



SAPA

**Sudanese American
Physicians Association**

RE-IMAGINING SUDAN'S HEALTH SYSTEM IN CONFLICT

**Towards a Resilient, Conflict-
Responsive and Inclusive Policy Agenda**

WORKSHOP

Technical Report

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For general communication about SAPA:
sapa@sapa-usa.org

Website: www.sapa-usa.org

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About SAPA: The Sudanese American Physicians Association (SAPA) is a humanitarian, non-profit, and non-political organization registered in the United States, Sudan, Uganda, and Chad.

Established in 2019 as a membership-based humanitarian organization consisting of Sudanese American physicians, SAPA utilizes its substantial connections with local and regional healthcare providers in Sudan to deliver critical aid to its most vulnerable communities.

Since the outset of the conflict in Sudan in April 2023, SAPA has been on the frontlines to ensure that healthcare services are able to meet the growing health needs in impacted areas.

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Executive Summary

The Reimagining Health System in Sudan workshop provided critical insights into the challenges, opportunities, and necessary interventions for improving Sudan's healthcare landscape. Discussions emphasized the importance of decentralized governance, workforce retention, community engagement, and digital innovation as key drivers of a resilient health system.

The workshop highlighted a phased approach that ensures immediate needs are met while building a foundation for a sustainable and equitable health system. In the immediate term (emergency response and recovery), it is crucial to expand community-led mortality tracking initiatives to improve data accuracy on war-related deaths, which will enhance situational awareness. Efforts should focus on increasing access to essential healthcare, food, and shelter for affected populations, while strengthening coordination mechanisms among humanitarian actors to ensure the efficient distribution of resources.

Additionally, improving digital health data collection will support real-time monitoring of health crises and enable a more agile response.

Over the medium term (health system strengthening), trust-building initiatives are essential to encourage local participation in health data collection, fostering a collaborative approach.

Workforce retention strategies, such as offering financial incentives and capacity-building programs, should be prioritized to maintain a skilled health workforce.

Engaging diaspora health professionals to support telemedicine, training programs, and medical campaigns will further strengthen the health system. Strengthening collaboration among public, private, and international health organizations will drive necessary policy reforms and contribute to the long-term sustainability of the healthcare system.

Moving forward, the integration of humanitarian, development, and peacebuilding approaches is vital to ensuring equitable access to healthcare services, improving emergency response mechanisms, and fostering a more resilient health system for Sudan.

This report serves as a roadmap for future action, guiding stakeholders in leveraging resources, fostering collaboration, and implementing sustainable solutions to address Sudan's ongoing healthcare crisis.

Introduction

Sudan has been grappling with prolonged conflict and instability, which has severely undermined its health system, leaving millions of people with limited access to essential healthcare services. The ongoing war has exacerbated existing challenges, including weakened infrastructure, shortages of medical supplies, the displacement of healthcare workers, and the ever-increasing demand for healthcare across the country.

The Sudanese American Physicians Association (SAPA) is boldly planning to reimagine and restructure the nation's health system. This initiative considers the increasing, worsening, and expanding conflict in Sudan, its detrimental effects on the health system, and – more importantly – the current and missed opportunities to (re)build a health system designed to withstand protracted conflict. SAPA recognizes that sustainable health system reform must be rooted in community-driven initiatives that empower local actors and prioritize the needs of the most vulnerable populations. By building on grassroots efforts and leveraging its extensive network of healthcare professionals, SAPA aims to convene an agreement to build a resilient and inclusive health governance model that can withstand the pressures of conflict and support long-term recovery and development.

The strategic vision of SAPA centers on scaling up health and nutrition interventions across life stages,

advocating for data-driven policies, and establishing resilient service delivery models in collaboration with international and local stakeholders. A significant portion of the workshop will highlight SAPA's commitment to overcoming systemic challenges, including limited institutional capacity, inadequate resources, and outdated health protocols. SAPA seeks to address these bottlenecks by empowering community-based health services, establishing evidence-based frameworks, and reinforcing multisectoral and grassroots partnerships.

The workshop “Re-imagining Sudan's Health System in Conflict” served as a crucial platform for this re-envisioning process. It brought together key stakeholders – at bilateral, multi-lateral, government, and civic levels – to develop strategies that integrate policy research, stakeholder engagement, and logistical planning. Through this workshop, SAPA seeks to lay the foundation for a health system that addresses the immediate needs of the conflict and sets the stage for a more equitable and sustainable future for all Sudanese people.



By leveraging SAPA's established humanitarian coalition and community-based strategies, this workshop will also address key systemic risks, such as political instability, resource scarcity, and donor fatigue, while exploring opportunities for advocacy and capacity building.

Through collaborative dialogue, this initiative seeks to establish a cohesive action plan, reinforcing SAPA's role as a pivotal actor in advancing healthcare resilience and localization within Sudan's crisis-impacted regions.



Aim, Objectives, and Expected Outputs

This initiative aims to re-envision a decentralized health system amid the ongoing conflict in Sudan, leveraging SAPA's strategic focus on designing local health solutions with community-led health governance.

The workshop will integrate insights from policy research, key personnel discussions, and service delivery operational planning across community, multi-lateral, and bi-lateral levels.



The specific objectives of the workshop are:

1. To convene policymakers, academics, and civil society leadership to co-develop a new policy agenda for health system resilience in Sudan.
2. To foster inclusive, community-driven local health solutions and health governance, building on best practices currently operational across the country.
3. To inform the design of a new model for a conflict-resilient health system in Sudan that responds to the immediate and long-term threats to population health and wellbeing in Sudan – through both formal and informal health delivery channels.



The expected outputs are:

1. A refined health system blueprint that integrates community-driven health responses, decentralized decision-making, conflict-sensitive strategies, and innovative financing models.
2. New partnerships and collaborations for the localization of the Sudanese health system through both the consultative invitations and the in-person workshop.
3. Robust and aligned set of goals, points for collaboration, and accountability measures that strengthen transparency, effectiveness, and cost-effectiveness in health service delivery.

Technical Preparation

There are four main milestones for preparing the workshop's technical content:

1. Consultation Process: this is a very early stage aimed at gathering insights from targeted stakeholders to refine strategies under six thematic areas:

- *Health System Leadership and Governance*
- *Health Workforce and Capacity*
- *Health Service Delivery*
- *Health Information Reform*
- *Access to Medicines*
- *Health Financing*

The consultation was conducted virtually through Google Meet and Zoom to allow participation from different regions. Then the recorded calls were transcribed, analyzed thematically and compared with literature insights, and utilized to construct and refine workshop themes/agenda.

2. Identification of themes: although themes were pre-identified based on the health system building blocks, cross-cutting themes emerged during the consultation process. Therefore, the final workshop themes and sub-themes were:

Themes	Sub-themes
Theme 1: Governance and Decentralization in Health Systems	1.1. Policy Gaps and Implementation Barriers. 1.2. Coordination and Accountability Mechanisms.
Theme 2: Health Workforce Development and Capacity Building	2.1. Addressing Workforce Shortages. 2.2. Skill Development and Retention Strategies.
Theme 3: Community Engagement and Accountability	3.1. Community-Led Health Initiatives. 3.2. Accountability Frameworks for Community Initiatives.
Theme 4: Technology and Innovation in Health Systems	4.1. Digital Tools for Capacity Building. 4.2. Leveraging Data for Decision-Making.
Theme 5: Health for Peace and Stability	5.1. Health as a Tool for Peacebuilding. 5.2. International and Local Partnerships for Peacebuilding.
Theme 6: Climate Change and Health Resilience	6.1. Environmental Stressors and Health Impact. 6.2. Adaptive Strategies for Environmental and Health Challenges.

Technical Preparation

3. **Workshop agenda:** program timetable was drafted to address the identified themes based on the consultation analysis. The program consisted of eight sessions (six were reflecting the above-mentioned themes in addition to setting the scene session and group work exercise session) as well as opening and closing sessions. As the workshop aims to integrate insights from experts to re-envision Sudan's health system, sufficient time was allocated for panel discussion after each session (see Annex 4).

4. **Workshop materials:** based on the expertise and background of the participants, speakers for each session were selected and notified to prepare presentations. The general feature for the presentations is to be concise, reflecting the generic concepts and insights, and to provoke and ignite the discussion. Moreover, the guide for the group work exercise was drafted and tools were selected to get the maximum benefit from this session (see Annex 5).

Workshop Structure

This workshop composed of eight sessions as follows:

Sessions	Main Topics
Opening Session	Opening Remarks by the Organizers, and representatives
Session One	Overview of Sudan's Health system: Key challenges and agenda for reform
Session Two	Bridging Policy Gaps: <ol style="list-style-type: none"> 1. Bridging Policy Gaps for Effective Decentralized Health Governance. 2. Enhancing Coordination & Accountability in Sudan's Decentralized Health System. 3. Building Partnerships for Essential Health Services Delivery–Humanitarian, Development, and Peace Nexus Approach.
Session Three	Addressing Health Workforce Shortages in Sudan: Addressing Health Workforce Shortages in Sudan: Strategies for Attraction and Retention. Solutions for workforce challenges: Case Study Yale Sudan Partnership.
Session Four	Empowering Communities for Sustainable Health Initiatives & Accountability: with Case studies from SAPA – North Darfur team and Talawiet Organization for Development.
Session Five	Empowering Local Health Systems to Utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan: <ol style="list-style-type: none"> 1. The Role of Evidence in Shaping Health Response in Sudan. 2. Assessing Effects of Conflict on Health Using Remote Sensing & Open-Source Data Analysis.
Session Six	Leveraging Health for Peace and Stability in Sudan: Exploring Health Initiatives as Tools for Peacebuilding
Session Seven	Enhancing Sudan's Health Resilience Against Climate Change Impacts
Session Eight	Breakout Group Exercise: Enhancing Sudan's Health System through Community Engagement, Workforce Strengthening, Governance, and Technology incorporating cross-cutting themes of climate change, peacebuilding, and social cohesion
Closing Session	Inputs from FMOH, Open reflections, Remarks from EU ambassador, and closing remarks from partners' representatives, FMOH representatives, and SAPA leadership.

The approaches taken to achieve the workshop objectives are as follows:

Approach	Description
Presentations	Illustrating generic concepts and insights regarding each theme, and adding concerns to provoke and ignite the discussion.
Expert Panel Discussions	Technical discussions were conducted across the whole workshop sessions through Q&As, commentaries from participants and panel, and reflections. Recommendations from the panel and participants were collected from these discussions throughout the workshop.
Group Work Exercise	Aiming to provide participants with an opportunity to collaboratively explore practical solutions to the key challenges facing Sudan's health system across four critical areas: community engagement, workforce strengthening, governance, and technology. In addition, this breakout group exercise will explore cross-cutting themes of climate change, peacebuilding, and social cohesion.

Workshop Sessions: Highlights and Insights

This section summarizes the key sessions, discussions, and outcomes from the workshop on reimagining the health system in Sudan. The workshop sessions focused on critical areas such as health governance, workforce challenges, community empowerment, and the role of technology in strengthening Sudan's healthcare system. The workshop is composed of eight sessions and group work exercises, the key points for each session are illustrated as follows:

Opening Session:

1. Remarks from SAPA president, Dr. Yasir Elamin:

After welcoming the esteemed participants, Dr. Yasir started by introducing the workshop rational as the impact of war in destroying hospitals and displacing population made the access to healthcare difficult. Moreover, he mentioned that our healthcare workers are struggling against overwhelming challenges, yet they continue to serve the community with incredible dedication. Furthermore, he highlighted the impact of the decision made by the US government to cut humanitarian aid which is already felt in our workshop, as some of our partners had to cancel their flights because of funding constraints.

Nevertheless, he put an emphasis on not losing sight of the future and concentrating on harnessing the opportunities to rebuild Sudan's health system that is to be community-led and decentralized. He also highlighted that health care is a fundamental right rather than a service, and health has become a tool for peace and stability. Therefore, Dr. Yasir encouraged participants to plan for the future and not to be consumed by the crisis alone, as he said "we should deal with the war as if it will last forever, and we should prepare for the day after as if the war will end tomorrow". Additionally, Dr. Yasir provided a snapshot of SAPA's achievements in the annual report of 2024, which will be launched on the 19th February 2025, as SAPA succeeded in serving hundreds of thousands of patients in 10 Sudanese states and Chad, and supporting more than 30 healthcare facilities and rehabilitating partially or completely 17 hospitals and clinics. Also, SAPA incentivized more than 1300 healthcare professionals in Sudan, and deployed 36 mobile clinics to respond to natural and man-made crises. SAPA provided hundreds of thousands of meals to those in hunger in Sudan and Chad.

In addition, Dr. Yasir acknowledged that those numbers are because of collective efforts from partners, volunteers, and healthcare professionals.

In conclusion, Dr. Yasir acknowledged the efforts of participants in dedicating time to attend the workshop, and also appreciated the efforts of the SAPA team (Sandra, Anmar, Tasneem, Faisal, Salim and all others) in organizing the workshop, in addition to a special thanks to Dr. Mona Ibrahim whose vision and dedication has been instrumental in shaping this workshop and thanks also extended to all Sudanese doctors from the ministry of health, Sudan Doctor Union, and dedicated public health professionals who have hoped for a stronger and more just healthcare system in Sudan. Finally, Dr. Yasir recognized and acknowledged Dr. Haitham Mohamed Ibrahim and his entire team (Dr. Almoghira, Dr. Reem and all health workforce in the ministry of health) of their leadership, resilience, and unwavering commitment to the Sudanese community.

2. Remarks from Sudanese Consul, Rwanda, Mr. Osama Abdelrahman:

On behalf of Mr. Khalid Mousa, the Sudanese Ambassador for Rwanda, Mr. Osama Abdelrahman started by welcoming all the workshop participants. Mr. Osama extended his gratitude to be part of this important workshop which aimed to support the health system in Sudan that has been exhausted by the ongoing war. Moreover, he highlighted that conducting this workshop is an evidence of Sudanese people's dedication and commitment towards serving their country. Mr. Osama trusted that the workshop will be productive and fruitful to provide actionable outcomes towards supporting Sudan's health system and serving the community.

3. Workshop Introduction and General Rules, Dr. Tasneem Abdalla:

Dr. Tasneem started by welcoming the participants that their presence and the workshop kickoff is a result of an enormous effort exerted by the organizing team. Also, she acknowledged and appreciated the continuous support from Dr. Yasir and Dr. Faisal, in addition to recognizing the efforts done by Dr. Sandra Saad who worked very hard to shape this workshop. Moreover, Dr. Tasneem gave a brief introduction about the workshop preparation process that has a pivotal milestone which is the consultation process. This milestone aimed to gather ideas, concerns and insights from most of the participants to aid in shaping workshop sessions and agenda.

On the other hand, Dr. Tasneem highlighted the general guidance for the workshop: to start and end the workshop days and the sessions as stated in the timetable, to encourage everyone to actively participate in the discussion and to respect others' opinion, to keep the phone silent or in vibrate mode to have the full attention of all participants, to freely and openly share your opinions and insights during the questions and answers of the panel discussion after each session. Lastly, she provided a quick round about the breaks and refreshment with their stated timing.

Session one: Overview of Sudan's Health system: Key challenges and agenda for reform, presented by Dr Imadeldin Ismail, WHO Sudan:

Dr. Imad started the session by thanking SAPA team efforts towards organizing this workshop that will support the country in developing the recovery and transition strategy for the health system during this critical time. Then his presentation serves in setting the scene for the two days through highlighting the current challenges and bottlenecks that should be looked at as opportunities for improvements. Also, Dr. Imad mentioned that most of these challenges existed even before the war and they have been aggravated by the devastating current situation.

Here is a summary of the key points highlighted:

- The effect of war on the increased number of fatality is remarkable, however, it is almost the second year of war and we are unable to estimate the number of fatality. Also, there are discrepancies between Federal Ministry of Health (FMOH) and open sources on the records for casualties: 3000 based on the health information system (HIS) and a range of 32,700 to 150,000 stated in the open sources. Moreover, it has been observed that health facilities are primary targets by the attacks (147 attacks on health facilities stated by the WHO).
- Another important point is that Sudan is lagging behind attaining universal health coverage target, as the indicators for UHC (mainly under five mortality rate) even before war were in stagnation. Also, when compared to other countries, attaining UHC is not solely dependent on the resources, but rather on how to spend them.
- Inequity is another major challenge that needs to be addressed while rebuilding Sudan's health system.

- Dr. Imad highlighted key challenges in Sudan's Health System disaggregated by building blocks:

- Governance & Accountability:

Lack of clear roles and responsibilities across governance levels that create confusion and affect accountability, weak decentralization due to weak local health capacity that will result in policy incoherence, limited private sector engagement coupled with poor regulatory mechanisms, and weak community system despite its huge contribution and potentiality.

- Health Workforce:

it should be acknowledged that frontline healthcare providers are facing hardships and struggles of attacks, and they spend prolonged periods of working without payments.

Moreover, the health workforce density is far less than the standards. Also, brain drain and displacement have led to severe shortages of doctors, nurses, and midwives and results in unbalanced distribution which could be considered as an opportunity as well.

- Health Information System:

during the early days of the war there was loss of data of the past 2 years, but fortunately enough some of this data was successfully retrieved. However, the reporting rate is still low coupled with verticality and fragmentation which resulted in poor data quality and consequently affecting the decision-making.

- Health Financing:

there is low public spending (69.4% out-of-pocket expenditures), and 80% of health expenditure is spent on secondary and tertiary care that reflects the policy incoherence, as more resources should be directed towards primary health care.

Also, the health financing is featured by inefficiency as there are several pools (Free care initiative, Zakat initiative, NHIF, etc.). In-particular, the National Health Insurance Fund (NHIF) which is moving towards strategic purchasing that is not operationalized as NHIF still provides services rather than strategic purchasing.

- Medicines and Health Technology:

the impact of the war was significant as there was a semi collapse of the national supply management system due to the destruction of warehouses and assets. Before the war., the availability of commonly prescribed medicines was 31% with discrepancies among the states based on a survey conducted jointly by the WHO and FMOH.

- Service Delivery:

the WHO and FMOH are finalizing a survey on damage assessment for health facilities using high resolution imaging in which the preliminary results reveal that almost 30% of hospitals sustain some level of damage, and this should be considered in the recovery stage in terms of costs needed. Before the war, almost 30% of health facilities were non-functional due to lack of human resources, equipment, or infrastructure. Some of the main challenges that affect the delivery of essential health services are: insecurity, and lack of financial resources.

- Another important aspect is the fragility of the health system, as the burden increases when the health system needs to respond to at least six concurrent health emergencies and outbreaks.
- There is a need for cohesive sectoral and cross-sectoral policies, considering political processes and global shifts.
- Strengthening platforms with public trust (e.g., SAPA's partnerships) is crucial

for building confidence and setting higher expectations for health services.

- It is highly needed to adopt the Humanitarian, Development and Peace Nexus approach and health for Peace approach to make efficient utilization of resources. Moreover, it is important to adopt Effective Development Cooperation (EDC) principles to harness the interest of donors who are willing to support.

Session Two: Bridging Policy Gaps for Effective Decentralized Health Governance:

This session consists of three presentations:

Dr. Imad started the session by thanking SAPA team efforts towards organizing this workshop that will support the country in developing the recovery and transition strategy for the health system during this critical time. Then his presentation serves in setting the scene for the two days through highlighting the current challenges and bottlenecks that should be looked at as opportunities for improvements. Also, Dr. Imad mentioned that most of these challenges existed even before the war and they have been aggravated by the devastating current situation.

Presentation 1: Bridging Policy Gaps for Effective Decentralized Health Governance, presented by Dr. Muez Ali, Qatar Foundation:

Dr. Muez started by bringing participants' attention to the fact that technically there is no policy in place during conflict, so instead of bridging policy gaps, it is better to talk about the link between health policy and development policy, and policy design and implementation process that have been limited by the conflict.

Here is a summary of the key points highlighted:

- Policymaking is not a science but policy choices are a result of a long contested process influenced by political interests and short-term priorities.
- Successful policies require adaptability that rely on understanding the context, having a lot of information, and building strategic partnerships.
- Post-conflict governance has become fragmented, with new actors like SAPA, MSF, and CBOs playing significant roles at the community level. Therefore, policy has to address and consider those changes.

Cont. Presentation 1: Bridging Policy Gaps for Effective Decentralized Health Governance, presented by Dr. Muez Ali, Qatar Foundation:

- Health policy can not be developed in isolation, and it has to be informed by other sectoral policies which all together are informed by the broader development and industrial policy that the country adopts.
- A six-step policy design framework was proposed under normal circumstances:
 - a. Problem Identification
 - b. Ideation & Policy Formulation
 - c. Analysis & Evaluation
 - d. Approval & Adoption
 - e. Implementation & Resource Allocation
 - f. Monitoring & Evaluation
- During conflict, as response is urgently needed, health actors start with implementation, then with the gathered information and monitoring and evaluation about the new situation. This new context is featured by new community level organizations with different mandates and shifting resource availability (not only US cutting humanitarian aid but also Netherlands and Belgium decided to reduce their aid, and Sweden shifting to a new aid model), in addition to the changes in flow of funds.
- Key features derived from SAPA experience over the past 2 years are: building trust with community and government (at all levels), and learning from and adapting to the new context. Moreover, trust and confidence of the community to receive good health services build demand and expectation that will create political pressure on providing good health services.

Here is a summary of the key action points:

- Collect information on the ongoing context, engage stakeholders, and conduct a collective process of having new policy and direction for Sudan's health system.
- Strengthen stakeholder engagement with new actors (e.g., CSOs, CBOs).
- Develop agile policymaking frameworks adaptable to conflict and post-conflict contexts.
- Build public trust to create political pressure for policy reforms.

Presentation 2: Enhancing Coordination & Accountability in Sudan's Decentralized Health System, presented by Dr. Haitham Bashir, EMPHINET:

Dr. Haitham started by acknowledging the previous presentations that highlighted the theoretical part of the policy making. Then, he mentioned that all Sudanese have been affected by war, whether as individuals or institutions, but hopefully Sudan will recover from war impacts.

Here is a summary of the key points highlighted:

- Decentralization has been adopted in Sudan since the 1990s with the structure of federal, state and locality level, which is assumed to have the following positive sides: improved allocative efficiency, greater technical and cost efficiency, enhanced accountability, democratization, and heterogeneous representation.

Cont. Presentation 2: Enhancing Coordination & Accountability in Sudan's Decentralized Health System, presented by Dr. Haitham Bashir, EMPHINET:

- However, decentralization becomes successful when enhanced accountability and coordination is applied, in addition to adequate information systems.
- Research documented some challenges facing Sudan's decentralization: lack of accountability and weak coordination. In addition, the main gaps are lack of clear roles of all sectors and stakeholders, poor intergovernmental coordination, limited financial oversight, and weak community engagement.
- During war, mortality and morbidity indicators were affected in addition to raise mental and psychosocial issues. The needs were identified to be mainly accessibility to healthcare services and health system resources.
- There are several factors that need to be considered to get information to act: addressing data issues, accessibility, quality, transparency, efficiency, capacity, and technology. Then the accountability framework needs to be defined with clear indicators that fits with the current context.

Here is a summary of the key action points:

- Start with seeing and visualizing our information and data in all sectors including health.
- Establish emergency coordination mechanisms.
- National and international commitment to peace and development.
- Improve accountability through performance tracking systems.
- Adopt a community-centered decentralization model.

Presentation 3: Building Partnerships for Essential Health Services Delivery – Humanitarian, Development, and Peace Nexus Approach, presented by Dr. Shaza Elmahdi, CIPE:

Dr. Shaza started by acknowledging the importance of having participants with diverse backgrounds and experiences that will add more insights from different perspectives towards re-imagining the health system in Sudan.

Here is a summary of the key points highlighted:

The Triple Nexus approach has been adopted since 2017, and it integrates humanitarian, development, and peacebuilding efforts. This approach focuses on coordination and is multidisciplinary.

- The main focus is how to think through the current crisis and envisioning sustainable solutions for the future. Also, we need to think through the immediate, short- and long-term needs of the health system amid a constantly changing situation not only because of war but also the dynamics of power and foreign aid. In addition, we need to think of what worked and didn't work to navigate the alternative sustainable solutions.
- Healthcare services as part of humanitarian response can not be considered in an isolation of the security situation or without imagining its sustainability over the next short-, intermediate, or even long-term. This is why we talk about Humanitarian, Development, and Peace Nexus Approach.

Cont. Presentation 3: Building Partnerships for Essential Health Services Delivery – Humanitarian, Development, and Peace Nexus Approach, presented by Dr. Shaza Elmahdi, CIPE:

- Healthcare gaps analysis should be coupled with analysis done by peacebuilding organizations to understand the security threats faced by the population, in addition to taking advantage of functioning early warning systems to anticipate the upcoming threats, and program designing to coordinate efforts.
- Prior to coordination, mapping of all health actors is essential in terms of who is doing what, where and why.

Here is a summary of the key action points:

- Conduct comprehensive mapping of all health actors as a prerequisite for coordination.
- Strengthen multi-sectoral collaboration.
- Improve funding mechanisms for integrated programs.
- Enhance local ownership and community participation.

Expert Panel Discussion: Bridging Policy Gaps for Effective Decentralized Health Governance:

- **Moderator:** Dr. Shaza Elmahdi (CIPE)
- **Panelists:** Bashir KamalEldin (Save the Children), Hadeer Musa (COEHA)

Key questions for discussion:

What do you think are opportunities to move towards health system decentralization?

- Beside the clear gap in capacity, regulation and interaction with partners, and lack of inputs from federal level to lower levels; the opportunity towards decentralization relies on improving centralized technical guidance and strategic planning.
- As a result of war, healthcare services become decentralized as providers on the ground, diverse actors, and great efforts from the community. However, we need to build more bridges, enhance trust, and improve coordination.
- On the other hand, the governance structure built for decentralization far exceeds the available financial resources, in addition, health could not be the priority in some states. Therefore, if the war stops, there would be a transition stage in which health and education should be centralized.
- Decentralization has to be reviewed in a professional aspect rather than political, as what worked in other countries might not work in Sudan. However, there are 6 areas that need to be centralized: disease outbreak control, management, and response; drug procurement; vaccine procurement; technical and financial support to needy states; policy development; and senior level jobs. Moreover, roles and responsibilities at the state level should be clearly defined.

Cont. Expert Panel Discussion: Bridging Policy Gaps for Effective Decentralized Health Governance:

- **Moderator:** Dr. Shaza Elmahdi (CIPE)
- **Panelists:** Bashir KamalEldin (Save the Children), Hadeer Musa (COEHA)

How to make effective interventions in terms of health provision during the current situation?

- Community-based approach is a cornerstone that should be reinforced especially in terms of health accountability. A real life example is setting a health facility committee that ensures accountability, engagement, and ownership. Moreover, community consultation is pivotal in guiding planning and designing health interventions based on community need and vision.
- Another example is the Community Medical Response Teams (CMRTs) who are a group of medical professionals providing first aid and initial care. Although they are not registered organizations, they should be considered as sub-recievers for funds to sustain their services.

What kind of support do you think can be provided to improve coordinated local responses?

- As mentioned in the previous presentation, mapping is essential prior coordination. Although coordination is the heart of work, it becomes an aim (huge fund spent on coordination meetings and forums) instead of a tool. Nevertheless, in the current situation featured by multi-partners where actors on the ground use their own communication channels, we need to learn how to apply coordination in a complementary way. Another point is how data is made available and accessible to partners through the national health information system (DHIS2) and how the government is able to get data from partners.
- As coordination is the maximization of available resources (whether financial or human) to help in achieving the outcomes in the served community; improvement at the state level is required, starting with mapping (who is doing what, when, where, why, and how). Also, coordination between the Humanitarian Aid Commission (HAC) and the ministry of health and all actors need to be improved to facilitate health service delivery.
- Community empowerment and ownership is critical in effective coordination. In addition, capacity building for volunteers is needed to bridge the gap in communication language, and to support adopting a structured approach in doing things.
- It is pivotal to think of health as a sector and not only service provision, and to develop a plan based on the determinants of health as well as community priorities.

Action Points:

- Improve centralized technical guidance and strategic planning.
- Centralization of 6 areas is needed: disease outbreak control, management, and response; drug procurement; vaccine procurement; technical and financial support to needy states; policy development; and senior level jobs.
- As a recommendation for SAPA, to figure out a constructive way to rethink centralization vs decentralization.
- Build more bridges, enhance trust, and improve cross-level coordination.
- Adopt a community-based approach for health accountability and health intervention design.
- Utilize the national health information system (DHIS2) as a unified platform for data sharing with all health actors.
- Health and education should be centralized during a transition stage after war.

Session Three: Addressing Health Workforce Shortages in Sudan:

This session consists of two presentations:

Presentation 1: Addressing Health Workforce Shortages in Sudan: Strategies for Attraction and Retention, presented by Dr. Almoghira Alamin, Federal Ministry of Health-Sudan:

Dr. Almoghira started by welcoming everyone and conveying the acknowledgement from his excellency, Dr. Haitham Mohamed Ibrahim, and all the ministry of health to this workshop that will provide essential and advancing recommendations, which will aid in managing the health system in Sudan.

He extended his thanks to SAPA not only in organizing this workshop but also in exerting efforts towards a resilient health system in Sudan through re-establishing and rehabilitating health facilities as well as managing and running services provision. Also, SAPA aids in supporting the Sudanese workforce in claiming their career aboard. Dr. Almoghira also extends his gratitude to all the Sudanese health workforce for their tremendous efforts in providing the services during this challenging situation. Moreover, he mentioned that Sudanese doctors deserve the recognition received from the council of Arab ministers of health in December 2024, in Baghdad.

Here is a summary of the key points highlighted:

Health workforce is one of the most important building blocks of health because through it the other blocks can be achieved.

- Workforce stations are:

- **Production:** It's a collaborative effort between MoH, ministry of higher education, SMSB, the academy of health science, which now becomes a university of health science.

- **Recruitment:** mainly it's the State Ministry of Health (SMoH) role based on the constitution of 2005.

- **Retention:** which is a real challenge faced by MoH before and during war, but the efforts and support from partners is remarkable in the retention of the workforce.

- One of the major Sudan health system challenges before war was the rapid turnover among the health health workforce, especially the senior level. Other challenges include: political, economical and social instability, freezing of public health projects, health constraints, and outbreaks.

- War impact manifests majorly in displacement of health workforce (whether internal as IDPs or external as refugees), attacking them at the health facilities (more than 50% is direct attacks), brain drain due to high out-flux of trained and qualified personnel,

- inaccessibility of 50% of Sudan land
- damage of infra-structure
- exhaustion and fatigability of health system at states with higher numbers of IDPs
- loss of 70% of specialized health services

Cont. Presentation 1: Addressing Health Workforce Shortages in Sudan: Strategies for Attraction and Retention, presented by Dr. Almoghirah Alamin, Federal Ministry of Health-Sudan:

• Strategies to support recruitment and retention include:

- Increase the healthcare providers at the entry of the health workforce e.g. implementing the career pathway policy, internship stage aimed to increase the intake of house officers.
- The academy of health science, which is now endorsed by the cabinet to become a university, as an intervention to avail paramedics (i.e. nurses, medical assistants, pharmacist assistants, medical laboratory assistants, and others).
- Supporting the sustainability of the health system and provision of health services through the financial support provided to SMOH for the financial incentive package for the health workforce at different levels (primary, secondary, and tertiary). Unfortunately, the financial capacity is being jeopardized.
- Ensure availability of certain services through financial support from health partners (e.g. WHO, WB, SAPA, etc.) providing incentives for frontliners (RH, Rapid Response Teams (RRTs), -- and medical staff at certain health facilities).
- Provision of capacity building programs and training, as non-financial incentives, to improve the capabilities of healthcare providers to meet the expectations. Those programs supported by partners (WHO, UNICEF, others), and in the states capacity building focused on the quality of primary health care services, emergency care, and epidemic control.
- Offering vacancy contracts to work in specialized hospitals and health centers by the National Health Insurance Fund (NHIF).
- Decree from the minister to attach the FMOH displaced staff within the SMOH which resulted in: strengthening the capacity of SMOH, expanding and improving coverage, and supporting the technical capacity of the programs. However, this initiative was limited by financial constraints, lack of a supportive environment, and the interest of SMOH solely focused on emergency teams.

• Diaspora engagement was in form of:

- Medical missions and campaigns.
- Telemedicine initiatives
- Rehabilitation of health institutes aimed to prepare a suitable working environment for the health workforce.
- Strengthening workforce distribution through conducting surveys at the safe states to engage health workforce with the health system of their states (Gadarif state model: the state managed to engage hundreds of the displaced workforce through provision of temporary jobs and distribution to health facilities in different localities).

Presentation 2: Solutions for workforce challenges: Case StudyYale Sudan Partnership, presented by Prof. Ibrahim Bani, MD, PhD,Yale School of Public Health:

After welcoming the participants, Prof. Ibrahim Bani started by introducing one of the solutions based on an initiative developed by him in Sudan during 2020 by a delegation from Yale School of Public Health.

Here is a summary of the key points highlighted:

- The main challenges facing health workforce are:
 - **Brain drain:** it is a major issue, as skilled health professionals leave Sudan for better opportunities
 - **workforce shortage:** healthcare professionals are suffering from shortage in supply thus leaving the country for better conditions .
 - **Economic instability:** hyperinflation and economic stagnation affect recruitment of healthcare workers
 - **Lack of infrastructure:** there's inadequate infrastructure specially in rural areas.

1. The Role of the Sudanese Medical Diaspora

- Significant potential exists in leveraging Sudanese professionals abroad in the Gulf States, USA, UK, and Canada.
 - Potentials of medical diaspora:
 - Wealth of expertise and skills abroad
 - Access to global networks and resources
 - Ability to foster innovation and collaboration
 - Contribution to Healthcare: Supporting medical training programs and healthcare delivery
 - The diaspora can contribute through:
 - Medical training and knowledge-sharing programs.
 - Supporting curriculum modernization in Sudanese medical schools.
 - Providing remote healthcare support (telemedicine and online consultations).
 - Conducting short-term medical missions to Sudan.

2. Case Study: Yale-Sudan Program for Research Leadership in Public Health

- A mixed-methods approach was used to evaluate the program.
- 28 participants enrolled, with 75% women and 25% men.
- 93% participant engagement, with 100% stating they would recommend the program to peers.
- Between 74% and 100% of participants met learning objectives across three modules that were conducted completely virtual.
- The three modules are: community leadership network, fostering effective mentorship, and leading research teams.

3. Recommendation: Establishing a Formal Medical Diaspora Engagement Strategy

- Encouraging the Sudanese diaspora to contribute to workforce development.
- Enhancing collaboration with international organizations, NGOs, and the private sector.
- Strengthening partnerships between Sudanese healthcare institutions and global academic networks.

4. The way forward: we need to have a roadmap for diaspora workforce development, and the importance of continuous engagement and capacity building (like what is done by SAPA and other organizations). Also, to encourage individual diaspora to play an important role in capacity building.

Expert Panel Discussion: Addressing Health Workforce Shortages in Sudan:

- **Moderator:** Dr. Almoghira Alamin (Federal Ministry of Health-Sudan)
- **Panelists:** Prof. Ibrahim Bani (Yale School of Public Health), Prof. Ahmed Shadol (Sudan Medical Specialization Board), Dr. Imadeldin Ismail. (WHO Sudan)

Key questions for discussion:***What do you think of the retention strategies for attracting and retaining healthcare professionals mentioned in the presentations?***

- Before talking about retention strategies, some points regarding production and recruitment need to be highlighted: some universities started exams and training which will facilitate the production of healthcare professionals, but attention must be paid to the production of paramedics especially through the Sudanese Academy for Health Science. However, some universities have issues with data. Moreover, partnership with the private sector and diaspora was effective in facilitating postgraduate production through the Sudan Medical Specialization Board (SMSB). On the other hand, most graduates are still struggling to get their certificates and licenses to qualify them for job applications. Moreover, the absorption of the healthcare workforce is essential to meet the needs for attaining Universal Health Coverage (UHC).
- Although many skilled healthcare professionals have been displaced to the state level which have a positive impact on the service delivery, most of them have not been recruited; therefore, MoH should interact with the Ministry of Finance (MoF) and partners to mobilize resources.
- Another important issue to be raised is the medical neutrality and safety of healthcare workforce and medical supplies, as some medical supplies in some areas have been hindered from reaching the community.

What are the strategies for recruiting and retaining healthcare workforce that might work in the context of Sudan?

- Efforts from the ministry of health are being made to have a good retention package (in terms of salary, entitlement, sponsoring postgraduate training). These efforts should be supported by partners as well. Also, it is critical to consider the training and displacement of community healthcare workers.
- As the MoH is not the only recruiter, the private sector should be engaged and involved in any discussion regarding healthcare workforce recruitment and retention. Also, the government should think of contracting out services, and keep providing policies, strategies, and standards to support the private sector to ensure quality of the services. Moreover, It is pivotal to support NHIF in reaching 95% coverage. As a result of implementing dual practice policy, the private sector prefers to recruit government employees who were already trained by the government, so health facility directorates should apply conditional registration for private entities to allocate budget for healthcare training.
- An important point is the appointment and deployment of doctors in rural areas. However, there should be some potential in exploring taskshifting and new models for providing healthcare providers.
- It is crucial to emphasize the importance of training provided by the SMSB which is considered a motivation and incentive for the healthcare professionals to reside in the country for years, however attention must be made to the quality of training for the newly enrolled healthcare providers, as many accredited centers were lost in Khartoum.

Cont. Expert Panel Discussion: Addressing Health Workforce Shortages in Sudan:

- **Moderator:** Dr. Almoghira Alamin (Federal Ministry of Health-Sudan)
- **Panelists:** Prof. Ibrahim Bani (Yale School of Public Health), Prof. Ahmed Shadol (Sudan Medical Specialization Board), Dr. Imadeldin Ismail. (WHO Sudan)

- Sectoral engagement is beneficial in providing support (e.g. education support or any fees exemptions) for the healthcare providers to reduce the financial burden (If we can not give them, at least not take from them).
- It is important to think of new models for financing PHC, for example, a PHC center could be self-sustained by the community to ensure auto-operation.

Here are key action points:

- Apply measures for medical neutrality and safety of healthcare workforce and medical supplies.
- Align efforts of the medical diaspora to meet the needs of the population.
- Apply conditional registration for private entities to allocate budget for healthcare training.
- Sectoral engagement to support healthcare providers in reducing the financial burden.
- Explore taskshifting and new models for providing healthcare providers.
- Provide free of charge healthcare services.

Session Four: Empowering Communities for Sustainable Health Initiatives & Accountability, presented by Dr. Muzan Alneel, ISTinaD Research Center:

Here is a summary of the key points highlighted:

- Communities often find ways to address emerging needs when they arise. A notable example can be seen in Umbadda Al-sabeil, where an emergency response room was established on April 20, 2023, just five days into the war. This initiative was formed by leveraging the existing neighborhood associations, showcasing the community's ability to respond swiftly and effectively to urgent needs.
- Community grassroots organizations that spearhead various initiatives typically embrace rights-based political narratives. The development of community-operated services, along with their financial structures, emphasizes the importance of ensuring access to fundamental rights for everyone as a guiding governance model. These services leverage communal resource mobilization tactics to devise sustainable financing strategies. Additionally, effective messaging aimed at empowering grassroots support is crucial for these services, serving as a primary line of defense against potential challenges or opposition they may face.
- The current war in Sudan has exacerbated the systemic failure of the Sudan healthcare system that will not disappear with the end of military operations. Thus, short-termism and firefighting approaches are not strategies to adopt. To handle health system challenges, it is essential to maintain and strengthen grassroots organizations that were

fundamental to the emergence of strong community solutions. Additionally, the survival of these initiatives requires political awareness of the projects and the competing projects(governments, international aid agencies)

- Talawet case study by Mohamed Alagib:** The Talawet National Organization has launched a community empowerment initiative in the Alnoor group of villages located in Kasala State. This project, which is structured in three phases, highlights the effectiveness of partnerships between communities and NGOs in creating sustainable solutions to address local challenges.
- The initial phase of the needs assessment has uncovered a concerning trend of elevated maternal mortality rates and the prevalence of water-borne diseases within the community. At the time, traditional healers were the primary providers addressing these health issues. Discussions during focus group sessions highlighted the necessity for enhancing the skills of community health workers and emphasized the importance of developing strategic plans to effectively address these health challenges.
- During the second phase of the project, the community health committee undertook a series of health interventions, which included the establishment of clinics, health awareness campaigns, and the construction of latrines. These initiatives received technical support from the organization and have been instrumental in achieving a 40% reduction in maternal mortality rates, as well as a significant decrease in water-borne diseases within the community.
- In the third phase of the project, the focus shifted to enhancing and sustaining progress while promoting accountability. A community health committee was established, consisting of 15 diverse members representing the community. This committee was tasked with mobilizing local resources and managing health services tailored to the community's needs.
- Simultaneously, a Civil Monitoring System was created, with equal representation of 15 males and 15 females. This system aimed to monitor services closely and act as a communication link between the community and governmental and non-governmental organizations.
- The success of this project can be attributed mainly to the strong sense of community ownership and effective local leadership. Additionally, the combination of traditional and modern practices has played a significant role in building trust and fostering collaboration among community members. These key elements are essential for any community-driven solutions to thrive.

- **SAPA-North Darfur Case Study By Ibrahim Osman:** In response to the escalating attacks on Al-Fasher city and the deliberate targeting of critical civil infrastructure, such as major hospitals, only a limited number of health facilities are still operational.
- In July 2024, residents of the Abushouk camp initiated a project aimed at acquiring an ambulance vehicle to facilitate the transfer of emergency cases to the remaining functioning hospitals in the city. To support this important initiative, SAPA collaborated with MedGlobal to provide complete funding.
- The vehicle has been entrusted to the community rather than government authorities to promote community ownership and accountability. This community initiative is dedicated to financing the vehicle's operations through its own resources. The leadership team of the initiative is composed of representatives from various community categories, ensuring inclusive representation.
- Lesson learned: It is widely recognized that communities possess a deeper understanding of their own interests than any external entity. Moreover, the ability of local communities to coordinate and oversee their own matters is frequently underestimated.

Here is a summary of the key action points/recommendations:

- Non-governmental organizations (NGOs) should prioritize empowering communities to achieve their objectives rather than taking direct action on their behalf.
- It is essential to cultivate a culture of inclusive leadership that ensures fair representation of all community members.
- Ongoing communication with community partners is crucial for gathering feedback and enhancing learning outcomes.
- Strengthen community ownership and accountability.
- Utilize communal resource mobilization for sustainable financial strategies.

Expert Panel Discussion: Empowering Communities for Sustainable Health Initiatives & Accountability:

- **Moderator:** Dr. Muzan Alneel (ISTinaD Research Center)
- **Panelists:** Mr. Khalid Tigani (Elaph Newspaper), Dr. Marwa Gibriel (Healthadvisor / consultant), Dr. Mohamed Ahmed Alagib (Talawet National Organization).

Key questions for discussion:

What are the lessons from the community initiatives that the health system should learn from?

- The health system should learn from the community initiatives in terms of effective feedback mechanisms, in which there is no room for bureaucracy in responding to the needs; and the bottom-up decision making process. Therefore, the health system should establish channels with the community through CHWs to support decision making, accountability, and co-designing context-specific initiatives.

What does community ownership look like, especially in terms of accountability?

- Community ownership is enhanced through providing the community with a decision making power by involving them in planning, budgeting, etc. Also, there should be a representative body to convey and advocate for the actual needs. Proper understanding of community ownership that requires careful planning and approaches for participation will result in establishing communication strategy.
- As community contribution alone is not sufficient to operate the projects, there should be an allocated budget to support those projects, in addition to training the community in fundraising and efficient management.
- Community engagement could be enhanced through: fostering participatory approach to ensure equitable par, emphasizing health promotion and education to promote healthy behaviours, and enhancing transparency through involving community members in project auditing and MEAL.

Key action points:

- Establish channels with the community through CHWs to support decision making and accountability.
- Develop communication strategy based on proper understanding of community ownership.
- Establish a representative body to participate in decision making, and to convey and advocate for the actual needs.
- Establish social accountability mechanisms.

Session Five: Empowering Local Health Systems to Utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan:

This session consists of two presentations:

Presentation 1: The Role of Evidence in Shaping Health Response in Sudan, Dr. Maysoon Dahab, London School of Hygiene & Tropical Medicine (LSHTM):

Here is a summary of the key points highlighted:

- **War-Time Mortality Estimation** during the first 18 months: it is important to report mortality to show the severity of the situation, the price of action, and the price of inaction; so allow the country to show accountability. Reported deaths are significantly lower than actual numbers.
- **Mortality Rate:** During the first 18 months, the mortality rate increases due to disease and starvation more than direct killing because of war, where in Kordofan and Darfur states most of death is because of direct killing. In Khartoum state approximately 61,000 people have died which represents a 50% increase in a crude death rate from pre-war.
- **Methodology:** Capture-recapture techniques used for mortality estimation. In-depth, the data collection was done through constructing three lists using community networks: the first list utilizes public networks through posting in social media, the second utilizes private networks, and the third one constructed through collecting data from social media. Then the overlap between the lists has been looked at.

Main Causes of Death:

- Increasing death toll, with many preventable cases.
- Diseases and starvation as major contributors.
- Killings predominantly in Darfur & Kordofan.
- Need for Immediate Response: Requires time, data, and funding, with a focus on food availability through community kitchens.
- Community-led evidence generation is powerful, and it is possible only through consensus building and utilizing technology and innovation.

Expert Panel Discussion: Digital Health & Data-Driven Interventions

- **Moderator:** Dr. Muzan Alneel (ISTinaD Research Center)
- **Panelists:** Mr. Khalid Tigani (Elaph Newspaper), Dr. Marwa Gibriel (Healthadvisor / consultant), Dr. Mohamed Ahmed Alagib (Talawet National Organization).

Key Points:

- **Potential of Digital Health Tools:** as one of the major issues in Sudan is data and information, the presented case shows the power of using technology to avail data.
- **Challenges in Data Collection & Reporting:** much of the attention must be made on how to utilize free technology to aid in mapping exercises as well as surveillance. Moreover, it is high time to document best practices not only as publication but as evidence for saving lives.
- **Technology Integration in Healthcare:** It is proven that technology integration is simple and cost effective interventions not only in healthcare services but also in education and professional practice. Therefore, we need to rethink our teaching models, reshape the curricula, and advocate for technology use by doctors and experts.
- Although investment in technology will advance and support the health system in Sudan, demand for evidence needs to be created to drive the political will and the development vision.

Action Points:

- Strengthen Community-Led Health Data Collection
- Enhance Emergency Response to Reduce Mortality
- Engage the Sudanese Diaspora for Support
- Advocate for Accountability & Policy Reform

Presentation 2: Assessing Effects of Conflict on Health Using Remote Sensing & Open-Source Data Analysis, presented by Zena Ahmed, Yale Humanitarian Research Lab:

This assessment has been conducted using the following **Methodology:** cross-corroboration of open-source data (social media, local news) with remote sensing and satellite imagery. In addition to the use of multi-temporal change detection for assessing health and security impacts.

The key findings as follows:**– Healthcare Infrastructure Damage:**

- 47% (41 out of 87) of hospitals in Khartoum sustained visible damage within the first 500 days of conflict.
- 20 of these hospitals provided critical primary healthcare services.

– Impact of Arson Attacks:

- Ongoing arson attacks in North Darfur have devastated over 100 communities.
- These attacks contribute to civilian casualties, displacement, famine conditions, and worsening food insecurity.

– Mortality Indicators:

- Satellite imagery has identified increases in grave-like structures, raising concerns about conflict-related mortality rates.

Cont. Presentation 2: Assessing Effects of Conflict on Health Using Remote Sensing & Open-Source Data Analysis, presented by Zena Ahmed, Yale Humanitarian Research Lab:

– Attacks on Food Production:

- Destruction of agricultural fields in Azraq and Gezira State has disrupted the next harvest, exacerbating food insecurity.

In conclusion, it has been found that remote sensing data is critical for monitoring public health impacts of conflict, including disease outbreaks and food security crises. Therefore, the assessment findings highlight the importance of integrating these tools into crisis response and policy planning.

Session Six: Leveraging Health for Peace and Stability in Sudan: Exploring Health Initiatives as Tools for Peacebuilding, presented by Mona Ibrahim, University of Oxford:

Here is a summary of the key points highlighted:

- Health and peace are deeply interconnected, particularly in fragile and conflict-affected settings.
- Sudan faces overlapping crises (conflict, displacement, and weak governance), which threaten health security.
- Fragility is a structural problem – humanitarian responses must address root causes rather than just symptoms.
- Health interventions can serve as peacebuilding tools by fostering cooperation, trust, and social cohesion.

Here is a summary of the key action points:

1. Health as a Tool for Peacebuilding

- Health services can be neutral spaces that promote dialogue and reconciliation.
- Cross-community health initiatives can reduce tensions by fostering collaboration among different groups.
- Primary healthcare expansion ensures that vulnerable populations receive equitable services, reducing grievances.

2. Addressing Structural Fragility in Sudan's Health System

- Chronic underinvestment in healthcare has left the system weak and fragmented.
- Political and social instability have hindered sustainable development efforts.
- Lack of coordination between humanitarian and development actors limits long-term impact.

3. Strategies for Integrating Health into Peacebuilding

- Inclusive health governance models that involve local actors, civil society, and displaced communities.
- Joint humanitarian-development-peace (HDP) approaches to bridge emergency response with long-term system strengthening.
- Conflict-sensitive programming that considers local power dynamics and historical grievances.

4. Strengthening Resilient Health Systems

- Investing in local health infrastructure to provide sustainable, community-driven services.
- Capacity-building for healthcare workers to equip them with conflict-resolution and trauma-informed care skills.
- Strengthening mental health and psychosocial support services for conflict-affected populations.

Session Seven: Enhancing Sudan's Health Resilience Against Climate Change Impacts, presented by Eiman Ahmed Mahmoud, MD, MPH, Touro University, SAPA:

Here is a summary of the key points highlighted:

- Sudan is one of the most vulnerable regions due to a combination of conflict and climate change.
- Climate change acts as a threat multiplier, worsening already fragile conditions.
- Erratic rainfall, extreme drought, and food insecurity are becoming more frequent.
- The Grand Ethiopian Renaissance Dam (GERD) impacts Sudan's water resources and climate variability.
- Low adaptive capacity due to lack of preparedness and reactive rather than proactive responses.

Here is a summary of the key action points:

1. Strengthening Health Systems & Infrastructure

- Investing in mobile health units:
 - Establish temporary and climate-resilient healthcare facilities.
 - Expand telemedicine and mobile health technology.
- Train and equip community health workers to handle climate-sensitive health risks.

2. Building Social Cohesion & Community Resilience

- Financial and partnership support to enhance resilience at the community level.
- Community-based planning workshops:
 - Conduct vulnerability assessments and adaptation planning.
 - Identify local resources and community action plans.
- Collaboration model: Engage farmers, healthcare providers, teachers, and engineers to develop localized solutions.

3. Smart Financing & Access to Climate Funds

- Secure international climate resilience and adaptation funds.
- Strategic allocation of resources toward:
 - Climate-resilient infrastructure.
 - Preventive healthcare measures.
 - Emergency response systems.

4. Strengthening Partnerships & Multi-Sectoral Collaboration

- Transdisciplinary collaborations with academia, research institutions, and NGOs.
- Partnerships with Farmers' Unions, Engineers Without Borders, and environmental specialists.
- Strengthen data collection systems for better climate-health policy planning.

5. Information Sharing & Data Integration

- Improve access to environmental and agricultural data for evidence-based planning.
- National Adaptation Plan (NAP): Embed climate risk assessment in healthcare planning.
- Promote climate-resilient agriculture and food security initiatives.

Session Eight: Breakout Group Exercise: Enhancing Sudan's Health System through Community Engagement, Workforce Strengthening, Governance, and Technology incorporating cross-cutting themes of climate change, peacebuilding, and social cohesion:

The breakout group exercise aimed to provide participants with an opportunity to collaboratively explore practical solutions to the key challenges facing Sudan's health system across four critical areas: community engagement, workforce strengthening, governance, and technology. Additionally, the exercise incorporated cross-cutting themes such as climate change, peacebuilding, and social cohesion.

Approach: Mixed SWOT and PESTEL Analysis

- Each group conducted SWOT and PESTEL analyses to identify key challenges and opportunities in Sudan's health system, particularly in workforce capacity, technology adoption, financing, medical supplies, service delivery, coordination, and partnerships.
- The exercise also examined peace, social cohesion, and the impact of climate change, as well as the diaspora's contributions to healthcare service delivery.
- Participants formulated actionable recommendations for strengthening Sudan's health system within their assigned themes.

Breakout Group Exercise

Participants were divided into four groups, each focusing on one core theme. Each group had a facilitator and a rapporteur responsible for guiding discussions and presenting findings.

Guiding Questions for Each Group

Group 1: Community Engagement

1. What strategies can enhance community ownership of health initiatives?
2. What resources are needed to support community-driven health solutions?

Group 2: Workforce Strengthening

1. How can Sudan attract and retain health professionals in conflict-affected areas?
2. What role can the Sudanese diaspora play in addressing workforce shortages?
3. How can blended learning and mentorship programs be effectively implemented?

Group 3: Governance and Policy

1. What policy changes are needed to improve health governance in a decentralized system?
2. How can coordination between federal and local health authorities be enhanced?
3. What accountability frameworks can ensure the successful implementation of policies?

Group 4: Technology and Innovation

1. What digital tools can be leveraged to enhance capacity building and service delivery?
2. How can data-driven decision-making improve healthcare planning and response?
3. What are the key barriers to adopting digital health solutions, and how can they be overcome?

Closing Session: Federal Ministry Of Health - Directorate General of International Health Inputs, presented by Reem Galal:

Here is a summary of the key context and challenges highlighted:

- Sudan's Health System in Conflict: The country faces severe disruptions due to conflict, leading to widespread humanitarian needs.
- A roadmap for health sector recovery is crucial, balancing immediate humanitarian responses with long-term system reform.
- Limited resources and weak governance are major barriers to effective healthcare service delivery.
- Security concerns and instability are hampering healthcare access and development.

Here is a summary of the key notes and action points:

1. Sudan Health Strategy Roadmap (2024)

The Ministry of Health has outlined five top priorities for 2024:

1. Life-saving and humanitarian responses – Immediate emergency healthcare interventions.
2. Reforming governance and financing – Strengthening health sector leadership and accountability.
3. Universal Health Coverage (UHC) investments – Expanding access to essential health services.
4. Strategic partnerships – Collaborating with national and international stakeholders.
5. Sustainability, growth, and development – Ensuring long-term healthcare system resilience.

2. Strengthening Emergency Health Response

- Expand mobile healthcare units to reach vulnerable populations.
- Ensure supply chain stability for essential medicines and medical equipment.
- Strengthen health workforce retention to address staffing shortages caused by displacement and insecurity.

3. Governance & Financing Reform

- Increase financial transparency in health funding allocation.
- Promote decentralized health governance for better regional service delivery.
- Engage the private sector and NGOs to strengthen public-private partnerships in healthcare.

4. Strategic Investment in Reproductive Health (RH) Services

- Ensure continuity of maternal and child health services despite conflict challenges.
- Improve access to family planning and emergency obstetric care.

5. Expanding Universal Health Coverage (UHC)

- Develop policies that prioritize equitable health access for all communities, including displaced populations.
- Strengthen primary healthcare infrastructure to provide cost-effective, high-impact interventions.

Open Reflections:

- The issue of salaries, incentives, and working environment for the healthcare providers, especially frontliners has been raised.
- It has been recommended to form a higher coordination council for healthcare that must be linked directly to the highest governance level in the country.

Remarks from EU Ambassador, Aidan O'Hara:

Mr. Aidan started by welcoming the participants, and he extended his gratitude to SAPA and Dr. Yassir Yousif Elamin for inviting him to this workshop, which is very interesting what the workshop will achieve in those two days in terms of short-, mid-, and long-term goals (respond to crises, strengthen health system, and build resiliency) for the country that is affected by the conflict and other crises. Also, Mr. Aidan stated that the real objectives of the EU is to stop war, see people protected, and see access to humanitarian services for those in need. Moreover, he highlighted the importance of the Humanitarian, Development, and Peace nexus to make sure that we will not start from zero whenever we get peace.

Furthermore, Mr. Aidan stated that the EU spent around 270 million euros on short-term and immediate humanitarian needs, and on the development side we have a portfolio of 460 million euros; most of it focuses on food security, nutrition, health and education for IDPs, refugees and host communities. Regarding health side, we have a portfolio of 40 million euros for primary health care, as we are working on 6 projects with UN agencies, INGOs to increase and make sustainable access to PHC, nutrition and WASH services in target states; in addition to local healthcare structure at PHC to sustain service delivery, medical supplies, and development of the workforce in a context of epidemics of Cholera, Malaria, Dengue, and Measles. In conclusion, Mr. Aidan acknowledges and appreciates what has been discussed in the workshop, and the EU will stay in contact to build partnerships aimed to maintain lives.

SAPA, Hope for Sudan: presented by Dr. Abdulazim Awadallah:

After welcoming the participants, Dr. Abdulazim provided a brief introduction about SAPA, its organizational structure, offices, and operation on the ground. In-depth, SAPA scope of work reflected on its programs:

- **Direct Health Services:** Support pre-existing health facilities and mobile clinics to offer primary health care, including care for pregnant women, mental health, psychosocial support and outpatient treatment. Also, this program includes continuous provision of critical healthcare services through hospitals and health centers in Khartoum, Red Sea, Northern, Gedarif and South Kordofan State.
- **National & Community Health System Resiliency:** The initiative focuses on fortifying hospital infrastructure and operational capabilities in conflict-affected regions, empowering healthcare facilities to manage an increase in patient volume, and enhancing the capacity of healthcare professionals to respond effectively to diverse emergencies and mass casualties. The overarching goal is to contribute to the resilience of local community health systems, enabling them to respond adeptly to emergencies and play a pivotal role in maintaining healthcare service continuity in fragile and conflict-affected settings.
- **Water, Sanitation and Hygiene (WASH):** Activities vary depending on location and need but will include providing emergency water supply by introducing mobile water units and establishing water distribution points; enhancing sanitation facilities by constructing and upgrading latrines and promoting community-led total sanitation (CLTS); promoting hygiene education through workshops and the distribution of hygiene kits; and facilitating WASH infrastructure by rehabilitating current infrastructure and encouraging community-led water management.
- **Food and Nutrition:** Focused initiatives target malnutrition, particularly among children under five and pregnant or lactating women, offering specialized nutritional supplements like ready-to-use therapeutic foods (RUTF) for severe acute malnutrition. Community-based education programs raise awareness about balanced diets, breastfeeding, and proper nutrition, emphasizing promoting locally available nutrient-rich foods. The program integrates nutrition services with existing health programs, conducting regular malnutrition screenings during health check-ups and vaccination campaigns for a comprehensive healthcare approach.
- **Child Protection:** is a critical aspect of humanitarian efforts, especially in conflict-affected regions like Sudan and Chad. To address these needs, SAPA will offer child-friendly spaces, psychosocial support programs, education and awareness campaigns on child rights, protection, and the importance of education, as well as MHPSS services for children impacted by trauma.

In addition, Dr. Abdulazim presented an overview on the existing projects in each state as follows:

KHARTOUM STATE

- Al Bolok Hospital:

- PICU, the very first PICU in Khartoum state (rehab + operational costs)
- Nursery
- Nutrition Ward

- Al Fateh Hospital:

- Opening of new SC, becoming the second operation-able SC in Khartoum state
- Nursery
- Nutrition Ward

- Al Shohada Hospital (Rehab, operational support).

- Al Saudi Hospital (Full rehab, to be opened in early January).

- PHCs:

- Umbada locality: 15 PHCs
- Bahri PHCs (2 Primary Healthcare Centers)

RED SEA STATE:

- Hassai Awli PHC.

- PICU: Port Sudan Pediatric Hospital.

- NICU (Rehabilitation): Port Sudan

- Pediatric Hospital.

- Capacity Building:

- Emergency Triage , Assessment and Treatment (ETAT).
- Principle Management of Pediatric Care.
- Pediatric ICU Basics for Nurses.
- In-Job Training for CPAP.

GEDARIF STATE:

- Gedraif Teaching Hospital (Rehab and operational support).

- Gedarif Obs & Gyn Hospital (Rehab and operational support).

- Om Shegeerat PHC.

NORTHERN STATE:

- SAPA IDPs Healthcare Centre.

- Dongola Hospital NICU.

- Capacity Building:

- Training on disease surveillance and cholera case definition.
- Training on Infection Prevention and Control (IPC) Protocols.
- Psychosocial Support (PSS) and Psychological First Aid (PFA).

NORTH DARFUR STATE:

- PHCs:

- Almuzdawaga (Al Lait)
- Dankooj (Saraf Omra)
- Rwanda (Tawila)
- Dali (Tawila)

- Mobile Clinics:

- Ellait
- Saraf Omra
- Tawila

- Zamzam IDPS Camp:

- SAPA food distribution point: Approximately 95,000 meals are provided monthly.
- Safe Spaces: Hope Oasis and SAPA developmental centre.

Cont. In addition, Dr. Abdulazim presented an overview on the existing projects in each state as follows:

SOUTH DARFUR STATE:

- Sheikh Musa Hospital.
- Karari PHC.
- Tadamon PHC.

CHAD, ADRE

- Various projects

GEZIRA AND KASSALA STATES:

- Hilaliya
- Abu Ushar
- Evacuation of Gezira IDPs
- New Halfa
- River Atbara

Finally, Dr. Abdulazim stated that SAPA is utilizing GIS to lead Effective Planning, also he provided highlights on programmatic expansions:

- Grassroots Initiatives.
- Developmental and Community Initiatives.
- Rehabilitation Projects.
- ERTTs (Northern, Port Sudan).
- EMTs (Khartoum).
- Procurement, Distribution and Logistics to Save Lives.
- National Comprehensive Nutrition Campaign.

Closing Remarks:

1. Prof. Ahmed Shadoul on behalf of national and international experts: Prof. Shadoul started by thanking SAPA for arranging this wonderful opportunity which ensures that Sudan is at the heart of all of us. It has been a wonderful experience to listen to what SAPA achieved, to share our views, and to discuss the wonderful roadmap to set for restructuring and re-imagining the health system in Sudan. Also, Prof. Shadoul mentioned that the workshop was very informative and deep discussions as well as a lot of expertise and wisdom brought to your plan hopefully. Moreover, Prof. Shadoul stated that “we are really proud of what you have achieved and what you are trying to achieve”, in addition, we do believe that as long as you are there, listening to others, and bringing many minds together, you will build a new Sudan in Shaa Allah.

2. Dr. Mekitew Abuto on behalf of Goal organization: Dr. Mekitew started by thanking SAPA for organizing such a great event. It was his pleasure to be in the workshop, hear from experts and academia from the ministry of health and all the seniors in Sudan. Also, Dr. Mekitew emphasizes that the workshop was an opportunity to learn a lot of things from the experts that will aid him as he is a Goal staff member who is involved in the implementation of an EU funded project aimed at strengthening the Sudanese health system in North Kordofan and South Darfur states, in addition to another project successfully implemented a year ago. Finally, Dr. Mekitew thanks all the participants for their inputs, and sharing their insights and experiences, and he looks forward to working with SAPA in the near future.

Cont. Closing Remarks:

3. Dr. Bashir Kamal Eldin on behalf of Save the Children: Dr. Bashir started by thanking everyone and thanking SAPA not just for the invitation to attend this workshop but also for the proactive thinking and taking the initiative to think of the future and how to strengthen the health system while the war is ongoing. Also, Dr. Bashir acknowledged the diversity of the workshop attendees (academic backgrounds, medical doctors, public health professors, our donors). Moreover, Dr. Bashir stated that SAPA will be one of the biggest INGOs in Sudan, as we witnessed their major achievement in the past five years that have been carried out by Sudanese. Finally, Dr. Bashir mentioned that he will be happy to see SAPA growing and continue in supporting the health system in Sudan.

4. Dr. Almoghirah Abdellah on behalf of Federal Ministry of Health: Dr. Almoghirah started by extending many thanks to SAPA not just for the workshop but for all their contributions in all fields and locations even outside Sudan, especially in Chad. Also, Dr. Almoghirah stated that on behalf of FMOH, we have big trust in SAPA, therefore, we will provide any facilitation needed from outside because we know their potential in addressing communities and country's issues before health issues. Moreover, Dr. Almoghirah extended his thanks to all the workshop participants with their diverse backgrounds (academia, researchers, and practitioners), and acknowledged SAPA's efforts in organizing such a workshop which contains highly important topics to the health system that will guide us towards achieving FMOH objectives and strategy. Therefore, we are committed to consider the workshop outcomes and contribute to their implementation. Finally, the workshop was a great opportunity for networking, and it will be considered as a preliminary step for continuous discussions and initiatives, therefore, we as FMOH are open for any initiatives and ideas that will support Sudan's health system.

5. Dr. Yassin Hassan: stated that this workshop gave him hope despite the current situation in the country featured by darkness and depression. Also, Dr. Yassin emphasizes the importance of building people and communities who are capable of achieving rather than talking. Moreover, he highlighted the importance of having a platform to publish these achievements and efforts to motivate and give hope to Sudanese people. Also, Dr. Yassin stated that this workshop is considered an introduction to many following workshops for a detailed discussion for each topic. In addition, the upcoming workshops should be featured by creativity and innovation coupled with reflecting other countries' experiences. Finally, Dr. Yassin asked about mental health because war impacts will result in many mental and psychological cases, therefore, he wishes to see a psychiatrist in each health center.

Cont. Closing Remarks:

6. Dr. Yasir Elamin, President of SAPA: On behalf of the SAPA board and all the colleagues in SAPA, Dr. Yasir extended his deepest gratitude to all the participants for coming from overseas, sharing their thoughts and insights, and for the kind words said about SAPA. Also, he thanked the participants for sharing their opinions through the consultation calls for free. Moreover, Dr. Yasir showed his commitment to conduct workshops towards supporting the health system in Sudan, and he wishes for the upcoming workshop in a peaceful, united and democratic Sudan.

Furthermore, Dr. Yasir recognized that SAPA success is attributed to that Sudanese people believed and trusted in SAPA; as for all of our partnership with other organizations has been driven by the Sudanese staff working in those organizations. Also, Dr. Yasir stated that one of the pivotal recommendations for SAPA is to be focused and to adopt some specialization in SAPA's work. In conclusion, Dr. Yasir was pleased to announce that the establishment of a Think Tank called "SAPA Health Institute for Policy (SHIP)" will be finalized in the next 3 months to support not just SAPA's work but also the ministry of health and other organizations. Another announcement was that SAPA is at the final stage to approve a project to establish a center for medical training in Wad Madani which will incorporate telemedicine to allow contribution from abroad.

Key Recommendations

Recommendations gathered from all the workshop sessions as well as the feedback form, then framed based on implementation timeline as well as key thematic areas.

Recommendations based on implementation timeline:

They have been grouped into 3 categories, as follows:

Short-Term (Emergency Response & Recovery):

- Expand community-led mortality tracking initiatives to improve data accuracy on war-related deaths.
- Enhance emergency response capabilities by increasing access to essential healthcare, food, and shelter.
- Strengthen coordination mechanisms among humanitarian actors to ensure efficient resource distribution.
- Improve digital health data collection to enhance real-time monitoring of health crises.

Medium-Term (Health System Strengthening):

- Develop trust-building initiatives to encourage local participation in health data collection.
- Enhance workforce retention strategies by offering financial incentives and capacity-building programs.
- Engage diaspora health professionals to support telemedicine, training programs, and medical campaigns.
- Strengthen collaboration between public, private, and international health organizations to ensure policy reforms and long-term sustainability.

Long-Term (Resilient & Equitable Health System):

- Establish a national health information system that includes data on marginalized and displaced populations.
- Integrate digital health solutions for disease surveillance, outbreak response, and telemedicine services.
- Ensure sustainable healthcare financing by reducing reliance on out-of-pocket expenditures and increasing government and donor funding.
- Implement a decentralized health governance model that balances local autonomy with central oversight.

Recommendations based on key thematic areas:

Theme	Opportunities	Recommendations/agenda for reform
Bridging Policy Gaps for Effective Decentralized Health Governance	<ul style="list-style-type: none"> • Building trust with the community and government that will create political pressure on providing good health services. • Triangulation of Healthcare gaps analysis and analysis done by peace-building organizations to understand security threats. • Improving centralized technical guidance and strategic planning. • Consider the Community Medical Response Teams (CMRTs) and similar bodies who are working on the ground as fund sub-receivers. • Utilize the national health information system (DHIS2) as a unified platform for data sharing with all health actors. 	<ol style="list-style-type: none"> 1. Develop agile policymaking frameworks adaptable to conflict and post-conflict contexts. 2. Start with seeing and visualizing our information and data in all sectors including health. 3. Adopt a community-centered decentralization model. 4. Enhance local ownership and community participation. 5. Adopt a community-based approach for health accountability and health intervention design. 6. Adopt Effective Development Cooperation (EDC) principles to harness the interest of donors who are willing to support. 7. Establish emergency coordination mechanisms. 8. Cohesive sectoral and cross-sectoral policies. 9. Improve accountability through performance tracking systems. 10. Conduct comprehensive mapping of all health actors as a prerequisite for coordination. 11. Build more bridges, enhance trust, and improve cross-level coordination. 12. Health and education should be centralized. 13. There are 6 areas that need to be centralized: disease outbreak control, management, and response; drug procurement; vaccine procurement; technical and financial support to needy states; policy development; and senior level jobs. 14. As a recommendation for SAPA, to figure out a constructive way to rethink centralization vs decentralization.

Recommendations based on key thematic areas:

Theme	Opportunities	Recommendations/agenda for reform
Addressing Health Workforce Shortages in Sudan	<ul style="list-style-type: none"> • Availing paramedics through the academy of health science, which is now endorsed by the cabinet to become a university. • Provision of capacity building programs and training that are considered non-monetary incentives for the healthcare workforce. • Strengthening workforce distribution through conducting surveys at the safe states. • Potentials of medical diaspora in Medical missions and campaigns, • Telemedicine initiatives, Rehabilitation of health institutes, Medical training and knowledge-sharing programs, and Supporting curriculum modernization. • Emphasizing the importance of training provided by the SMSB which is considered a motivation and incentive for the healthcare professionals to reside in the country for years. 	<ol style="list-style-type: none"> 1. Establish a formal medical Diaspora engagement strategy. 2. Enhancing collaboration with international organizations, NGOs, and the private sector, especially in supporting a good retention package and workforce development. 3. Strengthen Local Workforce Retention – Improve working conditions, financial incentives, and career development pathways. 4. Apply conditional registration for private entities to allocate budget for healthcare training. 5. Build the capacity of the community health workers (CHWs). 6. Strengthening partnerships between Sudanese healthcare institutions and global academic networks. 7. Apply measures for medical neutrality and safety of healthcare workforce and medical supplies. 8. Provide support for the healthcare providers through sectoral engagement (e.g. education support or any fees exemptions) to reduce the financial burden. 9. Exploring taskshifting and new models for providing healthcare providers. 10. Provide free of charge healthcare services.

Recommendations based on key thematic areas:

Theme	Opportunities	Recommendations/agenda for reform
Empowering Communities for Sustainable Health Initiatives & Accountability	<ul style="list-style-type: none"> Communities ability to respond swiftly and effectively to address emerging needs. Community grassroots organizations that spearhead various initiatives typically embrace rights based political narratives. Political awareness of the projects is required for the survival of these initiatives. Civil Monitoring System to monitor services closely and act as a communication link between the community and governmental and non-governmental organizations. The combination of traditional and modern practices has played a significant role in building trust and fostering collaboration among community members. The health system should learn from the community initiatives in terms of effective feedback mechanisms, and the bottom-up decision making process. 	<ol style="list-style-type: none"> 1. Maintain and strengthen grassroots organizations that were fundamental to the emergence of strong community solutions. 2. Prioritize community empowerment to achieve their objectives. 3. Strengthen community ownership and accountability. 4. Utilize communal resource mobilization for sustainable financial strategies. 5. Establish a representative body to participate in decision making, and to convey and advocate for the actual needs. 6. Establish channels with the community through CHWs to support decision making, accountability, and co-designing context-specific initiatives. 7. Develop communication strategy based on proper understanding of community ownership. 8. Establish social accountability mechanisms.
Empowering Local Health Systems to Utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan	<ul style="list-style-type: none"> Community-led evidence generation is possible only through consensus building and utilizing technology and innovation. Utilize free technology to aid in mapping exercises as well as surveillance. Technology Integration in Healthcare services, education, and professional practice is simple and cost effective intervention. Remote sensing data is critical for monitoring public health impacts of conflict. 	<ol style="list-style-type: none"> 1. Strengthen Community-Led Health Data Collection. 2. Enhance Emergency Response to Reduce Mortality 3. Engage the Sudanese Diaspora for Support 4. Advocate for Accountability & Policy Reform 5. Create demand for evidence to drive the political will and the development vision. 6. Integrate remote sensing data tools into crisis response and policy planning.

Recommendations based on key thematic areas:

Theme	Opportunities	Recommendations/agenda for reform
Leveraging Health for Peace and Stability in Sudan	<ul style="list-style-type: none"> Health interventions can serve as peacebuilding tools by fostering cooperation, trust, and social cohesion. Addressing fragility requires a shift from short-term humanitarian responses to sustainable, conflict-sensitive development. A well-functioning, equitable health system can reduce tensions, enhance resilience, and promote lasting peace. 	<ol style="list-style-type: none"> 1. Adopt Cross-community health initiatives to reduce tensions by fostering collaboration among different groups. 2. Ensure equitable access to services through PHC expansion. 3. Joint humanitarian-development-peace (HDP) approaches to bridge emergency response with long-term system strengthening. 4. Inclusive health governance models that involve local actors, civil society, and displaced communities. 5. Conflict-sensitive programming that considers local power dynamics and historical grievances. 6. Investing in local health infrastructure to provide sustainable, community-driven services. 7. Capacity-building for healthcare workers to equip them with conflict-resolution and trauma-informed care skills. 8. Strengthening mental health and psychosocial support services for conflict-affected populations.
Enhancing Sudan's Health Resilience Against Climate Change Impacts	<ul style="list-style-type: none"> Enhance Data Systems – Use satellite imagery, environmental tracking, and AI driven data analytics for decision-making. Proactively plan for climate-related health risks instead of reacting to crises. 	<ol style="list-style-type: none"> 1. Establish temporary and climate-resilient healthcare facilities. 2. Expand telemedicine and mobile health technology. 3. Train and equip community health workers to handle climate-sensitive health risks. 4. Financial and partnership support to enhance resilience at the community level. 5. Improve access to environmental and agricultural data for evidence-based planning. 6. Engage farmers, healthcare providers, teachers, and engineers to develop localized solutions.

Moving Forward: Key Action Points

The SAPA workshop, Re-imagining Sudan's Health System in Conflict: Towards a Resilient, Conflict-Responsive, and Inclusive Policy Agenda, provided a critical platform for envisioning a future-proof health system in Sudan—one that is adaptable to conflict, community-driven, and built on sustainable, decentralized governance models. The discussions, expert insights, and collaborative exchanges resulted in a roadmap that outlines key action points necessary for strengthening Sudan's healthcare sector amid its ongoing humanitarian crisis.

A key realization from the workshop was the urgent need to bridge policy gaps and strengthen governance mechanisms. The current fragmented system must transition towards community-centered decentralization, where local health authorities and grassroots organizations play a pivotal role. This requires agile policymaking frameworks that can adapt to both conflict and post-conflict scenarios, alongside enhanced coordination mechanisms and comprehensive mapping of health actors to ensure strategic resource allocation. The recommendations also emphasize balancing decentralization with centralized oversight in critical areas, such as disease outbreak management, drug and vaccine procurement, health financing, and policy development.

The shortage of healthcare professionals in Sudan remains one of the most pressing challenges, exacerbated by brain drain, workforce displacement, and inadequate financial incentives. The workshop underscored the necessity of engaging the Sudanese medical diaspora through structured programs such as telemedicine, medical missions, and training partnerships. In parallel, local workforce retention must be addressed through improved working conditions, financial incentives, and career development pathways. Innovative solutions such as task shifting, targeted capacity-building, and formalized public-private partnerships can further stabilize the healthcare workforce. A critical aspect of workforce management is ensuring medical neutrality and the protection of healthcare workers, given the ongoing attacks on medical personnel and facilities.

Community empowerment emerged as a fundamental pillar of health system resilience. Participants highlighted the critical role of grassroots organizations in responding to crises and sustaining essential healthcare services. The workshop emphasized the importance of strengthening community ownership and accountability, enabling local leaders to actively participate in decision-making processes. Sustainable resource mobilization, local governance structures, and the integration of community health workers (CHWs) as intermediaries between health providers and the population were also identified as key priorities. To build lasting trust and efficiency, social accountability mechanisms and clear communication strategies must be embedded within health governance frameworks.

Technology and digital innovation present an unparalleled opportunity to transform Sudan's healthcare landscape. The workshop highlighted the power of digital tools in mortality tracking, disease surveillance, and crisis response. Community-led data collection efforts should be expanded, while remote sensing and satellite imaging can provide real-time insights into infrastructure damage, population health needs, and food insecurity trends. Leveraging open-source data, AI-driven analytics, and digital health solutions will not only improve emergency response mechanisms but also lay the foundation for evidence-based policymaking and long-term health system planning.

A central theme of the workshop was leveraging health interventions as a tool for peacebuilding. In fragile and conflict-affected settings, healthcare delivery can serve as a bridge between divided communities, fostering cooperation and social cohesion. The expansion of primary healthcare (PHC) services is a crucial step towards equitable access, reducing disparities that could otherwise fuel grievances and instability. To ensure sustained peace, integrating conflict-sensitive programming, cross-community collaboration, and inclusive governance structures within the health sector is vital.

Additionally, investing in trauma-informed care and mental health services will be crucial to address the psychological and social consequences of prolonged conflict. The workshop also highlighted climate change as a major, yet often overlooked, threat to Sudan's health system. With increasingly erratic rainfall patterns, extreme droughts, and food insecurity, health resilience strategies must incorporate climate adaptation. Recommendations include establishing climate-resilient healthcare facilities, scaling up telemedicine, training health workers in climate-sensitive disease management, and improving early warning systems for climate-induced health risks. A multi-sectoral approach, engaging farmers, engineers, environmental experts, and health professionals, will be critical in ensuring Sudan's healthcare system can withstand and respond to climate-related shocks.

Strategic Implementation Plan

To ensure a practical and phased approach, the workshop structured its action points into short-term, medium-term, and long-term interventions:

Short-Term (Emergency Response & Recovery): Expand community-led mortality tracking, strengthen emergency healthcare access, improve humanitarian coordination, and enhance real-time digital health data collection to mitigate immediate health crises.

Medium-Term (Health System Strengthening): Develop trust-building initiatives, enhance workforce retention strategies, formalize medical diaspora engagement, and strengthen multi-sector collaboration to create a stable and functioning health system.

Long-Term (Resilient & Equitable Health System): Establish a national health information system, integrate advanced digital health solutions, secure sustainable financing, and implement a balanced decentralized governance model that ensures local autonomy while maintaining centralized oversight for critical services.

The SAPA team has tried through this workshop to provide a clear, actionable framework for reimagining Sudan's health system amidst the country's ongoing crisis. By prioritizing policy reforms, workforce retention, community engagement, digital innovation, health-for-peace initiatives, and climate resilience, Sudan can lay the foundation for a stronger, more inclusive, and conflict-responsive healthcare system.

The path ahead requires collaborative engagement from existing authorities, governmental entities, international partners, local organizations, and the Sudanese diaspora. Mobilizing financial and technical resources will be critical to translating these recommendations into reality. Above all, the workshop reinforced the principle that healthcare is not just a service, but a fundamental right—and a vehicle for stability and peace in Sudan.

Moving forward, SAPA remains committed to leading this transformation, advocating for sustainable health solutions, and ensuring that the resilience of Sudan's health system is rooted in the strength of its people and communities.

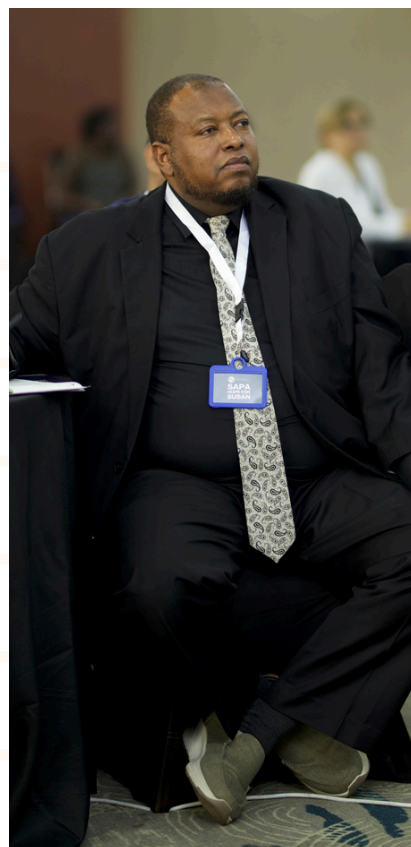
Workshop Evaluation

The workshop aimed at addressing critical issues in Sudan's health system received a mix of responses from participants, with most evaluating it as highly relevant and evidence-based. The majority of participants agreed that the workshop effectively addressed the critical issues related to health governance, workforce shortages, community health initiatives, and climate-resilient systems in Sudan. In-depth, an electronic evaluation form (using Google Form) has been shared with all the participants and this summary highlights the responses from 11 participants.

Key Insights and Recommendations:


Relevance to Sudan's Health System: Most participants felt that the workshop fully addressed the critical issues in Sudan's health system, particularly in the areas of decentralized governance, community-based health systems, and workforce shortages. However, some found that certain areas, such as climate resilience and multi-sector collaboration, were partially addressed.	Valuable Sessions: The sessions on "Bridging Policy Gaps for Effective Decentralized Health Governance" and "Empowering Communities for Sustainable Health Initiatives" were highlighted as providing the most actionable insights. Many participants emphasized the importance of community-based health systems and decentralized governance as keys to reforming Sudan's health sector.	Evidence-Based Discussions: The majority of participants confirmed that the discussions and presentations were evidence-based and aligned with best practices, though a few noted that certain recommendations could benefit from stronger evidence, particularly concerning climate resilience and broader health system integration.
Engagement and Expertise: Participants highly rated the expertise and engagement of speakers and panelists. The discussions were considered highly effective in fostering meaningful dialogue, with many participants expressing interest in active involvement in future initiatives.	Logistics and Facilitation: The organization and logistics were generally well-received, with some participants mentioning minor delays in invitations and travel arrangements. However, most found the workshop format conducive to engagement and interaction, although a few suggested that the logistics could be improved in future events.	Next Steps: Several participants identified the finalization of recommendations and follow-up actions as critical next steps. There was consensus around the need for regular updates and the formation of working groups to continue the momentum and ensure the actionable recommendations are implemented. Follow-up events and continuous engagement were seen as vital for sustaining the momentum from the workshop.
Recommendations for Future Discussions: Participants recommended inviting a broader range of experts and policymakers, including from the private sector, humanitarian organizations, and countries with relevant recovery experiences, such as Japan and Germany. The inclusion of multi-sectoral perspectives and inter-sectoral collaboration was seen as key to advancing Sudan's health system reform.	Participant Feedback: Most participants expressed interest in contributing to follow-up initiatives, whether through advisory roles or active participation in working groups. The call for increased engagement and participation from various sectors, such as education, social welfare, and violence prevention, was noted as crucial for future workshops.	

In conclusion, the workshop provided a valuable platform for cross-sectoral dialogue on Sudan's health system challenges and solutions. It was well-received for its evidence-based approach and effective facilitation. Moving forward, maintaining engagement, fostering collaboration across sectors, and ensuring actionable outcomes from the workshop's recommendations will be essential to strengthening Sudan's health system. Participants were optimistic about continued involvement in follow-up initiatives and were eager to contribute to the reform process.



Annexes:

Annex 1: Consultative Questions for Actors



Sudanese
American
Physicians
Association

1620 Hardeman Ln,
Plano, TX 75075

+1 (888) 472-7287
sapa@sapa-usa.org
www.sapa.usa.org

Consultative Questions

There are 6 themes for the discussion questions:

- 1. Health System Leadership and Governance**
 - Strategies for decentralized governance models.
 - Formalizing the role of CBOs.
 - Integrating violence prevention, poverty reduction, and social cohesion.
- 2. Health Workforce and Capacity**
 - Addressing workforce shortages and reintegration of displaced professionals.
 - Integrating informal health delivery channels.
- 3. Health Service Delivery**
 - Piloting interventions in stable areas.
 - Enhancing equitable healthcare access.
- 4. Health Information Reform**
 - Improving accessibility of health data systems for front-line staff.
 - Exploring emerging technologies.
- 5. Access to Medicines**
 - Sustainable supply chain models.
 - Continuous access to essential medicines in conflict zones.
- 6. Health Financing**
 - Conflict-sensitive and sustainable financing models.
 - Co-financing with communities and civil society.
- 7. SAPA Strategy**

To ensure better alignment of SAPA 2025 - 2027 strategy to Sudan health system demands.

Annexes:

Annex 1: Consultative Questions for Actors

Health system leadership and governance:

- How can decentralized health governance models be effectively implemented in Sudan's diverse and conflict-affected regions? Have you observed any promising practices across the country?
- How can we foster stronger collaboration and trust between governmental health bodies and local communities to enhance conflict-sensitive health governance?
- What role should community-based organizations and local actors play in shaping Sudan's health governance? How can their contributions be formalized and supported?
- How can we ensure that the new health system integrates wider responsibilities, such as violence prevention, poverty reduction, food security, and social cohesion? Provide examples where integrated approaches have been mobilized through the Sudanese health system.

- What role do you believe organizations like SAPA can play in facilitating long-term health system reform in Sudan?

Health workforce and capacity

- What strategies should be employed to address the critical shortage of healthcare workers in conflict-affected regions? Are there examples where displaced medical professionals had been reintegrated into the health system?
- How can informal health delivery channels, such as community health workers and traditional healers, be better integrated into the formal health system to ensure continuity of care during conflict?
- What can be done to strengthen the capacity of local health systems to operate independently in the absence of national-level support due to conflict?

Health service delivery

- In areas of relative stability, what are the opportunities for piloting new health system interventions? And what opportunities exist to

Annexes:

Annex 1: Consultative Questions for Actors

integrate health services within other public institutions and community-level platforms.

- How can we ensure equitable access to healthcare services, particularly for the most vulnerable populations such as women, children, and displaced communities?
- Do you think the mechanisms through which health services are delivered are capable of reducing the local levels of violence?

Health information reform

- What are the current health information databases still in operation? And what geographic/population scope can they capture?
- Considering the trade-off between urgent responses vs comprehensive health information systems, what adaptations do you believe could make it easier for front-line staff to engage in data systems? And what information do you think is necessary to capture?
- What role do you believe emerging technologies and innovations can

play in reforming health information systems?

Access to medicines

- How can we address the shortages of essential medicines and medical supplies in conflict-affected regions? Are there humanitarian supply chains that have potential to be sustained beyond the conflict?
- What innovative supply chain models can be developed to ensure continuous access to medicines and health technologies in conflict zones?

Health financing

- What innovative financing models could be explored to sustainably fund Sudan's health system?
- Have you come across models of financing that leveraged co-financing from Sudanese communities, civil society and local governance?
- How can we ensure that funding models for health system strengthening are conflict-sensitive and adaptable to changes in Sudan's security environment?

Annexes:

Annex 1: Consultative Questions for Actors

Additional Questions to Align Inputs with SAPA's Strategy

Across all themes: What specific recommendations do you have for SAPA to incorporate into its ongoing strategy to ensure resilience, localization, and sustainability?

Governance: What role should SAPA play in creating accountability frameworks for health governance in Sudan?

Financing: How can SAPA advocate for more conflict-sensitive and locally driven health financing models?

Information Reform: What data collection or analysis gaps should SAPA prioritize to strengthen decision-making in health interventions?

Annexes:

Annex 2: Presenters' Biobibliography:

Dr. Imad Ismail

is a public health specialist who worked at various levels and in different capacities in the health system besides working with key technical programmes before joining WHO. He is involved in providing technical backstopping to and building capacities of sub-national governments (States and Localities) especially in planning, supervision and monitoring of the performance of local health services. He has a special interest in developing strong, robust, resilient and responsive health systems in developing countries. Dr. Imad's educational background includes: MD in Community Medicine from Sudan National Medical Specialization Board; Master of Public Health from University of Maastricht, Netherlands; Diploma in Project Management and Resource Development from Commonwealth University and Bachelor of Medicine and Surgery from University of Khartoum with extensive trainings especially on health systems development and strengthening and monitoring and evaluation.

Dr. Muez Ali

is the Research and Policy Associate at Earthna, Qatar Foundation. He is also an Honorary Research Fellow at University College London. His research focuses on security, climate change in the MENA region, electrification and energy access, and the political economy of development.

Dr. Haitham Bashier

is the director of the Public Health Emergency Management Center (PHEMC) at EMPHNET. Dr. Haitham is a member of the Agency for Public Health Education Accreditation (APHEA) Board of Directors. He was the Executive Director of the International Academy of Public Health (IAPH) in Jordan. He also worked as an assistant professor at the School of Medicine, National University in Khartoum. He worked as the Director of Teaching and Education at the Public Health Institute in Sudan. He worked as the Emergency and Humanitarian Action Department director at FMOH, Sudan, till 2010. Besides teaching, Dr. Haitham is a researcher, supervisor, and external examiner at many universities. His published work is mainly in emergency management, capacity building, and training. Dr. Haitham holds a Ph.D. in Disaster Management and a master's in public health.

Dr. Shaza Elmahdi

is the Sudan Country Director at the Center for International Private Enterprise, operating from the East Africa regional office in Addis Ababa. She has spent over 19 years focused on international development, governance, economic reform, democracy, and public health, Shaza brings a wealth of knowledge and expertise to her role. She is a co-founder of the Sudanese American Physician Association and serves as the Chair of the Board of Directors at Center Links. Additionally, she is a member of the International Human Rights Committee at the National Academy of Sciences. Before joining CIPE, Shaza worked with various esteemed organizations, including Invisible Children, the Global Women's Institute at George Washington University, SIHA, and Human Rights Watch. She earned her MBBS degree from the University of Khartoum, an MPH from George Washington University, and an MA in Human Rights from the University of London. Shaza was also a recipient of scholarships from the Gates and Malinda Foundation to study reproductive health at the Gates Institute at Johns Hopkins University.

Annexes:

Annex 2: Presenters' Biobibliography:

Dr. Bashir Kamal Eldin Hamid

is an assistant professor of internal medicine and public health specialist who worked for the Ministry Of Health, NGOs and INGOs. currently leading the health portfolio for Save the Children-Sudan.

Dr. Almoghirah Abdellah

is a community medicine consultant who currently serves as a Director General of Directorate General for Curative Medicine at Federal Ministry of Health and a senior staff at National Health Insurance Fund (NHIF) headquarters in Khartoum, Sudan. He earned an MBBS from the University of Khartoum in 2001, a postgraduate Diploma in Community Medicine from Gezira University in 2008, and an MSc in Health Economics and Healthcare Management from Chulalongkorn University in 2013. He is Board certified having an MD in Community Medicine from Sudan Medical Specialization Board, and Certified Professional in Healthcare Quality (CPHQ) from The American Healthcare Quality Certification Commission, National Association for Healthcare Quality July 2024. Dr. Almoghirah's networking includes membership at WHO Health Financing Technical Group, Joint Learning Network (JLN) Population Coverage Collaborative, Executive Board Member at AfroPHC and Community Medicine Specialty Consultancy Council at Sudan Federal Ministry of Health. He is also a supervisor of health research, a lecturer, an internal and external examiner of public health subjects at several Medical and health academic institutions in Sudan as well as regionally at International Academy of Public Health (IAPH). He is a reviewer at British Medical Journal (BMJ) Global Health and Certified Professional in Healthcare Quality (CPHQ) from The American Healthcare Quality Certification Commission, National Association for Healthcare Quality July 2024.

Professor Ibrahim Bani

is a highly accomplished public health physician with over two decades of extensive experience in International Public Health. His impressive career encompasses various academic appointments and significant contributions to the field. Currently, Professor Bani serves as an Associate Professor (adjunct) at the Chronic Disease Epidemiology Department, Yale School of Public Health, USA, and an Adjunct Associate Professor at the Global Health Department, Rollins School of Public Health, Emory University, Atlanta, GA, USA. Recently (2020-2024), I was an Associate Professor (Community Medicine) at the College of Medicine, Ajman University, UAE. Dr. Bani's international experience is equally impressive, encompassing collaborations with renowned organizations such as Nutrition International, World Bank, WHO, UNICEF, USAID, WFP, and UN Humanitarian Mission in Iraq. He has consulted with WHO to evaluate regional management training programs in the Middle East and North Africa. Dr. Bani is also an active member of a WHO consultative group focused on developing Public Health Leadership and Networking.

Annexes:

Annex 2: Presenters' Biobibliography:

Dr. Ahmed Shadoul

is a distinguished medical leader with over 40 years of experience in healthcare, public health, and humanitarian operations. Currently, he serves as the Secretary General of the Sudan Medical Specialization Board, Director of the Arab Health Specialization Board (Sudan Office), and a Senior Advisor to Sudan's Federal Minister of Health. He is also a Goodwill Ambassador for Health in Sudan. Dr. Shadoul graduated from the University of Khartoum's Faculty of Medicine and specialized in pediatrics at the University of Liverpool, UK. He holds additional postgraduate qualifications in communication, health education, disaster management, and information technology. His expertise spans maternal, neonatal, and child health, disease control, and health system strengthening in both developed and developing nations. He has held key roles in international organizations, including WHO and UNICEF, where he contributed to health policy development, emergency response, and national health strategies across multiple countries, including Sudan, Afghanistan, Pakistan, and Yemen. His leadership was instrumental in responding to humanitarian crises such as the 2005 Pakistan earthquake, the 2010 mega floods, and Yemen's complex health emergencies. As WHO Representative in Afghanistan and Yemen, Dr. Shadoul successfully coordinated major humanitarian and development initiatives, negotiated access to health services in conflict zones, and mobilized international resources. He also played a vital role in Sudan's COVID-19 response. His contributions extend to global health governance, serving on WHO committees, including the Staff Pension Committee and the Technical Advisory Group for the WHO Global Code of Practice on Health Worker Recruitment. Dr. Shadoul's leadership continues to shape medical education, health policy, and emergency response, making a lasting impact on global health and humanitarian efforts.

Dr. Muzan Alneel

is the co-founder and managing director of ISTinaD Research Center (Innovation, Science, and Technology for People-Centered Development) established in Sudan in 2021. Her research focuses on industrial policy, development governance, and people-centered policy analysis and design. Dr. Muzan is also a research fellow at the Transnational Institute (TNI) and a former non-resident fellow at the Tahrir Institute for Middle East Policy (TIMEP). She has also served as a volunteer consultant on industrial policy at the Industrial Research and Consultancy Center (IRCC) in Sudan, where she played a key role in establishing the Institute for Industrial Policy Studies in 2020.

Annexes:

Annex 2: Presenters' Biobibliography:

Dr. Mohamed Ahmed Alagib

is the Program Coordinator at Talawiet Organization for Development (TOD), overseeing UNHCR-funded projects in Sudan. With a Master's degree in Population & Development and a Bachelor's in Economic & Rural Development, Mohamed is focused on Food Security and Livelihoods (FSL), child protection, peacebuilding, and community mobilization. Previously, as Project Manager with Secours Islamique France (SIF), he successfully implemented a school feeding program, improving attendance and academic performance for 3,000 students. His roles at CARE International and Mercy House for Relief & Development further honed my skills in FSL, conflict prevention, and child protection, benefiting thousands across South Kordofan and Darfur. He also contributed to capacity building as a freelance trainer, delivering project management and humanitarian aid training. His tenure with UNAMID as an Associate Civil Affairs Officer allowed him to lead peacebuilding initiatives, manage Quick Impact Projects (QIPs), and strengthen local NGOs.

Dr. Ibrahim Osman, MD, SMC, DHA, ECFMG

is a certified physician, former director of the COVID-19 Centre in West Darfur State, with interest in public health leadership. Currently, working as the Darfur Region's Program Coordinator at SAPA.

Mr. Khalid Tigani

is an experienced journalist, who serves as the editor-in-chief of the Sudanese newspaper Elaph.

Dr. Marwa Gibril

is a family physician and public health expert, holds an MPH in Health Policy from the Harvard T.H. Chan School of Public Health. Her passion centres on health security, with focus on protecting, recovering, and reforming fragile health systems in conflict and post-conflict settings. Currently, she is freelancing with various organisations supporting the humanitarian response in Sudan.

Dr. Eiman Ahmed Mahmoud

is a global health specialist and pathologist by training, earned her medical degree from the University of Khartoum-Sudan and MPH in Infectious diseases and Biomedical Sciences from University of California Berkeley. Served as a lecturer at UC Berkeley School of Public Health and currently, a Professor of Pathology and Director of Global Health Program at Touro University, California. Her current research is based in several East African countries in cervical cancer, NCD and healthcare worker capacity strengthening in LMICs. She served in the SAPA board of directors 2020-2022 cycle, and secretary of Consortium of Pan African Medical Diaspora (COPAMD), both of which enabled her to synergize academic validity and non-governmental humanitarian organizational work. She is being selected to participate in the Global Forum 'Health Research at the Nexus of Humanitarian crisis and Climate Change' hosted by Fogarty.

Annexes:

Annex 2: Presenters' Biobibliography:

Assistant Professor Maysoon Dahab

is an infectious disease epidemiologist at the London School of Hygiene and Tropical Medicine. She is the co-director of the Sudan Research Group, where she is currently focused on understanding the health impacts of the Sudan war and the community-led health response.

Professor Elmoubasher Farag

Professor Elmoubasher Farag is a senior infectious disease epidemiologist and the head of the Communicable Disease Control Programs at the Ministry of Public Health, Qatar and the Vice President for Medical and Health Sciences Office in Qatar university.

Dr. Mona Ibrahim

is the Lead Policy Adviser in the Department of Social Policy and Intervention, University of Oxford. Mona also holds advisory positions across major international actors including the FCDO, UNICEF, WHO, and WFP.

Dr. Faisal Ahmed Alnoor Elhaj

is the Country Director for SAPA, bringing a strong background in pharmacy and public health to lead and oversee the organization's strategic programs. With extensive experience in policy formulation, guideline development, and health program implementation, he plays a key role in strengthening community health initiatives. Faisal's leadership focuses on enhancing health outcomes, ensuring effective program delivery, and fostering impactful collaborations to advance SAPA's humanitarian and public health efforts in Sudan.

Dr. Zena Ahmed

currently works as a Lead Analyst at the Yale Humanitarian Research Lab, where she researches public health impacts in areas of Sudan affected by conflict-related damage. Previously, Zena worked as a Health Advocacy and Policy Consultant at Physicians for Human Rights, contributing to policy research and advocacy initiatives for marginalized populations. She applies research and data to address global humanitarian challenges. Zena Ahmed, MS, MPH, has experience in health policy, crisis management, and humanitarian advocacy. She earned her Master of Public Health in Health Policy from Yale University and a Master of Science in Translational Medicine from the City College of New York. Her academic background focuses on policy development and crisis operations in humanitarian settings.

Annexes:

Annex 2: Presenters' Biobibliography:

Dr. Abdulazim Awadallah

is a public health professional with 8 years of experience in leading health initiatives in Sudan. Holding a Master of Public Health (MPH) from Tokyo Medical and Dental University (TMDU), and serving as the Programs Manager for SAPA supporting all country projects across more than 8 states. He has worked prior as a Health Systems Consultant with WHO during COVID-19, carrying out indirect impact and cost-benefit analysis of MCH services under COVID, worked as a Consultant for PHC Innovations Mapping with UNICEF supporting prioritization of PHC solutions under the context of the war, and currently serving as a Universal Health Coverage (UHC) National Consultant supporting the model development and implementation of the SHARE Project across 420 PHC's across 18 states.

Annexes:

Annex 3: SAPA in Numbers:

SAPA IN 2024



1325

Healthcare
Professionals
Supported Through
Incentive Programs

22,700

Children
Screened for
Malnutrition

5,900

Admissions for
Severe Acute
Malnutrition (SAM)

436,186

Meals
Distributed

1600

Deliveries by A
Skilled Birth
Attendant

11

New
Partnerships

539

Medical Cadres
and Community
Volunteers Trained

10,000

Children Under 5
Vaccinated

36

Mobile Clinics
Deployed

14

SAPA-Supported
Hospitals

17

Rehabilitated
Facilities

20

SAPA-Supported
PHC Centers

425,000

Patients
Served

3200

Psychosocial
Consultations
ProvidedFollow SAPA
on Social MediaSAPA
Newsletter
 www.sapa-usa.org
 sapa@sapa-usa.org


Annexes:

Annex 4: List of participants:

Participants list			
Category	Name	Affiliation	Attendance
Academia	Ahmed Abdalla Mohamadani	Lecturer at UMST, Rwanda	In person
	Ahmed Alamin Elsheikh	Lecturer at UMST, Rwanda	In person
	Eiman Ahmed Mahmoud	Academia	In person
	Ibrahim Bani	Yale School of Public Health, USA	In person
	Maysoon Dahab	London School of Hygiene	In person
	Samir Shaheen	Lecturer at UMST, Rwanda	In person
Economist	Yassin Hassan Bashir	Economist, PHC management	In person
European Union	Claudia Marinaro	European Union Delegation to the Republic of the Sudan	In person
Government	AbdalRaof Ahmed Abdalla Sharfi	Doctors Leader/Academic	Virtual
	Ahmed Mohamed Farah Shadoul	Secretary General, Sudan Medical Specialization Board	In person
	Alaa Altayeb Mudathir	Ministry of Health	Virtual
	Almoghirah Alamin Gadasseed Abdellah	Sudan Federal Ministry of Health	In person
	Osama Abdelrahman Sharaf Eldin	Sudanese consul, Rwanda	In person
	Reem Galal Ahmed Mohamed	Ministry of Health	In person
INGOs	Bashir Kamal Eldin Hamid El Sanousi	Save the Children	In person
	Elmoubashar Abubaker Abd Farag	Qatar Fund for Development	In person
	Hagir Yahya Mohamed Hassan	IRC	In person
	Haitham Bashier Abbas Bashier	Emphinet	In person
	Mekitew Letebo Abuto	GOAL	In person
	Muez Ali Abdelgadir Ali	Qatar Foundation	In person
	Shaza Bala Elmahdi	CIPE	In person
Journalist	Khalid Tigani Ahmed	Journalist	In person
National NGOs	Awatif Mohamed Hassan Hamid	ERRS Medical Office Rep/WRR Rep.	In person
	Mogahid Alteib Yousif Alteib	ERRS Medical Office Rep/WRR Rep.	In person
	Mohammed Ahmed Alagib Ahmed	Talawiet Organization for Development	In person
Pan African institute	Hadeer Mousa	Center for Occupational and Environmental Health-Africa (COEHA)	In person

Annexes:

Annex 4: List of participants:

Participants list			
Category	Name	Affiliation	Attendance
Public Health Expert	Marwa Gibrel	Health advisor/consultant	In person
	Mona Abdelaziz	Public Health Expert	Virtual
	Safa Ali	Saudi Hospital	Virtual
Research institute	Danielle Poole	Yale	Virtual
	Mona Ibrahim	Academia / University of Oxford	In person
	Muzan Abuobaida Mohamed AhmedAlneel	ISTinaD Research Center	In person
	Zena Ahmed	Yale Humanitarian Research Lab	In person
SAPA	Faisal Ahmed Elnoor	SAPA	In person
	Abdulazim Ali Abdulazim	SAPA	In person
	Kabashi Hashim Alawad	SAPA	In person
	Razan Hashim Mirghani	SAPA	In person
	Tasneem Abdalla Ahmed	SAPA	In person
	Salim Mohamedsaeed Salim	SAPA	In person
	Ahmed Isam Eldin Ahmed	SAPA	In person
	Walaa Sulieman Babikir	SAPA	In person
	Ibrahim Adam Osman	SAPA	In person
	Omer Abuzaid	SAPA	In person
	Alanood Elbagir Abdelgaoum	SAPA	In person
	Abdulrahman Abdullah Awadullah	SAPA	In person
	Yasir Yousif	SAPA	In person
	Ali Elsayed	SAPA	In person
	Huzaifa Salim	SAPA	In person
	Hatim Kheir	SAPA	In person
	Mohamed Yahia Elsaid	SAPA	In person
	Anmar Homeida	SAPA	Virtual
UN Agencies	Imad Ismail	World Health Organisation	Virtual
	Yusra Hassan	UNICEF Sudan	Virtual
	Ali Elsayed	UNICEF Sudan	Virtual
Sudan Doctors Syndicate	Adiba Ibrahim Elsayed	Sudan Doctors Syndicate	In person

Annexes:

Annex 5: Program Timetable:

Tuesday, February 11, 2025

Time	Activity	Description
6:00 – 8:00 PM	Social Dinner – Ice Breaker exercises	Welcome and networking session

Wednesday, February 12, 2025

Time	Activity	Description	Speaker(s) / Facilitator(s)
8:00 – 8:30 AM	Registration & Breakfast	Participant check-in and materials distribution	SAPA Team – Tasneem
9:15 – 9:30 AM	Opening Remarks	Welcome speeches	Yasir Yousif Elamin – SAPA president Sudan Consul – Rwanda.
9:30 – 9:40 AM	Introductory and Guidance on the two days events and overall agenda mapping	Housekeeping	SAPA Team – Tasneem
9:40 – 10:00 AM	Introduction: Situational analysis on the status of health system in Sudan	Overview about the current health care system situation in Sudan, the different efforts and entities working on healthcare, and main bottle necks currently facing the response, recovery, and preparedness issues of healthcare in the different regions of the country.	Emad Ismail (WHO Sudan)

Session One: Bridging Policy Gaps for Effective Decentralized Health Governance, Coordination, and Accountability in Sudan

10:00 – 10:15 AM	Presentation 1: Bridging Policy Gaps for Effective Decentralized Health Governance in Sudan	Addressing policy gaps and implementation barriers in Sudan's decentralized health governance for effective service delivery (including resource mobilization, partnerships creation, and prioritization of health care interventions)	Muez Ali (Qatar Foundation)
10:15 – 10:30 AM	Presentation 2: Enhancing Coordination and Accountability in Sudan's Decentralized Health System	Strengthening coordination and accountability for effective decentralized health governance in Sudan through stakeholder collaboration.	Haitham Bashir (EMPHINET)

Annexes:

Annex 5: Program Timetable:

Cont. Session One: Bridging Policy Gaps for Effective Decentralized Health Governance, Coordination, and Accountability in Sudan			
10:30 – 10:45 AM	Presentation 3: Building partnerships to enhance essential health services delivery around the theme of nexus – Humanitarian, Development and peace nexus approach.	Highlighting the approaches utilized to build, and sustain partnerships in healthcare in conflict affected settings between the different stakeholders and unity the efforts to enhance the nexus approach in essential health services delivery	Shaza Elmahdi (CIPE)
10:45 – 11:00 AM	Coffee Break		
11:30 – 12:00 AM	Expert Panel Discussion	<p>Perspectives from governance experts, policymakers, and community representatives on best practices and lessons learned. Prioritization of health care, resources mobilization, including resource mobilization, partnerships creation, and prioritization of health care interventions)</p> <p>Overview of Sudan's health governance challenges and the importance of accountability.</p>	<p>Moderator: Shaza Elmahdi (CIPE)</p> <p>Panel: Emad Ismail (WHO Sudan).</p> <p>Hadeer Mousa (Center for Occupational and Environmental Health Africa (COEHA), Bashir Kamal Eldin. (Save the Children Sudan)</p>
Session Two: Addressing Health Workforce Shortages in Sudan: Strategies for Attraction and Retention			
12:00 – 12:15 PM	Presentation: Strengthening Sudan's Health Workforce: Addressing Shortages and Building Capacity	<p>Presentation on current workforce shortages and their impact on healthcare service delivery in Sudan.</p> <p>Strategies to attract and retain skilled professionals.</p>	Almoghirah Alamin (Federal Ministry of Health-Sudan)
12:15 – 12:45 PM	Expert Panel Discussion	Insights from policymakers, healthcare administrators, and diaspora representatives on solutions for workforce challenges.	<p>Moderator: Almoghirah Alamin (Federal Ministry of Health-Sudan)</p> <p>Panel: Ibrahim Bani(Yale School of Public Health), Ahmed Shadol (Sudan Medical Specialization Board), Imadeldin Ismail. (WHO Sudan)</p>
12:45 – 1:00 PM	Group Photo	Collective group picture	

Annexes:

Annex 5: Program Timetable:

Session Two: Addressing Health Workforce Shortages in Sudan: Strategies for Attraction and Retention			
1:00 – 2:00 PM	Lunch Break	Informal networking	
Session Three: Empowering Communities for Sustainable Health Initiatives and Accountability in Sudan			
2:00 – 2:30 PM	Presentation: Empowering Communities for Sustainable Health Initiatives and Accountability	Overview of the importance of community engagement in health system resilience and sustainability. Enhancing community-driven health initiatives through ownership, accountability, and sustainable engagement strategies in Sudan.	Muzan Alneel (ISTinaD Research Center) Case studies (SAPA – North Darfur team/ Ibrahim Osman) Mohamed Ahmed (Talawiet Organization for Development)
2:30 – 3:00 PM	Expert Panel Discussion	Perspectives from public health experts, policymakers, and community representatives on best practices for fostering community ownership and accountability.	Moderator: Muzan Alneel (ISTinaD Research Center) Panel: Khalid Tigani (Elaph Newspaper), Marwa Gibriel (Health advisor/consultant), Mona Ibrahim, Mohamed Ahmed Alagib Ahmed
Session Four: Empowering local health systems to utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan			
3:00 – 3:15 PM	Presentation: The role of evidence in shaping health response in Sudan.	Overview of the role of technology and data in strengthening Sudan's health system, highlighting challenges and opportunities.	Maysoon Dahab (The London School of Hygiene & Tropical Medicine LSHTM)
3:30 – 4:15 PM	Expert Panel Discussion	Insights from health technology specialists, policymakers, and data analysts on the integration of digital tools and data systems to enhance service delivery and decision-making.	Moderator: Maysoon Dahab. (The London School of Hygiene & Tropical Medicine LSHTM) Panel: El Moubashar Farag (Ministry of public health - Qatar · CDC-Public Health), Haitham Bashier (EMPHINET).

Annexes:

Annex 5: Program Timetable:

Cont. Session Four: Empowering local health systems to utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan

4:15 - 4:45 PM	Open Reflections		
4:45 - 5:00 PM	Day 1 Recap	Key takeaways and next steps	Facilitators, Event Moderator
4:45 - 5:00 PM	Day 1 Recap	Key takeaways and next steps	Facilitators, Event Moderator
6:00 - 8:00 PM	Group Dinner	Informal networking	M Hotel

Thursday, February 13, 2025

Time	Activity	Description	Speaker(s) / Facilitator(s)
8:00 - 8:30 AM	Breakfast	Morning refreshments	
9:00 - 9:20 AM	Day 2 Welcome	Recap of Day 1 and introduction to Day 2	Ahmed Isam

Session Four: Empowering local health systems to utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan

9:20 - 9:35 AM	Presentation 2: Public health effects observed from remote sensing data		Zena Ahmed (Yale Humanitarian Research Lab)
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Session Five: Leveraging Health for Peace and Stability in Sudan

9:35 - 9:50 AM	Presentation 1: Exploring health initiatives as tools for peacebuilding and fostering partnerships for long-term stability.	Overview of health's role in peacebuilding and its potential to foster social cohesion in Sudan.	Mona Ibrahim (University of Oxford)
9:50 - 10:20 AM	Expert Panel Discussion	Insights from policymakers, humanitarian organizations, and peacebuilding experts on integrating health interventions into peace efforts.	Moderator: Faisal Ahmed (SAPA) Panel: AbdelRaof Sharfi (Doctors Leader/Academic), Mona Ibrahim. (University of Oxford)

Annexes:

Annex 5: Program Timetable:

Session Six: Building Climate-Resilient Health Systems in Sudan			
10:20 – 10:35 AM	Presentation: Exploring strategies to enhance Sudan's health resilience against climate change impacts and environmental stressors.	Overview of climate change impacts on health in Sudan and the need for resilience-building initiatives.	Eiman Mahmoud (Touro University)
10:35 – 11:05 AM	Expert Panel Discussion	Insights from environmental health specialists, policymakers, and climate adaptation experts on integrating climate considerations into health planning and response efforts.	Moderator: Abdulazim Awadallah (SAPA) Panel: Maysoon Dahab (LSHTM), Elmoubashar Farag (Africa – CDC, Qatar Ministry of health), Zena Ahmed. (Yale Humanitarian Research Lab)
11:05 – 11:30 AM	Coffee Break	Refreshments	
Session Seven: Breakout Session			
11:30 – 1:30 PM	Breakout Group Exercise: Section A: Enhancing Sudan's Health System through Community Engagement, Workforce Strengthening, Governance, and Technology. Section B: To explore how health initiatives can foster social cohesion and contribute to peacebuilding efforts in conflict-affected areas of Sudan.	Participants will be divided into four groups, each focusing on one of the core themes in addition to the cross-cutting themes of climate resilience and health-for-peace strategies in Sudan. Each group will have a facilitator and a rapporteur responsible for guiding discussions and presenting findings in the plenary session.	SAPA team – Group facilitators.
1:30 – 2:00 PM	Plenary Session: Group presentations	Each group presents their findings (3 minutes per group). Q&A session with the audience (2 minutes per group).	
2:00 – 3:00 PM	Lunch Break		

Annexes:

Annex 5: Program Timetable:

Closing Session: Integrating Insights and Defining Next Steps			
Session Four: Empowering local health systems to utilize Digital & Technology Sustainable Health Initiatives and Accountability in Sudan			
3:00 - 3:10 PM	Insights from General Directorate of International Health - FMOH		Dr. Reem Galal
3:10 - 3:30 PM	Open Reflections	Recap of key highlights from each session by designated rapporteurs. Reflections from key stakeholders on lessons learned and emerging priorities.	Strategic Planners
3:30 - 3:45 PM	Remarks from EU Ambessdor		Aidan O'Hara
3:45 - 4:30 PM	Closing Remarks	<p>Closing statements from workshop organizers and key partners.</p> <p>Appreciation to participants and outlook for future engagements.</p> <p>Announcement of SHIP Initiative - SAPA Institute for Health Policy</p>	<p>Mekitew Abuto - GOAL Sudan</p> <p>Bashir Kamal - Save the Children</p> <p>Ahmed Shadoul -SMSB</p> <p>Almoghirah Abdellah - FMOH</p> <p>Yasir Yousif Elamin – SAPA president.</p>
6:00 - 8:00 PM	Group Dinner	Celebration and networking	M Hotel
Friday, February 14, 2025			
All Day	Partner Departures	Check-out and departure	All Day

Annexes:

Annex 6: Group Work Guide and Tools:



Internal Factors

STRENGTHS +	WEAKNESSES -

External Factors

OPPORTUNITIES +	THREATS -

Annexes:

Annex 6: Group Work Guide and Tools:

PESTLE ANALYSIS TEMPLATE

COMPONENTS	RELEVANT ISSUES AND EFFECTS
POLITICAL FACTORS	
ECONOMIC FACTORS	
SOCIAL FACTORS	
TECHNOLOGICAL FACTORS	
LEGAL FACTORS	
ENVIRONMENTAL FACTORS	

Annexes:

Annex 7: Workshop Visuals:



For general communication about SAPA:
sapa@sapa-usa.org

Website: www.sapa-usa.org

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