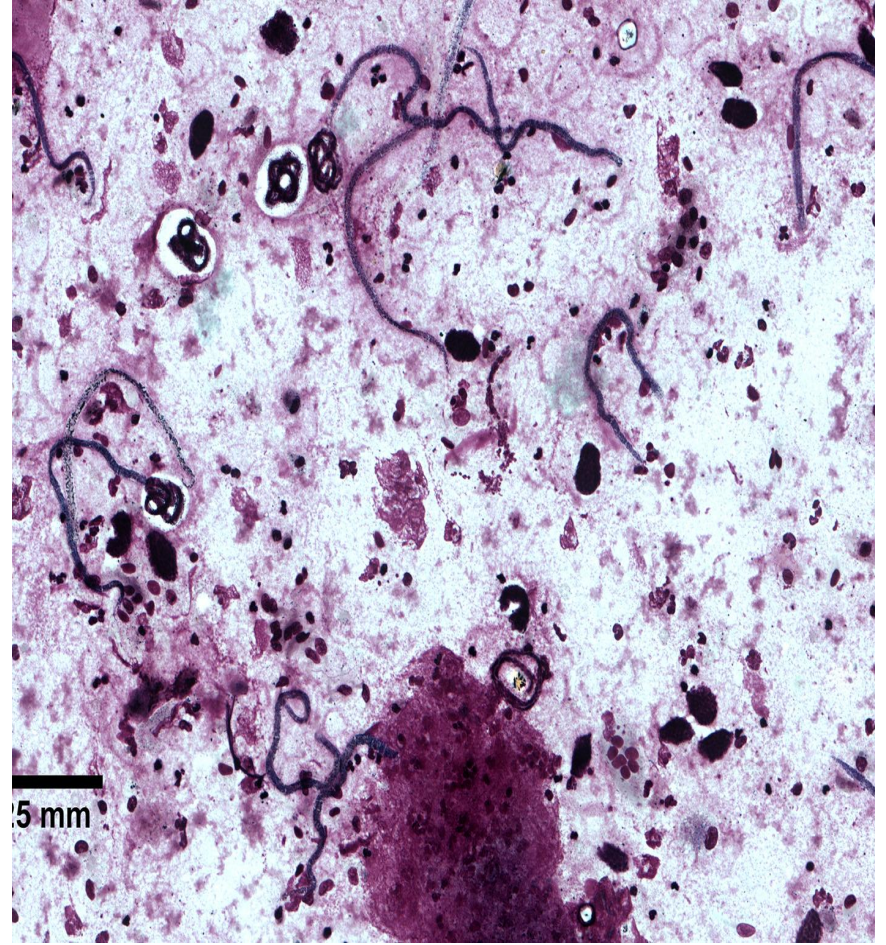
Email: moussjf@yahoo.fr

IT Person:

Name: Jean-François MOUSSA

Phone: +237698684584

Email: moussjf@yahoo.fr



Team and Roles

Data Manager:

Name: Jean-François MOUSSA

Phone: +237698684584

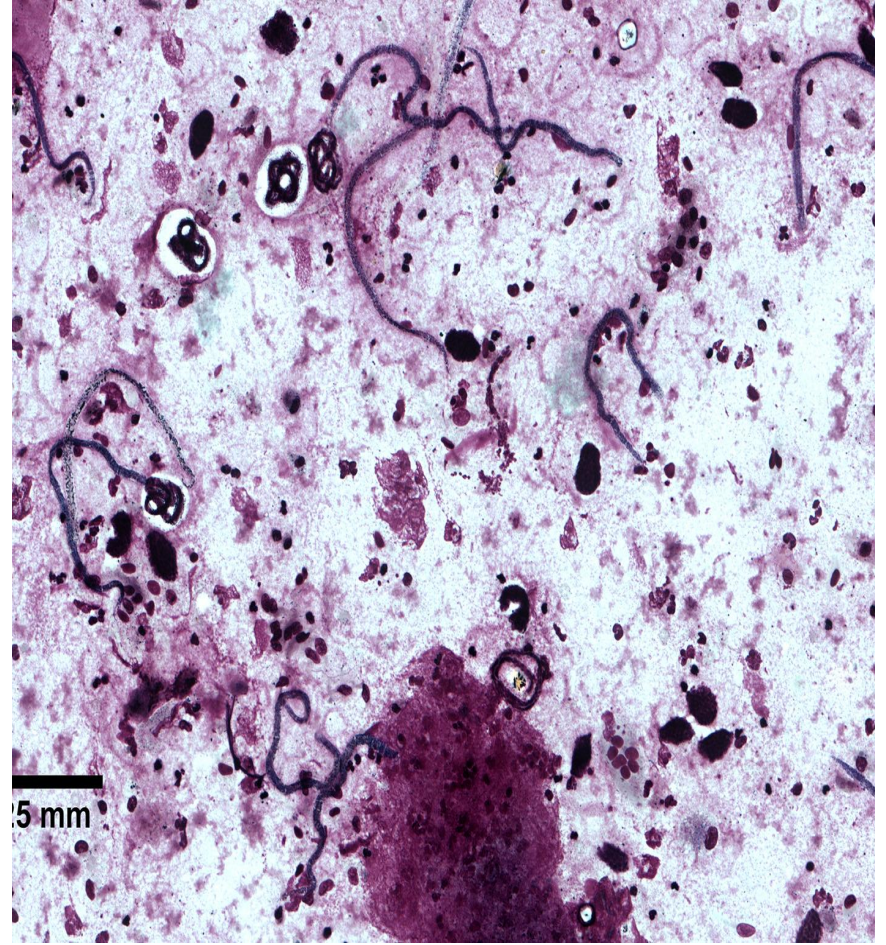
Email: moussjf@yahoo.fr

Scientific Outreach and Communication:

Name: Prof Maurice TINDO

Phone: +237699548324

Email: tindodouala@yahoo.com



Team and Roles

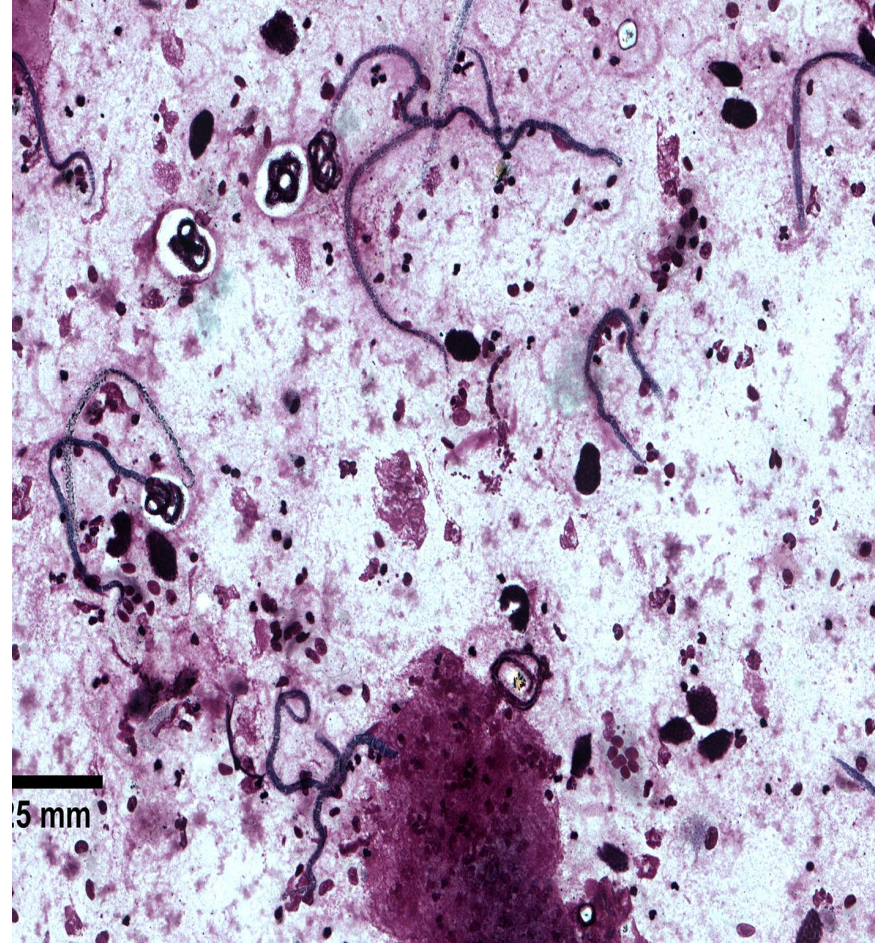
Head of Delegation:

Name: Sylvie FANTA

Phone: (+237)697313169/676115001

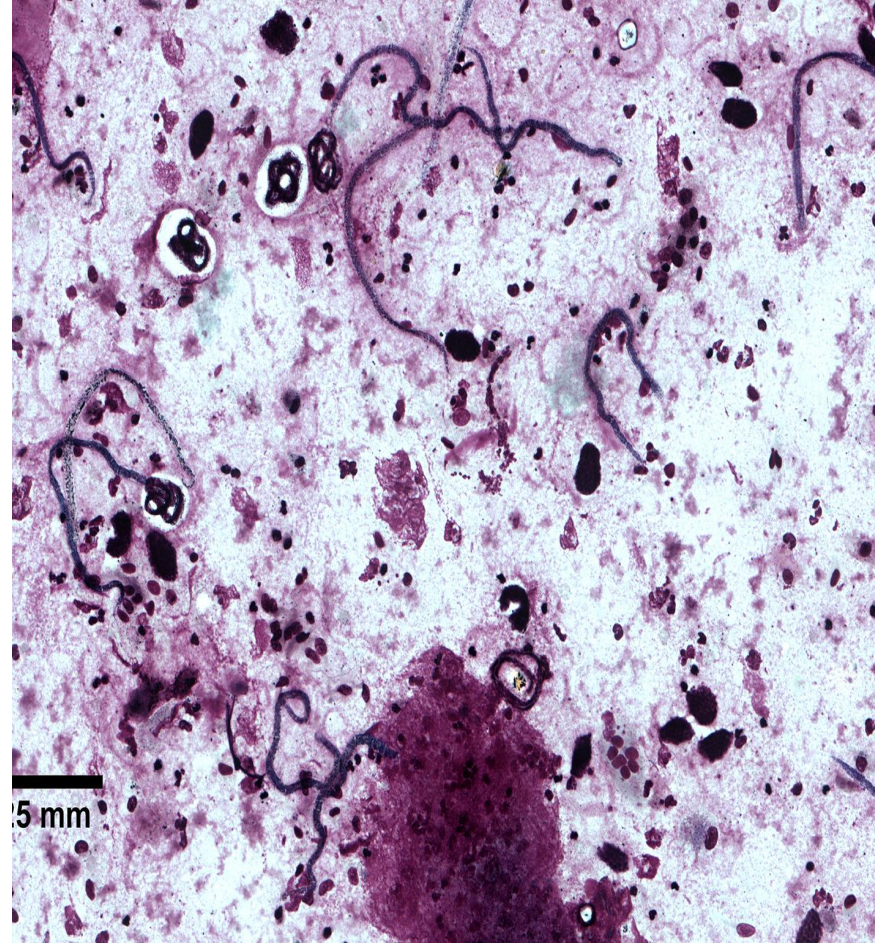
Email: mfantasylvie@yahoo.com

This team is not efficient enough, because you can see, the node manager alone has three roles;



Team and Roles

The strengthening of the node team is envisaged for the near future, with the of the hierarchy.



Data mobilization plans and progress

Number of occurrences published between 2018 and 2020: 7022 occurrences (5218 by eBird, 1644 occurrences by other international institutions and 160 by the Faculty of Sciences of the University of Douala, member of the Cameroon network);



Data mobilization plans and progress

Number of datasets published between 2018 and 2020: 16 datasets including 1 published by a Cameroonian institute (Faculty of Sciences of the University of Douala).

Organization of a capacity building workshop and the mobilization of biodiversity data holding institutions in November 2018.



Data mobilization plans and progress

Enrollment of three new institutions holding data on the national network;

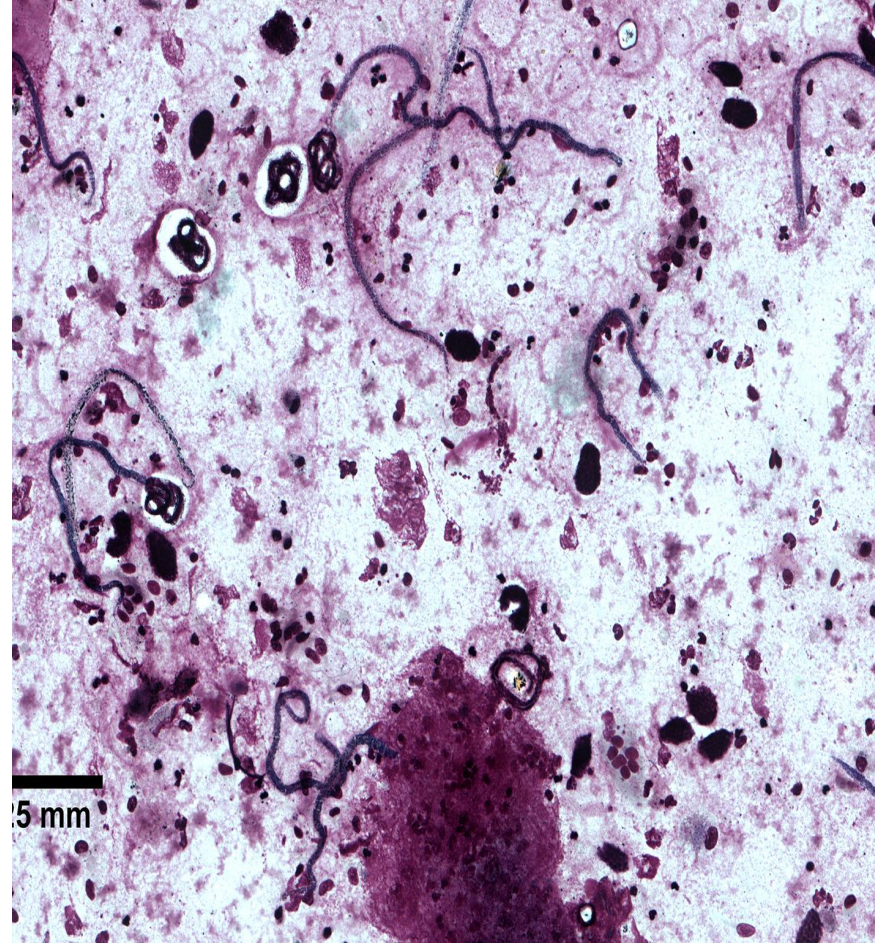
Proposal for a capacity building project on the publication of data for members of the national network.

No abundance data, photo trap data or DNA sequences have been published.



Node services

Helping others to publish their data (helpdesk support)	X
Providing training in digitization, publication, data quality, data use	
Support for/participation in projects	X
Data cleaning at the node level	
Node portal/website	X



Needs, priorities and actions

NEEDS

PRIORITIES

ACTIONS

Capacity building of network members on cleaning and publishing data on the GBIF portal.

1

Organization of a capacity building workshop for members of the GBIF national node.

Operationalization of the national biodiversity information management committee

2

Regular work sessions organization for the scientific committee and validation commission

Needs, priorities and actions

NEEDS

PRIORITIES

ACTIONS

Upgrading of Cameroonian's
Biodiversity Information System.

3

Development of new modules
and functionalities integrating
national needs.

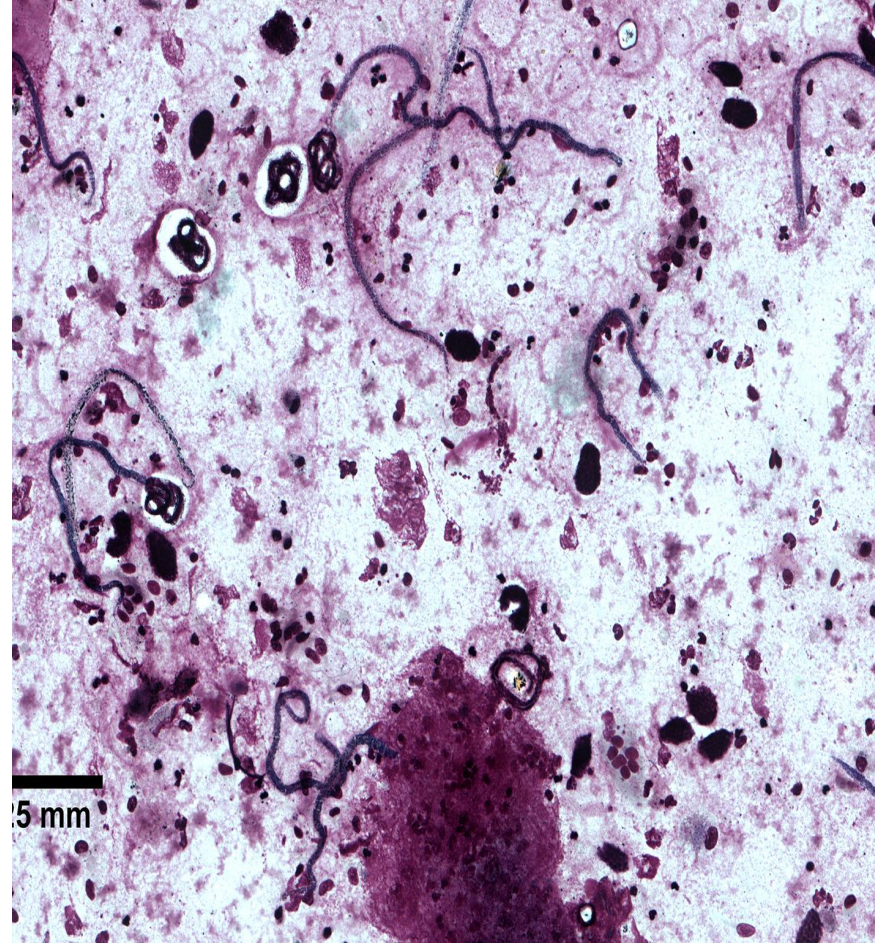
Data use

For the moment, the data mobilized by the national node is partially used by the technical departments of the ministry in charge of the environment. They are used to understand some phenomena such as the invasion of watercourses by invasive species.



Support for national and regional initiatives

Although some members of the node participate independently in regional initiatives, the Cameroon node has only participated in a few initiatives at national level. It is in this context that a steering committee bringing together researchers and biodiversity data holders was set up. This node have also set up the national biodiversity information system.



Regional Vision

For the sharing of traditional knowledge on the species of African biodiversity, it will be important to set up a platform including researchers and the various actors of biodiversity on the continent.



EIGHTH REGIONAL MEETING OF GBIF-AFRICA: Updates on GBIF-Africa Action plan 2018-2020



Dr. GANGLO C. Jean
Professor of Forest sciences
Node Manager of GBIF Benin
Regional Representative of GBIF-Africa
Virtual meeting 10-12 June 2020

Content

- 
- 
- **Introduction**
 - **Methods**
 - **Results**
 - **Challenges to overcome / discussion points**

INTRODUCTION

- GBIF-Africa Action plan were initiated in 2014 and went through several updates. The one we consider here is the most updated and covers the period of 2018-2020
- Based on the feedbacks received from the nodes, we tried to report on progress towards the achievements of the objectives of the GBIF Action plan 2018-2020
- Discussion points are derived from the possible obstacles to the achievements of the activities in the nodes and the challenges to overcome to enable more realizations

METHODS

- On June 08th, at 10pm (GMT+1), we received from the nodes a total 13 presentations. Due to the remaining time ahead of the meeting, we sampled the presentations received at the rate of 69% and read carefully the samples retained and took them into account to inform the advancement of the nodes towards the achievements of the objectives of the Action plan. The sampling also took into account, the representativeness of the sub regions of Africa. The participants sampled from the feedbacks at the time, are marked with a green asterisk

New nodes	Senior nodes	Organizations
Angola*	Benin*	EWT*
Cameroon*	Ghana*	
Niger	Guinea	
Nigeria*	Kenya*	
South Sudan	South Africa*	
Zimbabwe*	Togo	

RESULTS: ADVANCEMENTS OF THE NODES TOWARDS THE ACHIEVEMENTS OF GBIF-ACTION PLAN 2018-2020

❑ **Objective 1: Strengthen capacity to mobilize foundational data (Alignment to GBIF Strategic Plan: SO1, SO3 & SO4)**

- ❑ Data mobilization and publication are ongoing in 61.54% of the nodes sampled (Ghana, Kenya, South Africa, Nigeria, EWT, Cameroon, Zimbabwe, and Benin)
- ❑ Data cleaning is continuously performed prior to data publication by 46% of the nodes sampled (Ghana, Kenya, South Africa, Nigeria, EWT, and Benin)
- ❑ **Challenge**
 - ❑ Reinforce data cleaning prior to data publication in some nodes

RESULTS: ADVANCEMENTS OF THE NODES TOWARDS THE ACHIEVEMENTS OF GBIF-ACTION PLAN 2018-2020

- ❑ **Objective 2: Build capacity to deliver relevant data across the data-science-policy interface (Alignment to GBIF Strategic Plan: S01, S05)**
 - ❑ Data use is in progress in 53.85% of the nodes sampled (Angola, Ghana, Cameroon, South Africa, Nigeria, EWT, and Benin)
 - ❑ Communication and outreach activities are continuously organized by all (100%) nodes sampled
- ❑ **Challenges:**
 - ❑ Promote more data use
 - ❑ Promote relevant data mobilization (demand driven data)

RESULTS: ADVANCEMENTS OF THE NODES TOWARDS THE ACHIEVEMENTS OF GBIF-ACTION PLAN 2018-2020

❑ **Objective 3: Build institutional capacity in Biodiversity Information Management (Alignment to GBIF Strategic Plan: S01)**

- ❑ Capacity building activities are organized by all (100%) nodes sampled
- ❑ In-depth capacity building in academic master program in biodiversity informatics is being addressed by Benin
- ❑ Biodiversity information infrastructure is being addressed by South Africa, Cameroon, and Benin

❑ **Challenges**

- ❑ Promote in-depth capacity building accross Africa by sustaining the ongoing initatives
- ❑ Promote more biodiversity information infrastructure in the nodes

RESULTS: ADVANCEMENTS OF THE NODES TOWARDS THE ACHIEVEMENTS OF GBIF-ACTION PLAN 2018-2020

❑ **Objective 4: Strengthen regional engagement (Alignment to GBIF Strategic Plan S01)**

- ❑ Advocacy and awareness in the community is in progress in 53.85% of the nodes sampled (Cameroon, EWT, Ghana, Nigeria, South Africa, Zimbabwe, and Benin)
- ❑ Support to regional strategies is ongoing in 61.54% of the nodes sampled (Angola, Cameroon, EWT, Ghana, Nigeria, South Africa, Zimbabwe, and Benin)
- ❑ Support to national, regional, and international agreements and conventions is in progress in 30.77% of the nodes sampled (Ghana, South Africa, EWT, and Benin)

❑ **Challenges**

- ❑ Reinforce support to national, regional and international initiatives
- ❑ Reinforce advocacy and awareness in the community
- ❑ Reinforce support to regional strategies

RESULTS: DATA PUBLICATION ADVANCEMENT IN ALMOST ONE YEAR

TIME

Participant	Number of occurrence data published from inside countries in 2019	Number of occurrence data published from inside countries in 2020	Difference (2020-2019)	Membership status
<u>South Africa</u>	25825687	<u>27,121,476</u>	<u>1,295,789</u>	Voting participant
<u>Kenya</u>	996422	<u>1,021,670</u>	<u>25,248</u>	Associate country participant
<u>Benin</u>	414518	<u>601,100</u>	<u>186,582</u>	Voting participant
<u>Tanzania, United Republic of</u>	532759	<u>535,470</u>	<u>2,711</u>	Voting participant
<u>Uganda</u>	463563	<u>466,753</u>	<u>3,190</u>	Associate country participant
<u>Ghana</u>	351244	<u>??? 259,847</u>	<u>???</u>	Associate country participant
<u>Madagascar</u>	231626	<u>239,867</u>	<u>8,241</u>	Voting participant
<u>Zimbabwe</u>		<u>151,323</u>	<u>151,323</u>	Associate country participant
<u>Comoros</u>	110005	<u>110,005</u>	<u>0</u>	Associate country participant

RESULTS: DATA PUBLICATION ADVANCEMENT IN ALMOST ONE YEAR TIME

Participant	published from inside countries	2020	Difference	Membership
<u>Angola, Republic of</u>	76273	<u>76,273</u>	<u>0</u>	Associate country participant
<u>Malawi</u>	70761	<u>73,439</u>	<u>2,678</u>	Voting participant
<u>Nigeria</u>	73402	<u>73,402</u>	<u>0</u>	Associate country participant
<u>Togo</u>	68519	<u>68,519</u>	<u>0</u>	Voting participant
<u>Congo, Democratic Republic of the</u>	49554	<u>51,044</u>	<u>1,490</u>	Associate country participant
<u>Guinea</u>	40202	<u>40,202</u>	<u>0</u>	Voting participant
<u>Liberia</u>	15872	<u>15,872</u>	<u>0</u>	Voting participant
<u>Mauritania</u>	12870	<u>12,870</u>	<u>0</u>	Voting participant
<u>Mali</u>	0	<u>5,956</u>	<u>5,956</u>	Associate country participant
<u>Niger</u>	3801	<u>3,801</u>	<u>0</u>	Associate country participant
<u>Central African Republic</u>	0	<u>3,750</u>	<u>3,750</u>	Voting participant
<u>South Sudan</u>	1843	<u>1,843</u>	<u>0</u>	Associate country participant

DISCUSSION POINTS

□ What are the obstacles impeding activities in nodes?

□ How to overcome the challenges:

1. Reinforce data cleaning prior to data publication in some nodes
2. Promote more data use
3. Promote relevant data mobilization (demand driven data)
4. Promote in-depth capacity building accross Africa by sustaining the ongoing initatives
5. Promote more biodiversity information infrastructure in the nodes
6. Reinforce support to national, regional and international initiatives
7. Reinforce advocay and awareness in the community
8. Reinforce support to regional strategies
9. Elaborate a new GBIF-Africa Action plan 2020-2024 with a midterm review (2022)

A group of five people are gathered around a wooden table in a room with light-colored walls and windows covered by white curtains. A man in a red t-shirt is seated at the table, typing on a laptop. Three other men are leaning over him, looking at the screen. A fourth man is standing behind them, also looking at the laptop. On the table, there are several other laptops, a black bag, and some papers. The scene appears to be a collaborative work or training session.

THANK YOU



GBIF 20 Year Review & the GBIF-Africa Community

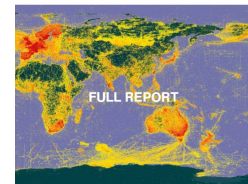
Fatima Parker-Allie



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Reviews of GBIF & GBIF Africa



- First Review of GBIF (CODATA and KPMG), conducted in **2003-4**, published in 2005.
- **2010 Forward Look Report**, GBIF Forward Look Team, scientists from the biodiversity community
- **20-Year Review of GBIF** (CODATA) based on interviews, written responses, across regions and diverse stakeholders

At the first Africa Regional Meeting, Uganda, 2010

- GBIF-Africa Nodes aligned the first regional meeting report to the GBIF FLR, to identify areas of intervention & action planning, and synergy with the GBIF Strategic Plan. (Maybe useful for the ACM business case)

Focus of Review

- Review how **effective GBIF has been** since 2001 in meeting the expectations from the OECD
- Review the **governance and sustainability** of GBIF
- Review GBIF in the 2018 landscape of biodiversity and research organisations
- Review the **technical aspects of GBIF's delivery** as a **research infrastructure**
- Consider the **challenges in the next 5-10 years** that GBIF needs to be prepared to meet
- **Provide recommendations on areas needing attention and improvement.**

Some Conclusions on Successes

Successes: GBIF as a platform is **viewed broadly as being a major success and a great improvement over alternative solutions**; this relates equally to the **data it mediates** and to its **capacity building activities**. There is a broadening range of current applications of GBIF-mediated data that match the OECD expectations of 1999.

“**No one comes close to offering what GBIF does** and no one else should; we should all get behind GBIF and help make it thrive.”

Factors: GBIF’s focus on **community, apparent stability** and **its staff**

Some Conclusions on Weaknesses

Many individuals expressed the “**far too many holes**” or **gaps in the coverage of taxa, regions, and countries** as a weakness of GBIF.

This regards the paucity of data for various **taxonomic groups**, as well as the lack of coverage for Brazil, Russia, India, China (BRICs) and parts of **Africa**, South America, and Asia in general [SWOT Compilation pg66] Ch.5 – Data, Standards, and Technology

Some conclusions Ch 6
SWOT: Community, Outreach,
Capacity Enhancement, & Training

- Many issues GBIF is facing differ among Regions and stakeholders
- In many African countries, the **capacity building programs** are **still inadequate**.
- Even available **biodiversity data** are not fully utilized due to a lack of skills & there is inadequate training on the production of data products.
- The research community may not be sufficiently engaged and there is no strategy to change this.
- Biodiversity stakeholders are working in isolation due to **poor coordination** & GBIF could assist member countries with a strategy to address this.

Some conclusions
SWOT: Ch.7 – GBIF's Participation,
Organization, and Funding

- The recent positive development in Africa is largely attributed to the effect of the capacity building program **BID**, 10 of the currently 21 national Participants joined “as a direct result”
- Opportunity: Consider Africa critically and particularly **biodiversity-rich regions** that **lack resources to mediate data and support them**.

Comments: Ch.7 – GBIF's
Participation, Organization, & Funding
GBIF Nodes Strengthening is needed

- The levels of funding vary considerably among Participants
- In most cases, the Node will be **supported infrastructurally & administratively by the hosting institution**.
- Beyond that, **Node staffing varies from fractional time of one person to about four full-time staff**. In most cases, **this must be considered severe underfunding**.
- For the network to function effectively **we need national investments in the node activities** and **dedicated people to this activity** - Tim Hirsch

Short Term Recommendations – 2-3 Yrs

Aim: improved coms & GBIF's visibility and to managing stakeholders' expectations

Nodes

- **R6, Strengthen Nodes** (p.123): Make the full Nodes concept work in all regions. Each GBIF region has different needs and issues – therefore, each needs **its own engagement strategy**.
 - Make the importance of Nodes known and increase their standing
 - Stabilize and extend regional networks in Africa

Africa is the only region to develop such a plan - the ACM
- **R10b, Leverage the Network:** GBIF should identify strategically where it could leverage its network to broker support for:
 - Follow-up activities to initial capacity-building projects and their funding
 - Connect global universities with African universities, in building their BDI curricula (this would probably need a champion from academia)
- **R11, Urgent Deliberations and Decisions of the GB** (p.124) The GB needs to establish guidelines on the **role of Nodes**, the **staffing of Nodes**, the (co-) funding of GBIF work programs by intergov. or governmental 3rd parties and by philanthropic org/ industry

Value Proposition

- **R4a, Value Proposition** (p.122): Develop compelling value propositions, especially as a tool for GBIF champions & Nodes.
- **R4b, Grand Challenge** (p.122): Choose a “grand” but doable real-world challenge (i.e., low-hanging fruit). **GBIF should identify associated data gaps and focus community effort on filling those gaps**, work with scientists to perform the analysis, & actively disseminate how the collections, countries, and GBIF are coordinated to solve or **contribute to the solution of such a significant real-world problem**

Medium to longer term recommendations

Funding, governance, value proposition & Nodes

- R12, Create Advisory Board** (p.125): The EC should create a, high level advisory body to advise the GB on strategies, on the mission, organizational principles, governance, and funding
- R14, Leadership** (p.126): GBIF should assume, **leadership of the Alliance** to create consensus and collaboration at a much broader scale. **SO 6 of the ACM** (grow a community of pract BDI)
- R17, Long-Term Strategy** (p.127): Formulate strategic plans for the long term, underpinned by cost estimates. **These need to resolve whether to host data other than occurrences, how to link them, whether and how to perform standard analytics or to offer a platform to execute user analytics**, and how to host GBIF services in the future [**will support the value proposition**]
- R19, Staffing Increase** (p.128): Staffing at the Secretariat should be doubled (**also supporting engagements & ACM**)
- R20, Organization & Funding of Nodes** (p.128): If success in **implementing fully functional Nodes** or developing their **sustainable funding** cannot be achieved in the medium term, **a major adaptation of either the funding of Nodes or the organizational concept of GBIF should be considered.**
- R21d, Node Funding Sources** (p.128): The long term funding of many Nodes, will likely need to be supplemented by third parties

Way forward

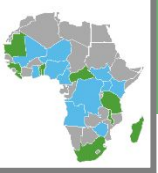
- We need to look at the Africa strategy and the 20yr Review recommendations and **look at priority recommendations for action**, and how the recommendations and key actions can be aligned so that we are strategic in our activities.
- Also we need to identify the gaps and areas of intervention (GBIF Secretariate/HOD's/Nodes) so that the operations and governance of Nodes is more effective.
- We must be able to identify the funding constraints and define strategies that are feasible for Africa
- GBIF-Africa should support the formulation of showcases to support the value proposition of GBIF



The GBIF-Africa Regional Engagement Strategy & Business Case Fatima Parker-Allie & GBIF Nodes

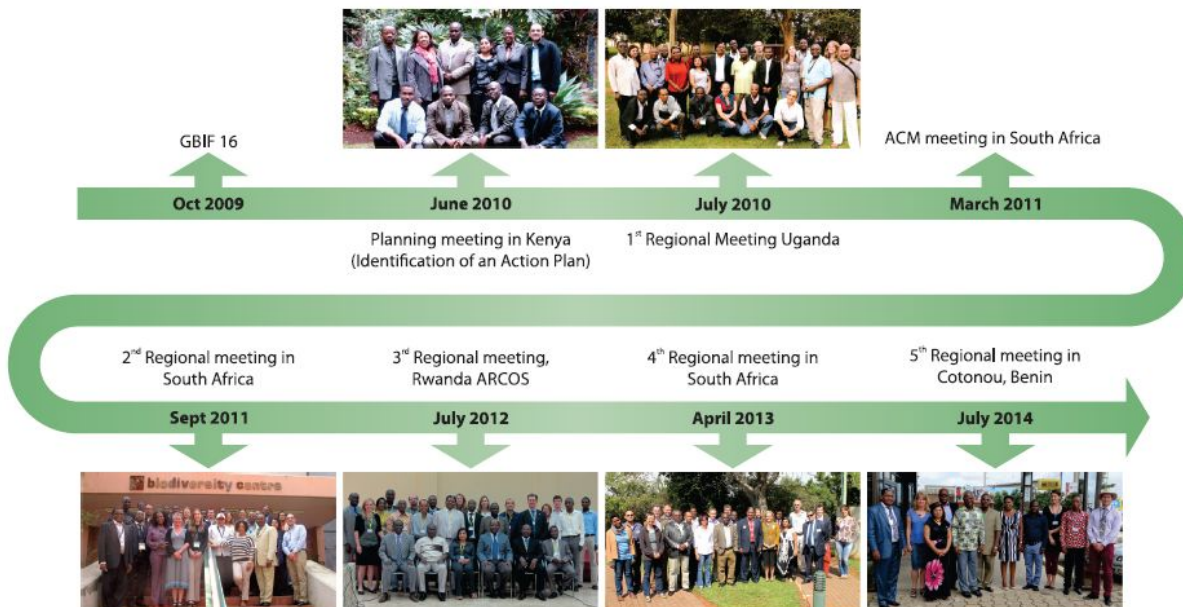
GBIF Africa regional meeting 2020





GBIF In Africa

- In 2009 the GB endorsed the recommendation to have reg. meetings to **improve coordination**
- GBIF Africa first convened in **Entebbe, Uganda**, 2010. Through a series of regional meetings from 2010, the region has developed a **series of action plans**, with outcomes in **three priority areas i.e. regional engagement, content mobilization and capacity enhancement**.
- NM from approx. 20 countries & Part orgs, have shown a continual increase in collaboration
- In 2015, SANBI-GBIF was requested to lead the establishment of the ACM, **which is the ultimate vision for a formal regional structure for BIM** (identified in 2010), as a requirement to foster the implementation of the GBIF strategic plan, in Africa.



GBIF-AFRICA COMMUNIQUÉ

Members of GBIF-Africa during their side-meeting held at Akany Soa Fomenake Hotel, Madagascar on this date of 7th October 2015 announces a Communiqué as an initiative to establish the African Coordinating Mechanism (ACM)

We, the undersigned agree on the following:

No.	GBIF Host	Topic	Representative
1	South Africa	GBIF-Africa	[Signature]
2	Kenya	GBIF-Africa	[Signature]
3	Uganda	GBIF-Africa	[Signature]
4	Madagascar	GBIF-Africa	[Signature]
5	Benin	GBIF-Africa	[Signature]
6	Rwanda	GBIF-Africa	[Signature]
7	South Africa	GBIF-Africa	[Signature]
8	South Africa	GBIF-Africa	[Signature]
9	South Africa	GBIF-Africa	[Signature]
10	South Africa	GBIF-Africa	[Signature]



No.	GBIF Host	Topic	Representative
1	South Africa	GBIF-Africa	[Signature]
2	Kenya	GBIF-Africa	[Signature]
3	Uganda	GBIF-Africa	[Signature]
4	Madagascar	GBIF-Africa	[Signature]
5	Benin	GBIF-Africa	[Signature]
6	Rwanda	GBIF-Africa	[Signature]
7	South Africa	GBIF-Africa	[Signature]
8	South Africa	GBIF-Africa	[Signature]
9	South Africa	GBIF-Africa	[Signature]
10	South Africa	GBIF-Africa	[Signature]

ACM - GBIF-Africa Regional Engagement Strategy & Business Case

1. INTRODUCTION

2. PURPOSE

3. BACKGROUND & POLICY CONTEXT

4. PAST AND CURRENT BIODIVERSITY AND BIODIVERSITY INFORMATICS INITIATIVES OF GBIF-AFRICA

5. THE GLOBAL BIODIVERSITY INFORMATION FACILITY IN AFRICA

6. AFRICAN REGIONAL BIODIVERSITY INFORMATION COORDINATION MECHANISM

Structure and function

7. THE KEY ACHIEVEMENTS OF GBIF-AFRICA

8. SCIENCE REVIEW AND PRIORITY THEMATIC AREAS

9. THE WAY FORWARD (Strategic objectives and goals; alignments to GBIF SO's)

Table 1: Log-frame and Implementation Plan for the African Coordinating Mechanism

Table 2. Budget to support the operationalisation of the ACM (approx. 25m over 3 years)

Table 3: GBIF-Africa regional action plan 2016-2018 developed during the 2016 GBIF-Africa Meet



PURPOSE

- The **Business Case** provides a framework for the **implementation of BDI priorities in Africa**, as opportunities for collaboration on the continent are growing, due to an increase in emerging economies and investment on the continent.
- Nodes strive to support the **data–science-policy interface** for this mega-diverse continent, in support of the implementation of the **Africa's Science and Technology Consolidated Plan of Action** – a plan of action which consolidates S&T programmes of the (AU) and the NEPAD.
- This plan has now been taken forward through the **Science, Technology and Innovation Strategy for Africa 2024**, with an aim to **accelerate Africa's transition to an innovation led, knowledge based economy**.



Strategic Objectives

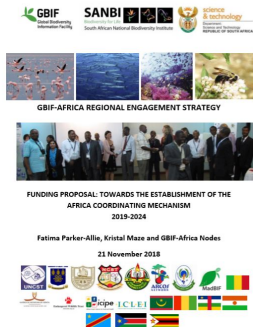
1. **Build capacity** to **mobilise foundational data** to **fill the data** and knowledge gaps
2. **Build capacity** to **deliver relevant data** to support **biodiversity research, assessments, modelling & planning** for decision making.
3. **Build institutional capacity** in **BIM** through empowering stakeholders to **produce, make accessible and use accurate data**
4. African countries **leverage STI** to achieve the **SDG's** and aspirations of the AU - Agenda 2063
5. Strengthen **regional engagement** through **advocacy, awareness-raising** and enhancing GBIF-Africa's role in supporting **regional strategies & conventions** like CBD, CITES, UNFCCC, CITES
6. In the 1st three years explore the **need and feasibility of developing a bigger platform** that can provide for a **strengthening of a community of practice**

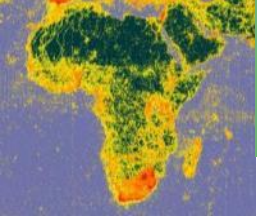


SKILLS DEVELOPMENT

LONG-TERM PARTNERSHIPS

MOVING INFORMATION UP THE CHAIN

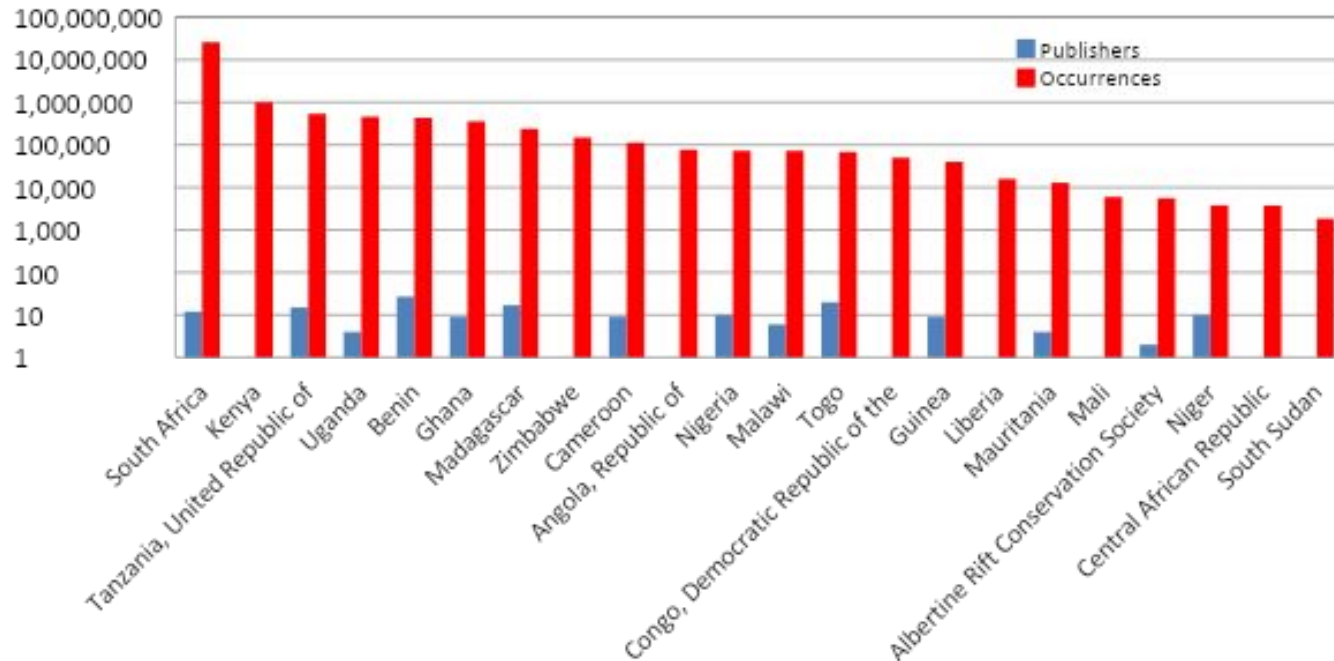




THE KEY ACHIEVEMENTS OF GBIF-AFRICA

Data Mobilization & Publishing

Number of Biodiversity Data Records Mobilized by the Africa Region (2019)

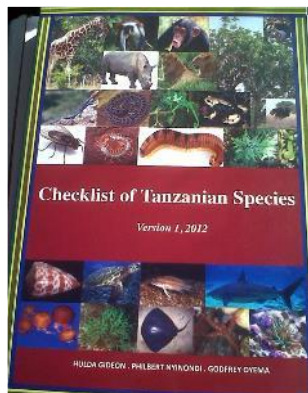


- Countries in Africa have mobilized approximately **30m PBR about biodiversity in Africa**
- W. Africa forming consortiums and mobilising a substantial amount of data (over 500 000).
- Many data publishers in Benin, Togo and SA - a reflection of an active community of scientists
- BID (GBIF) – also many datasets and countries have delivered data
- While some countries are publishing, technical competence are not always consistent or in house – **more technical skills are required**
- It is also important to note that for a mega-diverse continent, **there are huge gaps in the data (in space, time and taxonomy)** which needs to be filled for its use downstream

THE KEY ACHIEVEMENTS OF GBIF-AFRICA

Training and Capacity Development

- Many countries has made great strides in training and capacity enhancement activities, supporting of the N - S and S-S engagement.
- One of the key enabling factors for collaborative engagement, is the **CESP**. The GBIF-Africa Nodes have further leveraged approximately **€ 71 030** from 2014-2017, through the **GBIF CESP** (health, food security, Node establishment, invasive alien species)
- Many countries have **uploaded data** to GBIF, some **have developed data portals nationally, developed products i.e. national checklists** as well as **published academic and data papers** (can be found in the science review).
- Capacity dev. has not only focused on work based training but also **development of curricula at Universities**. Countries such as SA, Benin and Ghana are looking at the development of Centres for BDI, and Benin has implemented an **MSc degree in BDI (JRS funds)**.



THE KEY ACHIEVEMENTS OF GBIF-AFRICA

Regional Engagement

- A number of **consortiums** have developed on the continent, which is a result of ongoing coordination & leadership enabled by GBIF, JRS, SANBI-GBIF and the Biodiversity for Development Initiative, as well GBIF Nodes.
- West African - “**the capture of primary biodiversity data on West African plants** (Benin, Ghana, Cameroon & Togo, Nigeria), in Partnership with **5 major global herbaria** of the world (Europe and North America).
- West Africa - “Capacity building & biodiversity data mobilization for conservation and policy”, led by GBIF-Benin - eight countries – Senegal, Côte-d’Ivoire, **Mali**, Guinea, **DRC**, **Niger**, Madagascar. **Niger has become a GBIF Ass Participant**.
- Another consortium is being driven by the **Albertine Rift Conservation Society** bringing together **DR Congo, Rwanda and Uganda** to strengthen **the Biodiversity Information Management System** of the ARCOS
- The South African Lead **ABC project (JRS)**– working with 4 African countries (Namibia, Malawi, Ghana and Rwanda) to mobilise policy relevant data and establish a national networks in BDI, rollout of BIMF’s following the SA example.

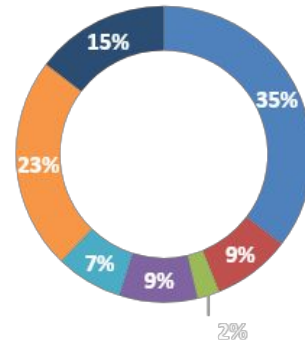
JRS Biodiversity
Foundation



Science Review of literature citing GBIF - Biodiversity in Africa



Thematic Use of GBIF Mediated Data for African Biodiversity



- Advancing biodiversity science
- Biodiversity and human health
- Data management
- Food, farming and biofuels
- Impact of climate change
- Invasive alien species
- Species conservation and protected areas

APPENDIX 4: SCIENCE REVIEW FOR GBIF-AFRICA (2011-2017)

Peer-reviewed literature using GBIF-mediated data, focused on African biodiversity

- Invasive alien species
- Impact of climate change
- Species conservation and protected areas
- Biodiversity and human health
- Food, farming and biofuels
- Ecosystem services
- Advancing biodiversity science
- Data management
- Data papers

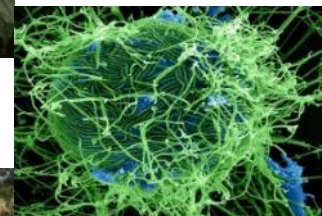
Asiatic denotes influences from African countries

- [illegible]

- [illegible]



Invasive alien species: Building national watch lists for invasive alien species



Public health: Mapping the niche of Ebola host animals



Food security: Conserving genetic diversity of crops in West Africa

Table 1: Log-frame and Implementation Plan for the African Coordinating Mechanism

Key Performance Areas	Sub-Objective	Activities	Outputs	Outcomes	Indicators and targets	Time frame
Strategic objective 2: Build capacity to deliver relevant/thematic data across the data-science-policy interface , to support biodiversity research, assessments, scenario modelling and planning for decision making						
Deliver relevant /thematic data across the data/science/policy interface	a. Provide incentives to support the generation, data mobilisation and/or use of policy relevant thematic data	Provide awards for young scientists to support the data-science- policy value chain	Proposal received and incentive granted	Increased understanding of the data-science-policy value chain	1 award per year	2020
	b. Enable information sharing and gathering on GBIF-Africa priority thematic areas in the region in support of initiatives and conventions such as CBD, IPBES, GEOBON, BIOPAMA and UNEP-WCMC and other national, regional and international efforts	Collect and analyse data on thematic priority areas for assessments; (1) Invasive alien species (2) Threatened species (3) Agro-biodiversity and forests (4) Native and endemic species (5) Medicinal plants (6) Freshwater and wetland biodiversity (7) Marine biodiversity data (8) Crop Wild Relatives (CWR)	Data on thematic priorities are mobilised and used for research and policy at different scales	Support research and policy for biodiversity	At least 3 thematic areas addressed	2020

ACM Information Product



**African
Coordinating
Mechanism**

What is it?

**A formal regional structure for
supporting biodiversity information
management on the continent**

1

Strategic Objectives

Six strategic priority areas to advance the African biodiversity informatics efforts

1. Strengthen capacity to receive international data & IG biodiversity data
2. Deliver data across the data structure and/or interface
3. Build institutional capacity in data management
4. Strengthen science, technology and innovation to advance the SDGs
5. Strengthen regional engagement
6. Build a strong African platform for biodiversity informatics partnership

2

Key Achievements

Science Review and Research Priorities
Science Review of literature citing GBIF - Biodiversity in Africa

Thematic Use of GBIF Mediated Data for African Biodiversity?

- Conservation and Biodiversity
- Biodiversity Management
- Biodiversity Assessment
- Biodiversity Conservation
- Biodiversity Research
- Biodiversity Policy

Biodiversity Conservation
Biodiversity Assessment
Biodiversity Conservation
Biodiversity Research

33

Key Achievements

The achievements of the GSA-Africa Partnership

Data



More than
30 MILLION
Primary passively
data records mobilized
by regional members

Funding

The GSA-Africa Nodes
have leveraged more
than
US\$ 9 MILLION
in funding since 2014



Capacity Building



Continuous regional
engagement since
2010
Approximate 20 GSA & 11
GSP projects training
and capacity
development

- 10 Young country participants
- 11 Academic country participants
- 7 Partner organizations

4

Action Plan

The AC20 will enable the implementation of the holistic action plan that will foster a dynamic, open-ended network in bio-ethics, interactive able to generate, publish and use bio-ethics data for sustainable development.

<p>Regional Priorities</p> <p>The world's largest coordinating efforts have been placed on the AC20 agenda for the first time, after a year working in regional networks, at the 2018 IAP Bioethics Forum. This was highlighted in the 2019 meeting.</p>	<p>Research Agenda</p> <p>Through the AC20 research funding network with governments and other funding agencies that have a strong focus on promoting science, technology and innovation.</p>	<p>Capacity Building</p> <p>The conceptualisation and development of academic programs, like master's degrees, to enable activities to support the implementation of the AC20.</p>	<p>Exchange activities</p> <p>The AC20 will explore a broader community of members to include non-state actors. The idea is to enhance the role of data in the development of scientific technology, innovation and innovation ecosystems.</p>
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5

Call to Action

Joiners, National Institutions, Science Councils, Governments, Academics

- Become part of our office biodiversity informatics network
- Invest in the office biodiversity informatics community
- Share your data
- Share your knowledge and expertise to build capacity
- Use the available technology, platforms and tools

Support the data revolution by ensuring that data supports open science and decision making at the national, regional and global policy levels.

6

Partnerships

The slide features a central map of Africa. To its left is a 3x4 grid of logos, including UNCTAD, FAO, and others. To its right is a 3x6 grid of national flags from various African countries. At the bottom, logos for SANRI, FAO, and GBIF are displayed.

More Information



The African Coordinating Mechanism Report



Central Information
Box, P.O. Box 1000
P. P. 1000@un.org

```
graph TD; A[Africa Coordinating Mechanism presentation] --> B[SANSI-GBIF Node]; A --> C[Node Managers training]; B --> D[SANSI-GBIF Fitness for Use Training]; B --> E[SANSI Biodiversity Advisor]; B --> F[Data Use for Decision Making]; C --> G[Biodiversity Informatics Training]; D --> H[GBIF]; E --> I[JES grants led by African Nodes]; F --> J[GBIF e-Learning]; G --> I;
```


Conclusion

- SANBI has presented the ACM business case & funding proposal to DSI in 2018
 - Including budget and log-frame (activities over time)
- ACM aligns well with DSI's **Science Diplomacy** agenda for Africa
- ACM proposal received **In principle support & strong ministerial** buy-in.
- The need for regional coordinating offices has been placed on the GBIF agenda, at the 2019 GBIF Governing Board, through the 20 year GBIF review.
- ACM will also “Explore a bigger platform and **community of practice** of all BDI initiatives to enhance use of the data” & will support **STI outcomes**. Thus, supporting the Global Alliance.

Partners signal new alliance for biodiversity knowledge



Way Ahead for the Business Case

- Endorsement from the Nodes on the updated business case including the updated strategic objectives
- Look and discuss a possible funding strategy as a collective which includes:
 1. The GBIF Secretariat
 2. What can be done at the GBIF regional level
 3. How countries can support funding approaches for the ACM at national level.
- This will mean that ownership will be taken by all, and countries may also need to go back to their national governments to look at how funding can be secured.
- SANBI-GBIF will continue to meet with DSI and also other partners on the ACM, following this virtual meeting.

African Coordinating Mechanism



What is

it?

**A formal regional structure for
supporting biodiversity information
management on the continent**