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# A Future for Planetary Health and Human Wellbeing 2050

UNEP Regional Foresight Workshop, Africa  
Co-organized by United Nations Environment Programme, CIFOR/ICRAF and the  
Science for Africa Foundation, and in partnership with the International Science  
Council. The workshop was also supported by the UN Futures Lab

**Nairobi, Kenya, 6-7 November 2023**

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## **Summary Document**

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## *Foreword*

### *A note from the UNEP Chief Scientist: Reflections on the Regional Workshops*

We are entering the final phase of our 2023-2024 Foresight Process. The first phase scoped a wide range of inputs including a Global Delphi survey and construction of four divergent scenarios of plausible futures to 2050. The next phase, the regional workshops, brought together over two hundred experts from six regions, to reflect on possible futures and crucially, to “reverse engineer” them: to walk backwards from them to the present, with respect to the interventions needed in 2023 to address the underlying causes of the triple planetary crisis and achieve planetary health and wellbeing. In doing so, we have identified some key issues, and perhaps more importantly, have signposted some of the pitfalls and cliff edges along the way.

Global issues require a global perspective, but also to take into account the unique contexts of each region. That’s why UNEP’s Foresight Process incorporates this regional element. What surprised many of us, was how diverse the visions which emerged from each region were. While it would be unscientific to read too much into the issues raised – the groups were not selected to be representative and this was not a polling exercise – it was nonetheless fascinating and instructive to be reminded that visions of the future are, by necessity, extrapolations of the preoccupations and anxieties of the present.

The discussions in Africa revealed a sense that the continent’s future could yield many positive outcomes rather than just negative ones. This view might have been informed by the fact that some African countries have seen two decades of remarkable GDP growth, while their neighbors have languished or undergone conflict and turmoil. Participants noted the danger of conflicts over resources and climate change, but they also raised a voice of hope over the opportunities that disruptions to the global economic order may bring to the continent which has perhaps benefited least from the current system. Africa, with its young and growing population, vast natural resources, and strategic location, might find itself newly emboldened to assert its needs in the world of 2050.

Some themes emerged from all of the Regional Workshops. Multilateral cooperation between states, combined with increased localization and lower-level democracy. The need to engage and involve youth, women, and Indigenous Peoples in decision-making. Modification of our consumerist habits, and a push towards sustainable, healthy lifestyles. These goals are feasible and pragmatic: an encouraging sign for the next step of the process, which is to consolidate and evaluate the inputs, and craft a tool which will help mainstream foresight thinking into environmental and social policymaking.

*Andrea Hinwood, Chief Scientist, UNEP*

*December 2023*

# Introduction

To better navigate current and future uncertainty and disruptive change, the strategic foresight initiative of the United Nations Environment Programme (UNEP) aims to put in place an institutionalized approach to foresight and horizon scanning. As part of this effort, UNEP and the International Science Council convened a Foresight Expert Panel who met in September 2023 to collectively interpret emerging signals of change distilled from a global survey. Four scenarios were developed at the global level, representing four possible visions of the world in 2050. The scenarios are neither “utopian” or “dystopian” visions, but rather, representations of possible futures used to facilitate discussions on issues, pathways and interventions which may affect planetary health and human well-being in the future.

- **Scenario A - Sustainability Paradox:** Science and technology are actively used to successfully solve many environmental problems and resource scarcity. Therefore, society continues to believe that economies can grow exponentially, and people continue to consume without limits.
- **Scenario B - Post-Truth Division:** Trust in science is eroded and social groups choose their own truths, aligning by shared attributes and beliefs. Conflicts exist within and across states and newly forming entities, down to the local level.
- **Scenario C - Fortress Multipolarity:** A future shaped by a ‘polycrisis’ forces humans to reorganize themselves into hybrid fortified enclaves with megacities, in competition and occasional cooperation with other megacities, and with an emphasis on internal security and surveillance.
- **Scenario D - Global Awakening:** New generations recognize the interconnectedness of their actions and their impact on the health of the planet. Supported by Artificial Intelligence (AI) and technology, they unite to create a world of harmony between humans and nature.

Regional workshops were held to contextualize global findings and explore region-specific dynamics, issues, risks, and opportunities. Participants took part in four main exercises, in a process co-designed by UNEP’s Office of the Chief Scientist and the European Commission Joint Research Centre Foresight team: Ice Breaker, Reviewing Scenarios, Exploring Changes, and Identifying Policy Interventions (see Annex 1 for more detailed methodology).

This report provides an overview of the main insights captured during the African Strategic Foresight Workshop, co-organized with CIFOR/ICRAF and the Science for Africa Foundation, and in partnership with the International Science Council. The workshop was also supported by the UN Futures Lab.. The workshop was held in Nairobi, Kenya on 6-7 November, 2023, at the Trademark Hotel and brought together several experts from across the region (see Annex 2 for a complete list of participants).

The report is not intended to present the full set of contributions that took place but rather to synthesize discussions with a view towards showcasing key insights for the region. The insights captured in the regional report as well as insights from the global process will be reflected in the 2024 Global Environmental Foresight Report.

# Background

Several megatrends are currently shaping the socioeconomic landscape in Africa which in turn is affecting how the continent can respond to environmental challenges, to which Africa is particularly vulnerable. These trends affect the continent's ongoing efforts to balance economic development with environmental sustainability.

Africa has the fastest growing population in the world, with an average growth rate of 2.6 % per year between 1995 and 2017, standing at double the 1.3 % growth rate for the world population.<sup>1</sup> This population is also very youthful with an estimated 60% of the population under 25.<sup>2</sup> An increasing population results in a decline in environmental quality and age structure can exacerbate the effects, due to the different consumption patterns that are demonstrated by the various age groups, with younger populations having a higher impact on the environment.<sup>3</sup>

This is coupled with a rapid urbanization that is occurring across the continent, with the urban population in Africa having grown by approximately 500 million people between 1990 and 2020. This is motivated by the prospect of higher hourly wages in urban areas as well as opportunities for better education.<sup>4</sup> This trend brings both opportunities and challenges, such as the need for infrastructure development as well as sustainable urban planning to support this growing population and to manage any potential adverse effects on the environment and conservation efforts that may result due to this growing urban population.<sup>5</sup>

Feeding this growing urban population has proven to be a challenge. The most recent estimates show that in 2022, the proportion of the population in Africa that faced moderate or severe food insecurity reached 61 percent. This prevalence is very high and is more than twice the prevalence of 29.6 percent at the global level.<sup>6</sup> Food insecurity in Africa is a complex issue with multiple interconnected causes, often stemming from a combination of economic, social, political, and environmental factors.

Among the more crucial factors is conflict and instability, with five of the top ten worst food security crises in 2021 occurring in African countries affected by violent conflict.<sup>7</sup> Furthermore, conflicts beyond the continent also contribute to the ongoing food insecurity, particularly the war in Ukraine and Russian sanctions affecting the supply chain and commodity prices of critical food imports, such as wheat, sunflower oil and seeds, and barley.<sup>8</sup>

This, in combination with the disproportionate effects of climate change on the region, leads to an amplified impact on the agricultural sector, which further exacerbates food insecurity. The largely pastoral agricultural approaches in the region are highly sensitive to changes in temperature, land degradation, water scarcity and other extreme weather events. This also brings on knock-on effects, such as locust infestations that can decimate food crops.<sup>9</sup>

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<sup>1</sup> Eurostat 2019 “The European Union and the African Union — A statistical portrait — 2019 edition” Retrieved from <https://ec.europa.eu/eurostat/web/products-statistical-books/-/ks-fq-19-001#:~:text=This%20statistical%20portrait%20presents%2C,Union%20and%20its%20member%20states.>

<sup>2</sup> Mo Ibrahim Foundation 2019 “Africa’s Youth: Jobs or Migration? Demography, economic prospects and mobility” Retrieved from [https://mo.ibrahim.foundation/sites/default/files/2020-05/2019-forum-report\\_0.pdf](https://mo.ibrahim.foundation/sites/default/files/2020-05/2019-forum-report_0.pdf)

<sup>3</sup> Dimnwobi, S. K., Ekesiobi, C., Madichie, C. V., & Asongu, S. A. (2021). Population dynamics and environmental quality in Africa. *Science of the Total Environment*, 797, 1–11. <https://doi.org/10.1016/j.scitotenv.2021.149172>

<sup>4</sup> African Development Bank Group 2022 “Africa’s Urbanization Dynamics 2022 - The economic power of Africa’s cities” Retrieved from <https://www.afdb.org/en/documents/africas-urbanisation-dynamics-2022-economic-power-africas-cities>

<sup>5</sup> Güneralp, B, et al 2017 “Urbanization in Africa: challenges and opportunities for conservation” Retrieved from <https://doi.org/10.1088/1748-9326/aa94fe>

<sup>6</sup> AO, AUC, ECA and WFP. 2023. Africa – Regional Overview of Food Security and Nutrition 2023: Statistics and trends. Accra, FAO. Retrieved from <https://doi.org/10.4060/cc8743en>

<sup>7</sup> Global Network Against Food Crises, 2022 Global Report on Food Crisis: Joint Analysis for Better Decisions, 2022. Retrieved from [https://docs.wfp.org/api/documents/WFP-0000138913/download/?\\_ga=2.7604853.678160824.1664538340-757622974.1664538340](https://docs.wfp.org/api/documents/WFP-0000138913/download/?_ga=2.7604853.678160824.1664538340-757622974.1664538340)

<sup>8</sup> UNCTAD 2022 “The Impact on Trade and Development of the War in Ukraine” Retrieved from [https://unctad.org/system/files/official-document/osginf2022d1\\_en.pdf](https://unctad.org/system/files/official-document/osginf2022d1_en.pdf)

<sup>9</sup> Stockholm International Peace Research Institute 2023 “Food Insecurity in Africa: Drivers and Solutions” Retrieved from <https://doi.org/10.55163/GISR2785>

Other factors influencing Africa's response to environmental challenges As the world works to address the impacts of climate change, there are increasing investments towards low carbon and renewable energy sources. This will lead to Africa's mineral resources becoming an increasingly prized commodity and consideration of the environmental impacts of intensified mining will be vital to manage the accompanying environmental challenges.<sup>10</sup>

These mega trends and how they are addressed reflect a growing awareness of the environmental challenges facing Africa and the continent's commitment to adopting sustainable practices for long-term ecological health.

## Underestimated factors affecting planetary health and/or human well being

As a starting point, participants engaged in an exercise to openly identify issues that they perceived to be currently underestimated in public discussions but that are impacting planetary health and human well-being. This set the stage for the foresight exercises to follow by providing insight into the mindset of participants at the onset of the workshop and the priority issues held at the top of their minds.

### *Leadership and Governance*

Comments were made regarding the perceived leadership crisis that is occurring at the global, national and local levels as well as weakening connections beyond national and regional borders and how this could be affecting the global response to addressing planetary health and human well-being. In the regional context there was also concern regarding the poor governance practices that are often adopted as well as apprehension around how corruption is preventing the advancement of the environmental agenda in an effective manner.

### *Finance and Economics*

Several participants expressed their views regarding the financial and economic positioning of the region on the global stage. They were particularly critical of standard financial and economic models that cannot adequately value planetary and human health, meaning that current economic systems are not sufficient to address the growing need for environmental action. There was a call for a shift towards more restorative economic systems that integrate principles of climate finance and small scale farming, among other things, with the view to ensuring resources are available to take the necessary actions to address the triple planetary crisis.

### *Geopolitical conflicts*

There was an acknowledgement among participants regarding the potential for increasing geopolitical conflict in the region as the demand for natural resources increases with the ongoing push for a green energy transition. There was also recognition of the interlinkages and potential polycrises at hand that connect such conflicts with all other issues that were put forward during this exercise.

### *Increasing Science Capacity*

It was noted that access to sound scientific evidence that is relevant and applicable to the regional context plays a critical role in ensuring successful implementation of policies and activities to address planetary health and human well-being. In this regard, it was also noted that the region needs to build its capacity for scientific research and development to ensure that relevant data is being generated from the region.

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<sup>10</sup> Cust, James, and Albert Zeufack, eds. 2023. Africa's Resource Future: Harnessing Natural Resources for Economic Transformation during the Low-Carbon Transition. Africa Development Forum. Washington, DC: World Bank. doi:10.1596/978-1-4648-1743-4. Retrieved from <https://openknowledge.worldbank.org/server/api/core/bitstreams/2cfa1ec3-1318-4415-aa8e-c8f3ce5e11ab/content>

## *Cultural erosion and Shifting Values*

Views were shared regarding how cultural values, indigenous and traditional customs are eroding as people's priorities shift to accommodate new ways of living. There was a strong recognition of the importance of indigenous knowledge, local traditions and the unwritten laws that indigenous communities have access to to support meaningful environmental action and as such the importance of listening to the voices of indigenous peoples and local communities, as well as preserving their oral history was strongly emphasized. Similarly, the role of women in supporting environmental action was also highlighted. Furthermore, the role of youth was also heavily discussed given that youth make up such a large proportion of the population in the region.

## *Advances in Innovation and Technology*

Participants expressed concern over how the growing emergence of AI will affect the region - from AI governance, to questioning how AI based innovation and technology will be transferred and applied in the region, including how this will ultimately impact the region's capacity to address planetary health and human well-being.

## The Scenarios

With these opening discussions in mind, participants spent much of the remaining time in the workshop in breakout sessions focusing on the four global scenarios, unpacking the scenarios in the West Asian context and exploring pathways to change between now and 2050 (Annex 1). These discussions, which incorporate and expand upon many of the key issues raised in the opening session, are summarized for each scenario. Below is a summary of the scenarios and how they were contextualized for the Africa region:

### Scenario A: The Sustainability Paradox

**Global Scenario Summary:** Science and technology is actively used to successfully solve many environmental problems and resource scarcity. Therefore society continues to believe that economies can grow exponentially, and people continue to consume without limits.

#### *What will Africa look like in 2050 under this scenario?*

- **Resource exploitation** continues and grows, without general consent from communities and without equal benefit from the wealth generated. Resource-rich countries like Zambia and the Democratic Republic of Congo resemble some of the petro-states of the early 21st century, with increased power and influence on the world stage. But power and wealth have not solved problems such as **mismanagement of nature**, and **income inequality**.
- **Migration** is an issue across the continent, as reshaped borders (such as East and West African Unions) encourage movement of labour, but also give rise to xenophobia. Mass migration to urban centres has led to the proliferation of **megacities** and depopulated rural communities.
- Despite a young and growing population, **young people** are still excluded from power structures which continue to benefit the elite. The greater role of **women** in the workforce, especially the expanding tech sector, is not yet mirrored by a more prominent role in civil society.
- Having been largely absent from the development and discourse around **Artificial Intelligence** in the early 21st Century, Africa is now a user, rather than innovator, in the field. The tool is being implemented in **education**, for example, simply to meet the demands of a large population, with a diminishment in quality and personalized learning.
- A similar phenomenon has occurred in **food systems**. While agricultural yields are high, due to technological innovations, the quality and diversity of food production has diminished in favour of



higher returns. This has an impact upon environmental and human health. Obesity and the perils of over-consumption have replaced hunger and diseases of poverty as the most prominent health issues.

## Scenario B: Post-Truth Division

**Global Scenario Summary:** Trust in science is eroded and social groups choose their own truths, aligning by shared attributes and beliefs. Conflicts exist within and across states and newly forming entities, down to the local level.

**What will Africa look like in 2050 under this scenario?**

- The concept of post-truth is **reinterpreted and celebrated** as marking the end of a colonial-era consensus around knowledge and social structures. In its place, communities spring up based around common interests. Many of these seek a **resurgence of traditional values** based around family, village and community.
- But this is also a world of resource scarcity, and **nationalism and localism** are the result of a need to protect against competitors. Conformity to the group is enforced by strict penalties, and self-expression is diminished.
- Technology has failed to live up to its promises and **traditional technologies** and analogue lifestyles have arisen. **Education** has become practical and utilitarian, with an emphasis on survival skills.
- **Conflict** is driven by resource scarcity, and **natural resources** such as water become weaponized. Mercenaries and armed groups thrive, and frequently transition into government.
- **Migration** is driven by conflict and out-of-control **climate change**, which renders many zones uninhabitable. Young people also migrate beyond Africa to meet the labour demands of an elderly population in the global north. But urban migration has reversed as industry fails to provide the jobs young people need, prompting a return to **rural communities**.
- Failed technology leads to more **subsistence farming** and a revival of **circular local economies**.

## Scenario C: Fortress Multipolarity

**Global Scenario Summary:** A future shaped by a ‘polycrisis’ forces humans to reorganize themselves into hybrid fortified enclaves with megacities, in competition and occasional cooperation with other megacities, and with an emphasis on internal security and surveillance.

**What will Africa look like in 2050 under this scenario?**

- An increase in **populism** and **religious fundamentalism** has resulted in widespread rejection of some values seen as “non-African”, for example LGBTQ+ rights. Charismatic leaders hold sway across the continent.
- Subversive movements have emerged in response to the authoritarian nature of these regimes, and are regularly suppressed, resulting in **social conflict**.
- Increased competition for resources has led to a **decline in cooperation** and pan-Africanism. Africa does not have a unified voice on the global stage and reduced negotiating power. This is mirrored by the decline of the United Nations to a League of Nations-type entity, riven by conflict and unable to effect change.
- **Localism** has risen, with sub-national fortresses competing with national entities, leading to rivalry and conflict.

- **Land-grabbing** is rife and food systems fall under the control of a few companies which are increasingly rapacious in their control. A new form of **corporate feudalism** prevails.
- **Water** management is inextricably linked to competition and access to water is weaponized.

## Scenario D: Global Awakening

**Global Scenario Summary:** New generations recognize the interconnectedness of their actions and their impact on the health of the planet. Supported by artificial intelligence and technology, they unite to create a world of harmony between humans and nature.

### *What will Africa look like in 2050 under this scenario?*

- This scenario provoked much debate in the group with many of the participants challenging the underlying premise that a global environmental consensus would be reached which would account for the needs and requirements of Africa.
- It was pointed out that all of the other scenarios had elements which could contribute to a more sustainable and harmonious African future: for example, the greater income brought from increased resource extraction in Scenario A, or the increased independence of Africa from other powers envisaged in Scenario C.
- Africa was not seen as taking a leading role or disproportionately benefiting from AI.
- It was pointed out that traditional African attitudes towards coexistence with nature, wildlife and the environment would come to the fore under this scenario and should also help inform other regions.

## Key Areas for Intervention

After diving deeply into the four scenarios, participants were asked to take a step back and reflect on what interventions might prevent, improve, or mitigate the outcomes of these 2050 visions. Though the initial workshop structure focused on how interventions might actually be implemented and by whom, discussions shifted towards identifying priority issues to be addressed and problems to solve.

With regards to who should be involved in implementation, participants highlighted a diverse array of stakeholders whose engagement is critical to making progress, including government, private sector actors, scientists, non-governmental organizations, and others. The main issues to be addressed that were identified cut across scenarios, incorporating multiple elements of coordination and cohesion, and are presented as such below.

### ***Public health and wellbeing***

The imperative of prioritizing food and nutrition security is highlighted through a comprehensive approach involving regional and national food policies. A renewed commitment is needed across the region to an approach to well-being that emphasizes the interconnectedness of health goals across the entire continent. Ensuring universal access to contraception and preventive measures for sexually transmitted infections contributes to both individual and public health objectives.

In parallel, efforts to address societal resilience and inequality involve the introduction and strengthening of basic social safety nets and social insurance. These measures aim to create an inclusive and supportive environment, providing individuals and communities with the necessary resources to navigate challenges. This holistic framework underscores the commitment to enhancing overall well-being by addressing critical aspects of health, nutrition, and social protection.

## ***Technology development and transfer***

To foster innovation and sustainability, strategic investments in infrastructure are essential. This includes leveraging technology for conservation efforts as well as utilizing advanced tools to map, manage, and monitor natural resources effectively. Participants also emphasized the importance of technology sovereignty for the region, and called for equitable access and further development of local solutions that cater to the region's specific needs.

To nurture innovation, the establishment of incubation centers that are aligned with open science and open data standards was proposed. Regulatory frameworks should incentivize local innovation, ensuring that advancements are tailored to regional contexts. Promoting decentralized knowledge and access to digital information is crucial, underlining the importance of universal internet access.

Moreover, facilitating technology transfer agreements further bolsters the collaborative and global approach to innovation, allowing for the seamless exchange of expertise and advancements. This strategy envisions a landscape where technology is harnessed, shared, and regulated to drive innovation while addressing local and global challenges that threaten planetary health and human well-being.

## ***Unlocking the Potential of Youth***

Unlocking the full potential of African development necessitates the strategic cultivation of youth capital. Emphasizing the importance of continuous education, there is a call for lifelong learning initiatives to equip individuals with the skills needed for future employment opportunities.

Recognizing the role of small and medium-sized enterprises as catalysts for job creation, investment in their development is highlighted. Corporate responsibility takes center stage, with a focus on fostering youth inclusion and empowerment within the business sector.

In pursuit of these objectives, the establishment of an African Youth Fund is proposed. This fund aims to channel resources towards initiatives that specifically address the needs and aspirations of the youth, contributing to a sustainable and inclusive developmental trajectory for the region.

## ***Strengthening Governance Approaches in the Region***

Promoting inclusive governance is identified as a critical imperative, aiming to empower communities and ensure their active participation in decision-making processes. Central to effective governance is the adoption of evidence-based decision-making, accompanied by capacity-building efforts to foster a culture of informed and transparent governance.

Advocating for fairness, there is a push for the development and enforcement of equitable standards. Decentralization emerges as a key strategy, with a focus on supporting localized and sub-regional democratic forums to enhance community representation.

Addressing land ownership dynamics, there is a call for reform towards more communal ownership models, promoting a sense of shared responsibility and resource management. To facilitate continental unity, the proposal of a single African passport, allowing free movement across the continent, signifies a commitment to interconnectedness.

On the global stage, the aim is to secure G20 and Security Council memberships, emphasizing Africa's active role in shaping international policies and ensuring its perspectives are well-represented in major decision-making forums. This multifaceted approach envisions a governance framework that is inclusive, equitable, and responsive to the diverse needs of African communities.

## ***Trade and business***

In pursuit of a sustainable and just global future, a comprehensive approach is advocated. This involves enhancing the appreciation of nature and discouraging the commodification of natural resources. A key component is the reform of the financial system, prioritizing increased access to microfinance and advocating for debt forgiveness, particularly from former colonial powers. To address environmental challenges, greater accessibility to climate finance is crucial. Setting global systems and standards is emphasized, complemented by the imperative to ban shell companies and control illicit money flows. Equitable taxation is proposed, coupled with an emphasis on improving public services. Finally, fostering economic collaboration is promoted through initiatives such as the Pan-African trade agreement, aiming to create a more balanced and interconnected regional economic landscape.

## ***A new economic model***

In envisioning a more holistic perspective on people and nature, there is a call for a paradigm shift away from reducing their worth solely to "dollar values." Recognizing the limitations of conventional metrics, there is a growing demand for more creative and nuanced considerations when defining progress. This entails a departure from simplistic economic indicators, urging a deeper understanding of the intricate relationship between humanity and the environment, acknowledging values beyond monetary measures. The narrative seeks a different theory that appreciates the multifaceted dimensions of human-nature connections and advocates for a more comprehensive definition of progress beyond mere economic parameters.

## **Next Steps**

The outcomes of the regional workshops will serve to inform the second round of the Delphi Survey. This second round aims to prioritize the 259 signals and over 50 issues submitted during the first round of the survey, to the top 18 (three from each region). The original 6000 experts invited to take part in the original Delphi survey, in addition to all those who participated in the regional workshops, will be invited to rank the top 18 issues based on their potential for being most disruptive. Survey respondents will also be invited to give their thoughts on whether and how UNEP should be involved in each issue.

Ultimately all the data gathered during this foresight exercise will contribute to the final Foresight Report, to be presented at the Summit of the Future in New York in September 2024, and UNEP's strategic long-term outlook.

# Annex 1 - Methodology - Regional Foresight Workshop

UNEP's strategic foresight initiative aims to establish an institutionalized approach to foresight and horizon scanning. The goal is to develop an anticipatory and future-oriented culture, recognizing the fact that tackling the global systemic challenges we are collectively facing requires integrating forward-looking knowledge and insights across disciplines, knowledge systems, and sectors of society.

The process comprises two distinct steps. The first was at the global level, bringing together a Foresight Expert Panel to interpret, analyze, and cluster and providing insights to potential for disruption following an analysis of 29 emerging changes and over 1000 signals of change identified from a horizon scan survey. Following this global analysis, a series of regional workshops were held to review the global outputs with the view to providing necessary regional perspectives to validate and adjust the initial identification of emerging signals of change and provide information on regionally specific issues, risks, and opportunities.

The structure for Regional Foresight Workshops was co-designed by UNEP's Office of the Chief Scientist and the European Commission Joint Research Centre (JRC) Foresight team in partnership with the International Science Council. The process included 4 key exercises:

1. ***Ice breaker Exercise:*** each participant was asked to share *one factor which, in their opinion, is affecting planetary health and/or human well-being but is underestimated in public discussion.*
2. ***Reviewing Scenarios:*** Participants were presented with the four UNEP scenarios that are being used as a foresight tool to engage in systemic reflections and the exploration of potential challenges, opportunities, and options for action in Africa. Participants were invited to familiarize themselves with the four scenarios and consider how to contextualize each of the thematic areas for the region as well as to refine and validate the scenarios.
3. ***Exploring Changes:*** participants were invited to a second discussion on exploring emerging changes under each of the four scenarios with the view to analyzing the potential for disruption of the state of the environment, planetary health and human well-being.
4. ***Identifying Policy Interventions:*** Action oriented strategic reflection to identify how each of the main changes impact sustainable development in the region and to propose specific policy interventions that could be implemented to address changes that could negatively impact sustainable development.

The 2-day workshop in Africa (6-7 November 2023) followed Chatham House Rules. It consisted of a series of facilitated breakout sessions during which participants discussed emerging changes in context of the four UNEP scenarios, shared their views on pathways through which those scenarios could possibly materialize and reflected on how this could affect the transition towards a sustainable future of improved planetary health and human wellbeing.

The knowledge and insights produced through the workshop – the collective intelligence generated through the discussions – together with the results of the Delphi survey and Global Sensemaking exercises, will ultimately culminate in a Global Report to be published in 2024 that aims to inform deliberations of the Summit of the Future.

## Annex 2 - Participants list

<b>Name</b>	<b>Institution</b>
Alana Poole	UN Futures Lab
Alex Awiti	CIFOR-ICRAF
Alexandra Said	United Nations Environment Programme
Anderson Kehbila	Stockholm Environment Institute,
Andrea Hinwood	United Nations Environment Programme
Anne-Sophie Stevance	International Science Council
Caroline Kisia	SHOFCO
Charles Sabukeera	United Nations Environment Programme
Cheikhouna Diagne	Cosmos service 3s
Dafne Capisani	UN Resident Coordinators / Development Coordination Office
Denis Sonwa	CIFOR-ICRAF
Dina Abdelhakim	United Nations Environment Programme
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Éliane Ubalijoro	CIFOR-ICRAF
Elizabeth Muriithi	International Development Research Centre
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James Waddell	International Science Council
Jason Jabbour	United Nations Environment Programme
Judy Omumbo	Science for Africa Foundation
Kabura Ciugu	Science for Africa Foundation
Kanako Okano	United Nations Environment Programme
Katarina Kuai	UN Resident Coordinators / Development Coordination Office
Lesley Green	University of Cape Town
Makarius Victor Mdemu	Institute of Human Settlements Studies
Million Belay	Alliance for Food Sovereignty Africa
Minke Meijnders	UN Global Pulse
Philip Thigo	Thunderbird School of Global Management
Nadia Ouedraogo	United Nations Economic Commission for Africa (UNECA)
Salina Abraham	CIFOR-ICRAF
Santiago Rodriguez Goicoechea	UN Resident Coordinators / Development Coordination Office
Sarah Cheroben	United Nations Environment Programme

Sheila Ochugboju	Alliance for Science
Sinclair Fergus	CIFOR-ICRAF
Susan Gichoga	Science for Africa Foundation
Tiina Neuvonen	UN Global Pulse