1 Identification

1.1 Session ID: 170113

1.2 Session Title: Multifaceted Impact of Sudan War on Sciences, Education, and Scientific Research; Managing Challenges and Building Resilience.

1.3 Session Date and Time: 17th September, 13:00 h ET

1.4 Convenor name: Salwa A. Musa.

2 Speakers and Panelists

Please list all speakers and panellists, including their names, titles, and organisational affiliations.

2.1 Speaker 1:

2.1.1 **Name**: Intisar Soghayroon & Akram Alkalifa.

2.1.2 **Organisation name**: Arab League Education Culture and Science Organization (ALECSO) & University of Khartoum.

2.1.3 **Type of organization:** Academic institutions/research center/ professional associations.

2.1.4 **Title of the presentation:** Shattered Classrooms: The Impact of the Sudan War on Education

2.1.5 Summary of the presentation:

Since the war in Sudan began in April 2023, the education sector has encountered unprecedented challenges, significantly disrupting both basic and higher education, as well as scientific research. This presentation will emphasize the extensive impact of the conflict on educational and research institutions, particularly the closure of over 10,000 schools, which has interrupted the education of 19 million children. Universities have also been deeply affected, with considerable damage and the displacement of staff and students. The conflict has disrupted 157 higher education institutions, affecting around 700,000 students and researchers.

In response to these challenges, the presentation will present strategies aimed at bolstering the resilience of education systems, higher education institutions, and research organizations. Proposed solutions include implementing emergency education programs, creating safe learning environments, and integrating digital learning platforms to ensure educational continuity. The presentation will also advocate for international

support and collaboration to rebuild and strengthen Sudan's education infrastructure. By adopting these approaches, the long-term effects of the conflict can be mitigated, fostering a more resilient and inclusive education system.

2.2 Speaker 2

2.2.1 **Name**: Ahmed Hassan Fahal

2.2.2 **Organisation name:** University of Khartoum

2.2.3 **Type of organisation:** Academic institutions/research center.

2.2.4 **Title of the presentation:** Mycetoma crisis in Sudan: Collateral damage of the ongoing war.

2.2.5 Summary of the presentation:

The ramifications of the Sudan war have reverberated profoundly, creating a cascading effect that has severely compromised the Mycetoma Research Centre's ability to fulfill its critical mission. The catastrophic impact on patients' care is multifaceted, ranging from the scarcity of essential medications to the disruption of treatment protocols. Patients, who were once beneficiaries of comprehensive and free management, now face uncertainty and a lack of access to the vital care they desperately need.

Equally distressing is the profound setback to mycetoma research. The MRC, previously at the forefront of groundbreaking studies and innovative approaches to combat mycetoma, now finds its laboratories silenced and its research initiatives abruptly halted. The war has not only disrupted ongoing projects but has also undermined the potential for future discoveries that could have brought relief to millions suffering from this neglected tropical disease. International collaboration, a cornerstone of the Mycetoma Research Centre's success, has also fallen victim to the conflict. The breakdown of international collaboration threatens to exacerbate the challenges faced by researchers and healthcare professionals striving to develop effective prevention, diagnosis, and treatment strategies. Despite the current challenges, the Mycetoma Research Centre remains a symbol of resilience and determination. Our collective responsibility is to ensure that this center, and others like it, receive the support they need to weather this storm and continue their vital work in the service of global health.

2.3 Speaker 3:

2.3.1 **Name:** Suad M. Sulaiman

2.3.2 **Organisation name:** Sudanese National Academy of Sciences (SNAS)

2.3.3 **Type of organization:** Academic institutions

2.3.4 **Title of the presentation:** A Multi-Disciplinary One Health Approach for the Rehabilitation of War Impact in Sudan.

2.3.5 Summary of the presentation:

The ongoing conflict in Sudan has severely impacted human, animal, and environmental health, prompting the Sudanese National Academy of Sciences to seek international support for local researchers to address these challenges. A One Health approach, which recognizes the interconnectedness of these health domains, is essential for effectively tackling the multifaceted issues arising from the war. Key components of this approach include rebuilding healthcare infrastructure, implementing infectious disease control, providing mental health support, restoring veterinary services, and addressing environmental damage. Multidisciplinary collaboration is crucial, involving healthcare professionals, veterinarians, environmental scientists, social scientists, and policymakers to ensure coordinated response efforts. The action plan encompasses comprehensive assessments of health impacts, capacity building, community engagement, resource mobilization, and ongoing monitoring and evaluation of initiatives. By adopting a holistic One Health strategy, Sudan can address the complex ramifications of conflict, fostering resilience and sustainable development for a healthier future.

2.4 Speaker 4:

2.4.1 **Name:** Salwa A. Musa

2.4.2 **Organisation name:** AL-Neelain University & Sudan Childhood Diabetes Association.

2.4.3 **Type of organisation:** AL-Neelain University: Academic institutions/research center & Sudan Childhood Diabetes Association: NGOs

2.4.4 **Title of the presentation:** An Integrated Approach to Maintain Resilience During Wartime: Experiences from Pediatric Diabetes Clinics.

2.4.5 Summary of the presentation:

Managing health conditions amidst the chaos of war demands unwavering determination and exceptional resilience. Sudan's current war has severely compromised access to specialized care, leading to shortages of medical supplies, and the displacement of healthcare professionals— all of which pose a grave threat to vulnerable groups like children with diabetes. Addressing the unique needs of those

children, especially in resource-limited settings like Sudan, adds more challenge and thus requires a comprehensive and adaptive approach that integrates multiple efforts. The ability to adapt to such adversity, highlights the spirit of those managing diabetes in conflict zones, showcasing their courage in overcoming all challenges. In the challenging landscape of humanitarian crises, the Sudanese Childhood Diabetes Association (SCDA) has pioneered a resilient and innovative approach to pediatric diabetes care. This model stands as a beacon of hope, significantly transforming healthcare delivery for children with diabetes during the conflict. Key components of SCDA's approach include utilizing locally available resources, fostering coordination and collaboration with various stakeholders, managing supply chains to secure essential medications, and providing training and capacity-building initiatives for healthcare workers. The initiatives undertaken by SCDA during the conflict have yielded significant results, ensuring crucial care and support for children with diabetes in the affected areas.

2.5 Speaker 5:

2.5.1 **Name:** Manzoul Assal

2.5.2 **Organisation name:** Chr. Michelsen Institute, Bergen, Norway

2.5.3 **Type of organization**: Academic institutions

2.5.4 **Title of the presentation:** Sudan 2023 War and Brain Drain in Higher Education Institutions

2.5.5 Summary of the presentation:

The 2023 war in Sudan has damaged higher education institutions, exacerbating an already critical brain drain. The ongoing violence has resulted in the displacement of many academics, researchers, and skilled professionals who are integral to the educational system. These individuals, facing threats to their safety and an increasingly uncertain future, are leaving Sudan in growing numbers. The impact of this is profound and leads to a significant loss of expertise and intellectual capital that is essential for the functioning and advancement of higher education. The departure of seasoned professors, researchers, and administrators cripples the ability of institutions to maintain academic standards, continue research projects, and offer specialized programs. The loss of these professionals also disrupts mentorship and knowledge transfer, weakening the development of future scholars and leaders in various fields. Furthermore, the brain drain undermines the potential for recovery and development in Sudan. With the flight of educated professionals, the country is losing not only the immediate contributions of these individuals but also the long-term benefits of a robust and dynamic educational sector. The weakening of this sector diminishes the country's capacity to rebuild after the conflict, leaving its future development in jeopardy.

2.6 Speaker 6:

2.6.1 **Name:** Hassan Bashir Mohamed.

2.6.2 **Organisation name:** AL-Neelain University

2.6.3 **Type of organization:** Academic institutions/research center.

2.6.4 **Title of the presentation:** The Social Costs of the Sudan War and its Impact on Human Development:

2.6.5 Summary of the presentation:

This discussion addresses the impact of war in Sudan on the health, education, and scientific sectors. The most serious costs of war are the social costs represented in the loss of life, injuries, disabilities, diseases, miscarriage and death of fetuses, psychological disabilities, the costs of losing public and higher education, homelessness, displacement, and migration without sponsorship or regional or international care, in addition to the risk of famine that threatens more than half of the population of Sudan. We are concerned here with exposure to these costs from two aspects: The first is: The cost of social war falls within the costs of external factors (Externalities) that are not subject to direct economic measurement, as some of its costs are inestimable, and Second: The costs of business disruption, the health sector institutions going out of work, the disruption of the educational process, the decline in production and productivity. To clarify the magnitude of the social costs, we focused more on the aspects of health care due to its direct connection to life. In conclusion, it is clear that war has had far-reaching consequences on healthcare delivery systems accessibility; educational opportunities; research capacity, and development efforts across sectors like agriculture, energy production etc.

2.7 Speaker 7:

2.7.1 **Name:** Adil Haseeb.

2.7.2 **Organisation name:** Renewable Energy Centre- University of Science and Technology, Omdurman - Sudan

2.7.3 Type of organization: Academic institutions/research center.

2.7.4 **Title of the presentation:** Possible Role of Renewable Energy towards Resolution of Conflict and Establishing a Sustainable Peace in Sudan:

2.7.5 Summary of the presentation:

Sudan's national cultural tapestry is woven from a multitude of tribal and ethnic groups. The two primary groups that shape the country's landscape are: 1) The "Nomadic Pastoralists" who are nomadic communities that traverse the vast Savannah and

Saharan regions of Sudan, accompanied by their livestock. They have adapted to a mobile lifestyle, persistently facing conflicts due to resource competition and territorial disputes. Historical grievances and marginalisation have contributed to their challenges and resulted in build-up of militias. 2) The "Sedentary Agriculturalists" who, in contrast, are the sedentary population that resides mostly along the Nile River and rain-fed areas. They engage primarily in agricultural practices. These two distinct ways of living have created an imbalance in development, leading to the present war. The lack of an overall national plan for equitable service distribution has fuelled militia buildup and antagonistic stances. Addressing these disparities and fostering understanding between the two groups is essential for stopping the war and building up sustainable peace. Renewable energy, given the huge solar resources of Sudan, could play a crucial role. Solar energy can address the displacement crises, assist in creating adequate shelters, provide medical care, and facilitate food transport and storage. Additionally encouraging nomads to settle using solar power can foster development and lasting peace in the country. International organizations, intergovernmental bodies, and aid agencies should actively support the use of renewable energies during and beyond Sudan's current predicament.

2.8   Speaker 8:

2.8.1   **Name:** Nuha Abdel Hafiz

2.8.2   **Organisation name:** University of Khartoum

2.8.3   **Type of organization:** Academic institutions/research center.

2.8.4   **Title of the presentation:** The impact of civil wars on the Sudanese Archaeology

2.8.5   Summary of the presentation:

The presentation aims to explore the impact of the April 15 war on archaeologists and archaeological research activities in Sudan, by analyzing three key periods: before, during, and after the conflict. Historically, Sudan's archaeology sector has been overshadowed by ongoing conflicts, many of which are rooted in issues of cultural identity. Despite the critical role archaeologists could play in addressing these cultural tensions, their involvement has been limited, even though they have access to valuable material evidence. The war caused significant disruptions, leading to the displacement of researchers and the halting of numerous archaeological projects, even in areas not directly affected by the conflict. Sudanese archaeologists, despite the many challenges and with the support of international partners, they concerted to protect and document the Sudanese heritage, which suffered damage to some archaeological and historical buildings and the looting of some valuable collections. The paper employed a deductive approach, gathering data via a questionnaire distributed to Sudanese archaeologists and supported by a review of relevant literature, particularly on cultural identity. The findings emphasise the need for archaeologists to focus on cultural identity issues in the post-war period, as these have been central to past and ongoing conflicts. Prioritising the

study and documentation of Sudan's cultural heritage is deemed crucial for national reconstruction and fostering unity among the Sudanese people.

3 Content

3.1 Session Abstract (max. 500 words):

Since the onset of the conflict in Sudan on April 15, 2023, the country has descended into one of its most severe crises in modern history. Millions of people have been displaced, losing their homes and jobs, and critical infrastructure has suffered extensive damage. The disruption of basic needs and essential services has further intensified the plight of the population. Amid this turmoil, the science and education sectors have faced significant security threats, with scientific, educational, and research institutions becoming direct or indirect targets of the violence.

The impact of war on sciences, scientific research, and institutions is multifaceted, influencing the aims, methods, and outcomes of scientific endeavors in significant ways. Educational institutions and research facilities have been subjected to attacks, often deliberately, or as a result of collateral damage which has caused a severe disruption to the learning environment, making it nearly impossible for educators to continue their work. More than just physical damage, the conflict has severely compromised the future development of the country, as science, education, and scientific research are key pillars for rebuilding a war-torn society. With limited access to quality education, the potential for future generations to contribute to the country's progress is under threat.

In addition to the destruction of infrastructure, scientists face many difficulties including but not limited to direct threats to their lives due to an unsecured environment. The presence of armed groups or military forces near these institutions exacerbates the fear and intimidation felt by scientists, further hindering academic activities. This environment of instability not only endangers lives but also disrupts the learning process and discourages individuals from pursuing their careers, disrupts networks and research activities, and leads to isolation from the international community, all leading to displacement and brain drain as a result. The long-term effects include a significant delay in the intellectual and social development of Sudan's youth, who are unable to access safe learning environments. Additionally, the targeting of educational institutions undermines the capacity for scientific research and innovation, which are crucial for the country's recovery and future stability. The loss of trained scientists due to displacement or death further weakens an already fragile system.

In the face of these challenges, safeguarding scientists, educational institutions, and their facilities during conflicts is critical. Protecting the right to education in times of war is essential not only for the immediate well-being of students but also for fostering long-term stability in affected communities. Efforts must be made to ensure that educational institutions remain safe zones, free from military occupation and violence. International bodies, governments, and humanitarian organizations must prioritize the protection of educational spaces and advocate for the respect of academic institutions as neutral grounds during conflicts.

Moreover, rebuilding damaged educational infrastructure and supporting the return of displaced researchers are essential steps for post-conflict recovery. By investing in the protection and resilience of education systems, Sudan can begin to heal from the devastation of war and lay the groundwork for a more stable and prosperous future. The safeguarding of education is not just a matter of immediate survival; it is a long-term investment in the peace and development of the nation.

3.2 Project Objectives:

List the key objectives your session or project aimed to achieve.

3.2.1 Objective 1: Adress and identify challenges:

This session would aim to address the unique challenges presented in the war environments faced by scientists and scientific research in conflict zones and examine the logistical aspects of conducting education and science amidst such turmoil. Additionally, explore how these difficulties affect various aspects of the education.

3.2.2 Objective 2: Policy and Advocacy:

Formulate recommendations for policymakers to support scientific activities, services, and research in conflict zones, including funding, infrastructure development, and protection for researchers and Advocate for the importance of scientific research and activities in understanding and addressing the impacts of war, and in contributing to post-conflict recovery and development.

3.2.3 Objective 3: Develop Collaborative Networks:

Foster collaborations among scientists and scientific communities from various disciplines, humanitarian organizations, local researchers, and affected communities and encourage partnerships between institutions in stable regions and those in conflict zones to share resources, knowledge, and expertise. This session would bring together researchers, policymakers, humanitarian workers, and other stakeholders to discuss strategies for conducting effective solutions in these challenging contexts.

3.2.4 Objective 4: Enhance Research Capacity:

Provide training and resources to local scientists and institutions to enhance their capacity to conduct research and services under challenging conditions and explore the use of innovative technologies and methodologies that can facilitate research and scientific activities in war-affected areas.

3.3 Key Themes

Main themes and topics that were covered during the session. The same ones you selected when you submitted your original session proposal. Select from the following. Maximum three

- **One Health**
- **Education & Youth**
- **Development**

4 Planned Impacts of the Science and innovation presented in your session.

4.1 Contribution to the SDGs:

The SDGs provide a comprehensive framework for addressing the world's most pressing challenges and promoting sustainable development globally. Select the Goal/s that your project contributes to (max 3 SDGs)

3. **Good Health and Well-Being**: Ensure healthy lives and promote well-being for all at all ages.

4. **Quality Education**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

16. **Peace, Justice, and Strong Institutions**: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.

5 Contribution to the UN Summit of the Future:

5.1 Main challenges (max 200 words):

Main challenges and difficulties experienced in implementing the science to contribute to the Sustainable Development Goals and provide recommendations to address the same whole.

Several challenges and difficulties exist, particularly in a country facing socio-economic and political instability including the current war. Some of these challenges are:

1. **Resource Constraints**: Inadequate funding, especially in developing countries limit their capacity to invest in necessary infrastructure and support innovative projects that could contribute to the SDGs, especially in conflict time.
2. **Access to Technology**: Lack of access to advanced technologies could limit the conduction of research and educational activities and implementation of science that contribute to SDGs.
3. **Policy and Governance Issues**: The absence of supportive policies, political instability, and weak governance structures can hinder the integration of science into sustainable development initiatives.
4. **Fragmented Efforts**: Lack of coordination among various stakeholders during wartime, including governments, academia, the private sector, and civil society can lead to duplicated efforts, inefficient use of resources, and missed opportunities for collaborative solutions.
5. **Capacity and Knowledge Gaps:** Insufficient Expertise and shortage of skilled scientists, and technical experts due to war brain drain or financial burdens limit the ability to conduct research and to translate scientific findings into actionable policies.

5.2 Additional goals (max 200 words)

1. Comprehensive Understanding of Challenges and Solutions:
A detailed analysis of the logistical, ethical, and methodological challenges specific to conducting scientific services and research in war-affected zones, along with practical solutions and best practices.
2. Strengthened Networks: Established or strengthened networks of scientists, researchers, institutions, and organizations committed to supporting scientific activities and research in conflict zones, facilitating ongoing collaboration and resource sharing.
3. Enhanced Capacity in Conflict Zones:
Improved capabilities of local scientists, researchers, and institutions through training programs, access to resources, and the development of innovative methodologies suited to war-affected environments.
4. Ethical Practices: Adoption of robust ethical guidelines and practices that ensure research is conducted responsibly, with respect for the rights and well-being of affected populations.
5. Policy and Funding Support: Concrete policy recommendations and advocacy strategies to secure funding and support from governments, international organizations, and private entities for scientific research and activities in conflict zones.
6. Documentation and Dissemination of Findings: Compilation and dissemination of the workshop findings, including a report summarising key discussions,

recommendations, and action plans, which can be shared with broader scientific and policy communities.

5.3 Integration: economic, social and environmental (max 500 words):

The steps being taken to integrate the three dimensions of sustainable development (economic, social, and environmental) and share best practices where available and how activities are being designed and implemented to reflect such integration.

The integration of economic, social, and environmental dimensions is essential for sustainable development, particularly when addressing the challenges in conflict zones. Successful integration requires collaboration across different sectors—government, community and policymakers, civil society, and academia. These partnerships ensure that diverse perspectives and expertise contribute to solutions. In Sudan, during wartime, several steps have been taken by some societies to incorporate these dimensions into the context of scientific activities, ensuring that research and development efforts align with the broader goals of sustainability despite the ongoing conflict. To ensure that this integrated efforts are effective, robust monitoring and evaluation mechanisms needs to be implemented.

1. **Economic integration:**
   - Resource Allocation: Prioritizing the resources available to be directed to essential scientific activities and enhancing international aid and partnerships to fund critical research and infrastructure.
   - Capacity Building: Investing in local expertise and skills development to enable scientists and educators to conduct research and teaching with minimal external dependency.
   - Sustainable Livelihoods: Implementing research projects that directly contribute to the local economy, such as sustainable agriculture, renewable energy, and small-scale industries that can operate during conflict.
2. **Social Integration:**
   - Community Engagement: Actively involving local communities in the participation of active scientific that is relevant to their lives.
   - Education and Awareness: Enhancing access to education by adapting teaching methods to conflict conditions, such as using digital platforms. This ensures continuity in education and fosters social cohesion.
   - Best Practice Example: In some Sudanese states, mobile classes, and educational units have been deployed to reach students in remote or conflict-affected areas. These units not only provide education but also promote psychological well-being by sharing their difficulties and challenges and engaging those students in many social activities.

3. **Environmental Integration:**
   - Promoting research and activities that minimize environmental impact, such as studies on renewable energy, which are crucial in conflict zones where natural resources are often overexploited.
   - Disaster Risk Reduction: Integrating scientific research with efforts to mitigate the environmental impacts of conflict, such as deforestation or pollution, which can exacerbate humanitarian crises.
   - Conservation Efforts: Protecting and restoring ecosystems that are vital for the survival of local communities, ensuring that environmental sustainability is a priority even in times of conflict.
   - Best Practice Example: In Sudan, efforts to utilize renewable energy in many areas and water management projects have been initiated to secure healthy resources in the conflict areas.

So, in conclusion, the integration of economic, social, and environmental dimensions into scientific activities in conflict zones is a complex but essential task for sustainable development. By adopting holistic policies, fostering cross-sector collaboration, promoting sustainable practices, and implementing inclusive and environmentally conscious initiatives, we can ensure that progress in one area does not undermine efforts in another. The steps taken in Sudan and other conflict-affected regions demonstrate that it is possible to advance sustainable development even in challenging conditions by designing and implementing activities that reflect this integration, engaging communities, and sharing best practices to guide future efforts. Sharing best practices and continuously monitoring and evaluating these efforts are critical to achieving a balanced and sustainable future.

5.4 Impact on the 2030 Agenda (max 1000 words):

A success metric for your project is primarily in how it delivers for all persons in our societies. Describe how other principles of the 2030 Agenda, for example, respect for all human rights, gender equality, the principle of Leaving No One Behind, non-discrimination, etc, have been mainstreamed in your science project.

More info on: 2030 Agenda: https://sdgs.un.org/2030agenda

The 2030 Agenda for Sustainable Development is built on principles that emphasize inclusivity, human rights, gender equality, and non-discrimination, encapsulated in the overarching commitment to "Leave No One Behind." Our session has been designed with these principles at its core, ensuring that our efforts contribute not only to scientific needs but also to the creation of an equitable, and inclusive society.

- **Respect for All Human Rights.**

- **Ethical Research Practices**: By adhering to the highest ethical standards in our research, ensuring informed consent, privacy, and the protection of vulnerable populations.

- **Access to Knowledge and Innovation**: By sharing knowledge and science among our community, we make our scientific findings and innovations accessible to all, particularly underserved communities. This includes community outreach programs and the development of low-cost technologies that can be utilized in resource-poor settings.

- **Gender Equality:** Gender equality is a fundamental principle that is reflected in the outcomes we aim to achieve.

- **Empowerment Programs**: In addition to our scientific work, we run parallel initiatives aimed at empowering youth and communities such as community-based projects that support leadership in science and technology.

- **Leaving No One Behind**: The principle of Leaving No One Behind is central to our mission ensuring that our scientific contributions benefit all segments of society, particularly those who are most vulnerable like children.

- **Non-Discrimination:** This ensures that all individuals, regardless of their background, are treated fairly and have equal access to the benefits of our scientific work.

- **Diverse and Inclusive Teams**: Built a diverse and inclusive project team that reflects the communities we serve. This includes recruiting individuals from different ethnic, racial, and socio-economic backgrounds.

- **Accessibility**: We are committed to making our all projects accessible to all individuals. Ensuring that our publications and materials are available in accessible, and developing technologies that are designed to be used by people with varying abilities.

- **Promoting Social Inclusion and Equity**: By fostering community Engagement and empowerment and addressing social determinants of Health and well-being.

- **Next Steps and Areas for Further Research:** To continue advancing the principles of the 2030 Agenda in our project, we plan to undertake the following next steps:

- **Strengthen Community-Based Approaches**: We will enhance our community-based approaches by fostering stronger partnerships with local organizations and stakeholders. This will help us better understand and address the specific needs of the communities we serve, ensuring that our solutions are both effective and sustainable.

- **Foster Innovation in Inclusive Technologies**: We will continue to innovate in developing technologies that are accessible to all, with a particular focus on underserved populations. Future research will explore how emerging

technologies can be leveraged to promote inclusivity and equity in sustainable development.

- **Increased Funding for Inclusive Research**: Securing additional funding to support our gender-responsive, human rights-based, and inclusive research initiatives will enable us to scale up our efforts and reach more communities.

- **Partnerships and Collaborations**: Building stronger partnerships with other organizations, including governments, NGOs, and the private sector, will enhance our capacity to implement and sustain our projects. Collaborative efforts will also facilitate the sharing of best practices and innovative solutions.

- **Capacity Building and Training**: Investing in capacity building and training for our team and local partners will ensure that we continue to develop and implement projects that align with the principles of the 2030 Agenda. This includes training on inclusive research methodologies, analysis, and community engagement strategies.

In conclusion, by mainstreaming the principles of respect for human rights, gender equality, non-discrimination, and the commitment to Leaving No One Behind, our session not only contributes to scientific and technological advancements but also to the broader goals of addressing social justice, equity, and sustainable development. These principles are integral to the success of our project and the realization of the 2030 Agenda.

Please select also the transition relevant to your science project:

(4) education

More info on Six transitions: https://unsdg.un.org/sites/default/files/2023-09/Six%20Transitions%20English.pdf

6 Forward-looking Statement:

6.1 Financial aspects

Why giving $ 1 million to your project will turbo boost the achievement of the SDGs. Three bullets (50 words/bullet).

1. **Rebuilding Education Infrastructure:** A $1 million investment will allow us to rebuild some of the damaged institutions and provide safe learning environments for displaced students. This directly supports SDG 4 (Quality Education) by restoring access to education for over 19 million children, ensuring a brighter future for Sudan's next generation.

2. **Empowering Future Innovators:** The funding will facilitate digital learning platforms and emergency education programs, empowering youth and researchers to continue their education and scientific work despite conflict. This aligns with SDG 9 (Industry, Innovation, and Infrastructure), driving innovation and rebuilding the nation's scientific capacity for sustainable development.

3. **Enhanced Collaboration and Capacity**: With $1 million, we can strengthen partnerships, build local capacities, and support collaborative efforts, facilitating international collaboration and partnerships can provide professionals in war-affected zones with access to resources, support, and opportunities for collaboration, which can improve retention rates and foster resilience.

6.2 To further advance your science project, you will need:

Please select an option and develop it further (50 words). Multiple selection is possible.

- **Establish Partnerships and Collaborations**: **Building** strategic partnerships with academic institutions, community leaders, and local organizations will amplify our project's impact. Collaborative efforts will enhance resource sharing, drive innovation, and enable knowledge exchange, ensuring that our solutions are more effective and widely implemented, thus accelerating progress toward the SDGs.

7 Conclusions (max. 300 words)

Provide a concluding summary on how science contributes to achieving the SDGs, incorporating policy recommendations.

Highlight any new or emerging issues identified during the session, suggest possible next steps or areas for further research and discussion, and outline the support needed to advance science and innovation in your field.

Science is essential in achieving the Sustainable Development Goals (SDGs) by providing the knowledge, technologies, and strategies needed to tackle global challenges. For science to effectively contribute to the SDGs, it requires a supportive policy environment, adequate resources, and strong networks of collaboration.

Policy Recommendations

- Increase investment in science, particularly in underfunded regions, to enhance research capabilities.

- Develop policies that integrate scientific research into sustainable development initiatives.

- Foster global partnerships to share knowledge, resources, and best practices.

- Invest in education and training programs to cultivate the next generation of scientists, particularly in low-resource areas.

Emerging Issues

Conflicts, such as the war in Sudan, severely affect the scientific community by causing brain drain and disrupting research. Targeted efforts are required to protect and rebuild scientific institutions in conflict-affected regions.

Next Steps and Research Areas

- Develop resilient research systems that can withstand crises like conflicts and natural disasters.

- Explore sustainable innovations in energy, agriculture, water management, and health that address multiple SDGs.

- Investigate how to integrate scientific research into policymaking to enhance the impact of science on achieving the SDGs.

Support Needed

To advance science and innovation for the SDGs, financial support is critical, particularly in areas directly contributing to the goals. Governments must create policies promoting scientific research, while collaborative networks among scientists, policymakers, and industry leaders should be strengthened. Capacity-building efforts are also necessary to ensure that all regions can contribute to and benefit from scientific advancements.

With these measures, science can continue to play a transformative role in building a sustainable and equitable future.