Sudan has no hope of achieving the 2030 targets

Background

On 4 April 2023 the Office of the Inspector General (OIG) published its report on the Global Fund grants to Sudan during the period January 2020 to December 2021.

The Global Fund has classified Sudan as a challenging operating environment (COE) due to the country's history of civil war and political instability. Economic and political instability continued during the audit period. Inflation more than doubled from 163% in 2020 to 359% in 2021, owing to currency depreciation and removal of fuel subsidies. The report states that this impacted government spending on health care (reduced from $159 per capita in 2014 to $47 in 2019), which limited the population's access to services. The World Bank database is quoted as the source but, in July last year, that database showed government expenditure on health to have been $29.6 in 2014 and $10.6 in 2019. Those figures were subsequently revised so that the current database reports them to have been $23.4 in 2014 and $7.8 in 2019, and to have slightly risen to $8.0 in 2020.

The report notes that active grants totalled $170 million for the 2020-2022 funding allocation period (i.e., January 2021 to December 2023 implementation period), of which 64% had been disbursed by end December 2021. However:

1. the table in Figure 2 of the report shows disbursements for NFM3 totalling $142 million which is 84% of the signed total of $170 million; and, confusingly,
2. the signed grant amount for malaria under NM3 in Figure 2 ($92 million) does not agree with that

shown in the table under Section 3.1 ($89 million).

The Federal Ministry of Health (FMOH) and the United Nations Development Programme (UNDP) are the Principal Recipients (PRs) for malaria and HIV/TB, respectively. Grants are also implemented via the Sudan Disease Control Directorate of FMOH for HIV, TB, and malaria (acting as a Sub-Recipient).

Progress in fighting HIV, TB and malaria is summarised in the following table that is presented in the report:

HIV / AIDS	TUBERCULOSIS	MALARIA
An estimated **41,000 people are living with HIV**, of whom 45% know their status (vs. 52% in the region). Among identified PLHIV, **27% were on treatment** (vs 43% in the region). The number of **new infections has not changed in 10 years**, remaining at around 3,500 per year. **AIDS-related deaths have decreased** over time (17%) from 2,300 in 2017 to 1,900 in 2021. **Viral load coverage is still very limited with only 10% of PLHIV on ART tested in 2019 and 2021**. The country has not reported to UNAIDS on the percentage of PLHIV on ART who are virologically suppressed. *Source:* UNAIDS – Sudan fact sheet	Sudan has a **declining trend** of TB incidence and mortality rates. **Estimated number of annual TB cases decreased** from 30,000 in 2019 to 28,000 cases in 2021. **Overall treatment coverage has declined** from 67% in 2019 to 62% in 2020. **TB treatment success rate increased** from 80% in 2017 to 83% in 2020. 28% of TB patients have a **known-HIV status. 2.3% of them are positive**, of whom 98% are enrolled in antiretroviral treatment. *Source:* Global TB Report 2021 and WHO data	Sudan had the **highest burden** of malaria in the Eastern Mediterranean Region in 2020, **accounting for more than half of all cases** (56%) **and deaths** (61%). Between 2015 and 2020, the country registered **an increase of more than 40%** in its malaria case incidence. Estimated **malaria cases grew by 65%** in 2020 over 2010 (3+ million cases). Estimated **malaria-related deaths grew by 170%**, from 2,770 in 2010 to 7,533 in 2020. *Source:* World Malaria Report 2021

Audit objectives and scope

The objectives of the audit were to assess the adequacy and effectiveness of:

1. implementation of HIV and malaria interventions to ensure access to quality services by beneficiaries;
2. implementation, oversight, and assurance arrangements to ensure achievement of grant objectives in challenging operating environments; and
3. supply chain governance and oversight mechanisms to ensure timely and uninterrupted availability of health and non- health commodities.

First Finding

Although significant costs of $10 million between NFM2 and NFM3 have been sustained to address supply chain gaps, including operational costs, there is little evidence of improvement. Weak oversight associated with lack of supportive supervision at the sub-national level, and low human resource capacity at all supply chain levels, are affecting health commodity traceability, availability, and accountability. This has contributed to material levels of expiries and stock-outs.

Procurement and distribution of health products constitute 71% ($140.6 million) of NFM3 grants to Sudan, with the United Nations Children's Fund (UNICEF) procuring malaria commodities and UNDP procuring for TB and HIV. Health commodities, except long-lasting insecticidal nets (LLINs), are stored and distributed by the National Medicines Supplies Fund (NMSF), which has a network of 18 regional warehouses.

The OIG noted:

1. Gaps in quantification and forecasting of levels of health commodities, as well as in warehouse and distribution processes. The lack of monitoring and supervision over localities and health facilities (HFs) has impacted the availability of health commodities at all levels, with long periods of material stock-outs and over-stocks at the facility level. The risk of expiry for malaria and HIV health commodities is also significant at the central level. All key malaria health commodities were stocked out at the central level for periods ranging from four to 15 months over the 41 months reviewed.
2. Non-adherence to good storage practices. For example, two of the five state stores kept commodities at temperatures above the recommended level (30° Celsius). There was also no temperature monitoring at the other three state stores and at all localities' stores visited.
3. Consumption reports from localities indicated zero stock-out days, although commodities were stocked-out for consecutive months.
4. Health facilities also lacked crucial documents including stock cards for managing inventory. Instead, they relied on improvised and non-standardised dispensing registers, as well as other documents that proved ineffective in recording commodities issued to patients.

Second Finding

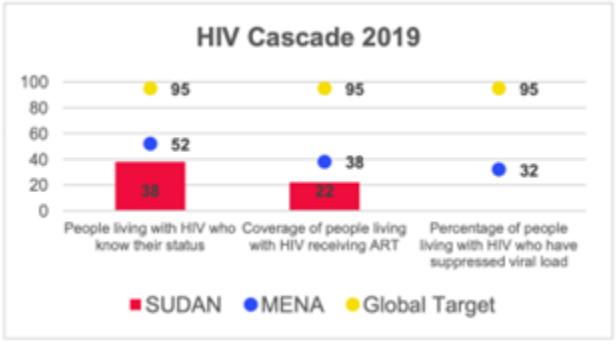
Despite substantial Global Fund investments ($353 million since 2015) in malaria, programmatic results have remained stagnant. Grant performance and impact are undermined by sub-optimal conditions for implementation, insufficient PR oversight from state to health facility levels and the limited funding landscape. Given the current trend, Sudan may not be able to reduce malaria morbidity and mortality by 30% by 2025.

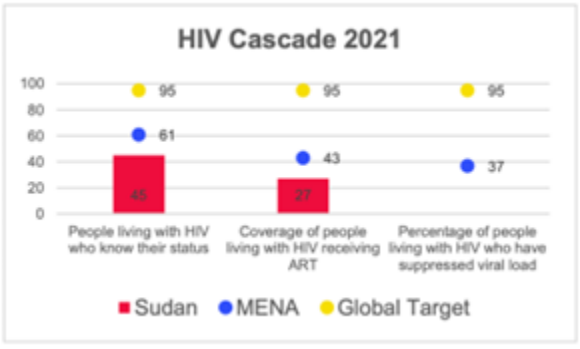
The report explains that:

1. Suboptimal planning and coordination of vector control interventions could result in increased malaria transmission and malaria cases.
2. Recurring gaps in malaria testing and case management impact efforts to reduce malaria incidence and mortality.
3. Gaps in data quality and oversight arrangements impact effective monitoring of quality of services for the malaria programme.

Third Finding

The third finding is that HIV programme performance is inadequate. HIV outcomes have improved in Sudan with a decrease in HIV/AIDS-related deaths by 17% since 2017. In 2020, the government updated its antiretroviral treatment (ART) guidelines to include community activities and expanded the scope of community-based organizations in HIV service delivery. While notable, this progress is insufficient to achieve the 95-95-95 target by 2025 and eliminate HIV as a public health threat by 2030. Sudan's limited progress is illustrated in the following figures that compare its performance with the regional average:





OIG attributes this inadequate performance to:

1. Gaps in grant design, with an absence of some indicators to be able to monitor and measure implementation.
2. Implementation not matching design: Although the current grant is designed to increase testing coverage among key populations (KPs), testing is still focused mostly on the general population through HIV testing services (HTS). Sudan also does not have a self-testing strategy, although HIV stigma and discrimination is high.
3. Gaps and bottlenecks in grant implementation which affect access to service for intended beneficiaries, such as: (a) delays in implementation initiation; (b) budget deficiencies for activities to reach out to KPs with prevention packages; (c) limited training and supervision; (d) low viral load (VL) testing coverage, with only 10% of people living with HIV tested for their VL in 2021; and (e)

underused HTS sites. The limited number of tests conducted is mainly due to: limited community awareness of HTS, high stigma, and HTS distribution not being aligned with geographical HIV burden variation.
4. The lack of recent data to guide the design and implementation of Sudan's HIV programme. The last integrated bio-behavioural surveillance survey (IBBS) was completed in 2015. A follow-on survey was planned for 2019 but delayed due to political instability and the COVID-19 pandemic. In addition, although grant funds were available for a study on ART survival and retention in 2021, it was not performed.
5. Funding constraints which, for example, limited HTS coverage and the number of ART sites to only 45, mainly in urban areas.

Fourth Finding

Improvement is needed in the Global Fund's approach to leveraging the COE policy in Sudan, especially during emergencies. The Secretariat's approach, in-country oversight and implementation arrangements have not adequately leveraged the principles of flexibility, innovation and partnerships that the COE policy encourages. The use of a "developmental approach" to address humanitarian emergencies in Sudan has contributed to weak grant performance and limited progress against malaria and HIV.

The OIG gives the following examples where it considers the Global Fund could have leveraged flexibilities to increase the effectiveness of grant implementation:

1. Despite malaria rapid diagnostic tests (RDTs) being free and the recommended method of diagnosis, new or innovative approaches (such as a compensation scheme for HFs using RDTs instead of microscopy) have not been developed. The lack of adaptation limits access to quality services for beneficiaries.
2. Alternative sources of funding were not leveraged for known gaps (such as the indoor residual spray intervention that was stopped in two states due to under-funding).
3. Adaptations have not been used to improve data quality. Sudan has made limited progress to improve programmatic and logistic data quality; and programmes continue to rely on weak and incomplete data that undermine decision-making.
4. In 2019, the Global Fund Secretariat contracted a service provider to perform an assessment and develop a targeted supply chain transformation plan. Basic supply chain mechanisms and tools from this assessment were not implemented at the HF level. The report was also only shared with the country two years after the assessment was performed. In addition, there is no clear agreement on how recommendations will be implemented, including the due date and identification of parties responsible for funding the plan.
5. Partnerships, such as that with Gavi, are not sufficiently leveraged.

Improvement is also needed in oversight and risk management. The report notes that:

1. The Country Coordinating Mechanism (CCM) Oversight Committee meetings and visits were often not conducted as frequently as planned. Consequently, the auditors noted long outstanding and reoccurring issues, as well as unaddressed recommendations from various assurance providers.
2. In response to the increased risk on governance from the political instability, the Country Team maintained two mitigation measures during the Portfolio Performance Committee executive session in March 2021. However, these measures are inadequate to address the challenges highlighted in this portfolio; in particular, these challenges consist of the ongoing leadership changes within the FMOH and state governments that contribute to poor grant performance.
3. Two mitigating actions related to warehouse and distribution systems, including last-mile distribution of health commodities, were not implemented during the NFM2 allocation cycle. These measures were subsequently replaced with a new mitigating action that had yet to start. This delay has had a significant impact on service delivery.
4. Only five of the 11 recommendations that the Technical Review Panel (TRP) made for NFM3 have been fully implemented after two years of grant implementation. No mechanism is in place to ensure completion.

Finally, OIG states that improvement is needed in assurance arrangements. The OIG reviewed 28% of the total transaction amounts managed directly by the FMOH from 2019 to 2021 and noted a considerable improvement in financial management at the Program Management Unit (PMU). Despite improvements in financial management since the last audit, the OIG observed that the Fiscal Agent does not conduct reconciliations between the approved transactions and those recorded in the PR's general ledger. This makes it impossible to provide assurance on the completeness and accuracy of the financial information reported to the Global Fund.

Audit Conclusions

In terms of the audit objectives, OIG's overall assessment was that:

1. The adequacy and effectiveness of implementation, oversight and assurance arrangements needs significant improvement.
2. Implementation of HIV and malaria interventions to ensure access to quality services by beneficiaries need significant improvement.
3. The design and effectiveness of supply chain mechanisms to ensure timely and uninterrupted availability of health and non-health commodities is ineffective.

Agreed Management Actions

The agreed management actions (AMAs) for each of the four findings are as follows:

1. The Secretariat will work with the PR to, by 31 December 2024:
    - Clarify the roles and responsibilities of the Quantification and Forecasting Technical Working Group, including to mandatorily monitor the stock levels at the central and state level and take appropriate decisions to avoid stock out at these levels.
    - Update NMSF's last capacity assessment to understand the root cause of the challenges to deliver up to the last mile, including to:
        - revisit the distribution strategy for Sudan;
        - strengthen the governance and accountability framework of identified implementers; and
        - provide a costed prioritisation plan based on the capacity assessment results.
    - Enhance human resources for supply chain management in the country to monitor stock level of health commodities and to improve logistics data collection and reporting.
2. The Secretariat will, in collaboration with the PR, support the FMOH in the period up 31 December 2024 to:
    - Conduct operational research and a post-campaign survey complemented with focus group discussions and key informant interviews to understand the root causes of low utilisation of the LLINS in Sudan.
    - Improve usage of RDT by:
        - implementing use of RDT as per national testing guidelines, ensuring protocols have been distributed, and staff trained; and
        - conducting an assessment for the root causes of low usage of RDT and prioritised costed recommendations
    - Enhance human resource capacity to improve programmatic data collection, quality and reporting for malaria, HIV and TB.

3. The Secretariat, in the period up to 31 December 2024, will work with the relevant PRs to:

    - Conduct the IBBS survey to guide the design and implementation of Sudan's HIV programme.
    - Enhance differentiated HTS to increase HIV testing access to populations at high risk of contracting HIV (e.g. KPs, attendees at STI services and TB patients) and through testing modalities where positivity rates are high (e.g. hospitalised patients).

4. The Secretariat will, by 31 December 2024, assess the grant design and implementation of grant activities and develop an innovative solution for malaria and HIV activities. It should include:

    - Updating the risk mitigation measures that address the identified issues on collecting and reporting quality programmatic and logistics data, quality of service and last mile distribution from the state level down to the HF level.
    - Supporting the CCM Oversight Committee to ensure that the TRP recommendations are addressed and implemented, taking into consideration the country's challenging context, covering:
    - Training the Oversight Committee on roles and responsibilities;
    - Tracking and reporting the status of the TRP recommendations; and
    - Ensuring that the Oversight Plan is adapted and realistic, guaranteeing a minimum oversight even in critical situations.

Commentary

This audit report provides an insight into the difficulties of implementing disease programmes in a country classified as a COE and also demonstrates how the Secretariat has difficulties in applying the COE policy flexibilities: raised many times both by the OIG and the countries themselves. . It is encouraging to read that the Global Fund has established sound control systems and processes in grant management to reduce financial and fiduciary risks in Sudan. The FMOH had established a PMU that provides overall financial management and oversight of the Global Fund grants to the FMOH and ensures timely completion of financial reporting. The grants also have a Fiscal Agent that oversees financial management procedures, including monitoring program activities and verifying financial transactions. The Fiscal Agent applies an oversight protocol manual when conducting quality checks at different levels. The Fiscal Agent has also improved the timely reporting to the Global Fund Country Team.

It is therefore a pity that parts of the report are confusing. For example, in the opening summary, it states that “The flexibility, innovation, and partnership principles that the Global Fund COE policy allows have yet to be effectively leveraged in Sudan”. It then immediately continues: “Although the OIG noted considerable improvement in financial management, innovative and flexible solutions are ineffective to address data quality challenges, to increase the use of malaria rapid diagnostic tests, to improve vector control interventions, or to increase grant oversight beyond the state level.” So, if innovative and flexible solutions are ineffective for these purposes, why, as later recommended, continue to try to use them?

Another example is that in its comment on the need for significant improvement in programme management, the report states that “The Secretariat could have worked continuously with the government to find a suitable substitution for the indoor residual spray intervention.” Yet, a few pages later, the report acknowledges that “Since the first coup in 2019, there have been many changes in leadership in the Federal Ministry of Health, with seven ministers of health, four global health directors and three disease control department heads. This instability has undermined accountability and implementation of grant activities.” How then could the Secretariat have worked ‘continuously’ with a government that was – and still is – ever changing? This is an important issue because it could affect successful completion of the AMAs.

In the section on key issues and risks, the report tells us that “The program has no operational plan for malaria case management and has not led a malaria review meeting in five years within the audit period”. This sounds strange for several reasons. First, the country’s funding request for the malaria grant would only have been approved had there been a program plan in place and, if there had been a significant gap in that plan, the TRP would have noted it and required it be attended to. Second, the malaria funding request could not have been prepared and submitted without some form of review. Third, a program cannot lead a meeting. It is also clumsy to refer to “five years within the audit period” when that period was only two years.

The report raises the issue of ineffective distribution which was observed during the visits to HFs. In the section on objectives and scope, the report states that “Our auditors visited 19 health facilities in 6 of the 18 states in Sudan, as well as five warehouses belonging to the National Medical Supplies Fund

". That means that the auditors visited less than 1% of HFs. Given such a small sample, their findings – however valid – cannot be assumed to be representative. In the discussion of the first finding, it states that "in the first four states visited, only 15 vehicles were available to deliver to 1,450 health facilities and 31 localities, with 20% of the vehicles not functioning". It is surprising that there was no further comment on the shortage of vehicle availability which, logically, would go some way to explaining stock-outs. Also, in the reference to the number of available vehicles, it is unclear if they are owned by the NMSF or HFs. So who is short of what?

References to the PRs are very confusing. The audit is stated to have covered the PRs and Sub-Recipients (SRs) of the Global Fund supported programmes. However, this was not strictly the case as the report discloses that: (a) the OIG did not audit expenditure of UNDP, which is the PR for the HIV/TB grants, as the UN and its subsidiaries do not consent to third parties accessing their books and records; and (b) the OIG was not granted access to the supporting documents of sub-sub-recipients managing HIV activities, due to the refusal of the United Nations Population Fund (UNFPA), UNDP's SR. This means that the audit findings on financial assurance relate to the malaria grant, which is 54% of the portfolio.

In the first AMA, it is evident that the PR referred to is the FMOH. However, the second AMA, which is all about malaria, states that the Secretariat will, in collaboration with the PR (which is the FMOH), support the FMOH. That makes no sense. The third AMA, which relates to the HIV findings, refers to the 'relevant PRs' when the relevant PR for the HIV/TB programme is UNDP.

The fourth AMA includes assessing grant design. In a COE situation, no amount of designing will ensure success without stability, the necessary resources and accountability in place. The AMA is also supposed to involve the development of 'an innovative solution'. What is then listed are not innovative but the usual common-sense steps. Proven approaches are indeed more likely to succeed than expending effort and scarce resources trying to invent innovative solutions in a situation that is not amenable to change. But neither proven nor innovative solutions will make a difference when, as noted above, the ongoing leadership changes within the FMOH and state governments contribute to poor grant performance.

Finally, the table showing progress in fighting the diseases uses different time scales that are not all relevant to the current grants. It would be more appropriate and informative to compare – or at least include – the progress on each of the diseases since the time of the previous audit.

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