World Health Organization
African Region

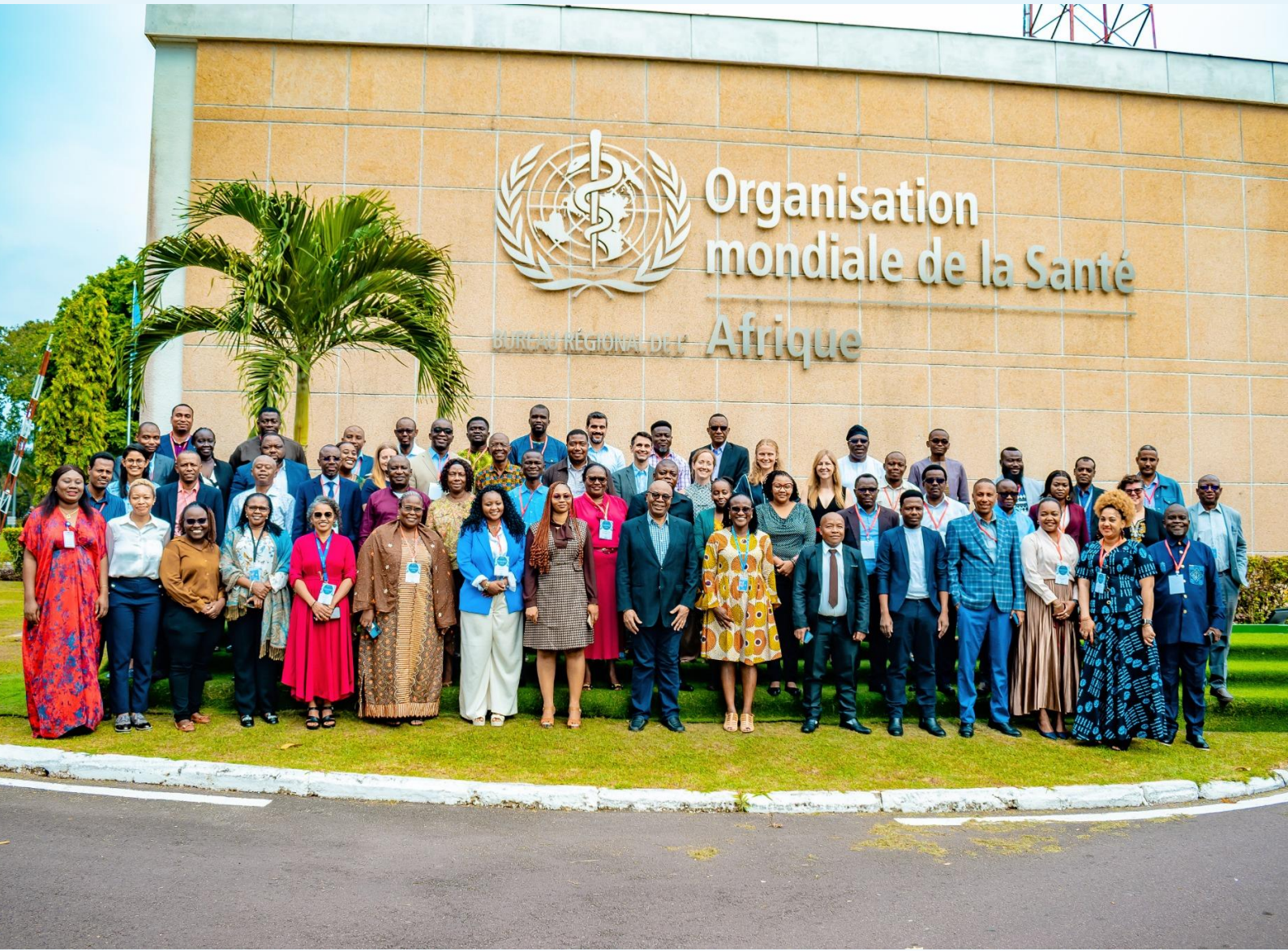
Health Promotion/ Disease Prevention and Control Cluster

ESPEN

Integrated Workshop on Data Collection, Reporting, and Utilization for Preventive Chemotherapy NTDs

21–25 July 2025

Brazzaville, Republic of Congo



Executive summary

Over the course of five days, the workshop successfully moved participants through the entire **data value chain**: from **collection** (Day 1), to **reporting** (Day 2), to **programmatic use** (Days 3–4), and finally to **forecasting and supply chain planning** (Day 5). This progression allowed countries to reflect on their current practices, identify gaps, and acquire practical tools to enhance data-driven decision-making for PC-NTDs.

Key cross-cutting outcomes:

- **Integration into national systems**: Multiple countries confirmed ongoing or planned efforts to integrate NTD indicators into national **HMIS (e.g., DHIS2)** and **LMIS**, reinforcing the principle of country ownership. However, interoperability gaps, reliance on paper-based tools, and denominator inconsistencies remain persistent challenges.
- **Improved reporting practices**: The JAP Upload Tool and pre-populated forms were welcomed as important innovations for **timeliness, accuracy, and transparency**. Case studies underscored the value of early coordination, validation meetings, and multidisciplinary engagement to improve JRSM quality and donor confidence.
- **Embedding data use**: Presentations and country experiences illustrated how data can inform **daily operational adjustments (e.g., mop-ups in Nigeria), medium-term planning (e.g., Kenya's mapping and harmonization), and long-term strategy (e.g., Zanzibar's revised SCH/STH interventions)**. A recurring theme was that data use is not a one-off activity but a **continuous cycle of analysis, decision, and action**.
- **Innovations and digital tools**: Participants engaged actively with the ESPEN Portal, IU Planner, CHIP dashboards, NTDeliver, and the **ESPEN GenAI Assistant**. Feedback stressed their importance as regional public goods, while also calling for improvements in **usability, integration with national systems, multilingual support, and user guidance materials**.

- **Forecasting and stewardship**: The final day emphasized that forecasting and supply planning must be treated as **ongoing, iterative processes**. The introduction of the Multi-Year Forecasting (MYF) tool, alongside country lessons from Kenya and Madagascar, highlighted the benefits of triangulating data sources, engaging diverse stakeholders, and building sustainable quantification teams. Stewardship of donations, through better inventory reconciliation and medicine transfer mechanisms, was identified as critical to maintaining donor trust and ensuring equity.

Way forward:

- **Follow-up technical support**: ESPEN and partners will provide targeted assistance to help countries operationalize workshop lessons—particularly in **JAP digitization pilots, ESPEN Portal use, and forecasting tool adoption**.
- **Peer-to-peer learning**: Participants called for continued **cross-country exchanges**, including webinars, regional working groups, and structured feedback mechanisms for digital tools.
- **Institutionalization of practices**: Countries were encouraged to formalize **multidisciplinary quantification teams**, establish routine **data review forums**, and integrate workshop outcomes into **national NTD master plans**.
- **Continuous improvement of tools**: ESPEN and partners committed to refining platforms such as ESPEN Portal, IU Planner, NTDeliver, and the GenAI Assistant based on country feedback, ensuring they remain relevant and user-friendly.
- **Strengthening accountability**: The workshop underscored the importance of building a **culture of data use and stewardship**—where reporting is not just compliance, but the basis for programmatic learning, resource mobilization, and long-term sustainability.

In closing, the workshop reaffirmed that **accurate, timely, and effectively used data is the cornerstone of NTD elimination efforts**. By embedding these practices into national systems and sustaining momentum through follow-up support, countries will be better positioned to optimize resources, improve equity, and accelerate progress toward the **2030 Roadmap goals**.

Introduction

The Integrated Workshop on Data Collection, Reporting, and Utilization for Preventive Chemotherapy NTDs was convened in Brazzaville from **21–25 July 2025**. Organized by ESPEN in collaboration with WHO/AFRO, WHO/HQ, CHAI, and other partners, the workshop brought together over 100 participants from Ministries of Health, WHO country offices, and partner organizations.

The workshop theme, *"Harnessing Data for NTD Elimination: Strengthening Collection, Reporting, and Utilization"*, reflected the urgent need for improved national capacities in data management to accelerate progress toward the 2030 NTD Roadmap goals.

As highlighted in the concept note, the objectives were to:

- Enhance national capacity in **data collection**, integration, and ownership.
- Strengthen efficiency and accuracy in **data reporting**, especially the JAP system.
- Promote **data-driven decision-making** through improved analysis, visualization, and application for programmatic planning.
- Support **forecasting and supply chain management** to ensure timely availability of medicines.
- Facilitate **peer learning and cross-country collaboration**.

The five-day agenda was designed to move progressively from data collection (Day 1), to reporting (Day 2), to utilization (Days 3 and 4), and finally to forecasting and supply chain planning (Day 5). Each day combined plenary discussions, country case studies, technical presentations, and hands-on sessions.

Day 1: Strengthening Data Collection and Integration

The workshop opened with remarks from **Dr. Akpaka Kalu**, who stressed that high-quality data is indispensable in times of constrained resources and shifting donor priorities. He underscored the need for **country-led, data-driven programming** and highlighted the workshop as an opportunity to equip teams with tools and approaches that translate data into better planning and impact.

The first sessions explored **tools and challenges in NTD data collection**. Countries reported using multiple platforms—ODK, Kobo, ESPEN Collect, ComCare, DHIS2, LMIS—but highlighted persistent issues of **fragmentation, limited interoperability, and continued reliance on paper forms**. A major gap identified was the **underreporting of morbidity data**, despite its importance for decision-making. Participants emphasized the need to integrate key indicators into national systems to ensure ownership and sustainability.

Two **country case studies** illustrated different approaches to integration:

- **Tanzania** has successfully linked NTD indicators to **DHIS2** and NTD medicine tracking to the **eLMIS**, improving visibility and forecasting. This was achieved through phased roll-out, strong political leadership, and workforce training, although interoperability gaps and risks of misordering persist.
- **Benin** has created a **dedicated NTD repository in DHIS2**, combining treatment, survey, WASH, and medicine data. While paper remains in use for school-based MDAs, digitization at community level through tools like **Red Rose** has advanced data timeliness and use. Remaining challenges include limited server capacity and incomplete interoperability with ESPEN and partner systems.

An interactive plenary facilitated by Sightsavers allowed countries to **prioritize key data elements** for integration into HMIS and LMIS, notably treatment coverage, morbidity, and stock levels. Participants also pointed to challenges with population denominators, highlighting discrepancies between census projections and pre-MDA headcounts. Experiences from Ghana, Ethiopia, and others showed that aligning with national systems, piloting integration before scaling, and ensuring continuous training are critical steps.

The afternoon focused on **ESPEN Collect**, which has supported over 240 surveys in 33 countries. Participants recognized its value for protocol review, real-time dashboards, and standardized

tools, but identified recurring issues such as delays in approvals, limited partner access, duplicate entries, and mapping errors. Breakout discussions proposed **role-based access for countries, more adaptable forms, improved mapping functions, and closer interoperability with DHIS2**.

Key Takeaways (Day 1):

- *Countries are making progress in integrating NTD indicators into national health systems, but interoperability and reliance on paper tools remain barriers.*
- *Tanzania and Benin's experiences highlight the importance of phased implementation, strong national leadership, and systematic capacity building.*
- *ESPEN Collect is widely valued but needs to evolve toward greater interoperability, improved dashboards, and expanded country access.*
- *Capturing morbidity data and harmonizing denominators remain priorities for better planning and accountability.*

Day 2: Enhancing Data Reporting, Quality Assurance and Population Denominators

Day 2 focused on **strengthening reporting practices** for the Joint Application Package (JAP), particularly the Joint Reporting Form (JRF), Joint Request for Selected Medicines (JRSM), and the Epidemiological Reporting Form (EPIRF). The opening session highlighted recurring challenges: **delayed survey results, outdated demographic data, mismatches in medicine stock reporting, and heavy reliance on manual processes**, all of which undermine planning and medicine requests.

ESPEN presented **new tools to support countries**, including pre-populated JAP forms with validated demographic projections, disease-specific forecasting tables, and the new **JAP Upload Tool**—an online submission system that tracks versions, notifies stakeholders, and reduces back-and-forth delays. These innovations are designed to improve data consistency, reduce errors, and ease reporting burdens.

Two **country case studies** provided practical lessons:

- **Guinea** improved timeliness for the 2026 JAP cycle by engaging stakeholders early, organizing validation meetings, and making greater use of pre-filled forms and the EPIRF tool. This resulted in higher data quality and more punctual submissions.
- **Sierra Leone** addressed population discrepancies and repeated delays by coordinating across ministries (Health and Education), reusing prior JAP templates for consistency, and strengthening internal validation. Early stakeholder involvement and draft reviews proved essential for reducing errors and accelerating submissions.

A practical session on **medicine reconciliation** highlighted the importance of aligning treatment records with physical stock balances. Using a case study, participants practiced reconciling open bottles, wastage, and carry-over stocks, reinforcing the principle that reconciliation must occur at the **lowest levels upward**. Weak reconciliation was shown to delay JRSM approvals and risk donor confidence.

The plenary session on **JAP digitization**, led by Penny Smith (Gates Foundation), explored opportunities for automation—such as auto-flagging errors, trend visualization, and integration with ESPEN Portal and IU Planner. While participants expressed enthusiasm, they also stressed the importance of **progressive implementation**, local infrastructure, and user training to ensure feasibility.

Key Takeaways (Day 2):

- *JAP submissions continue to face systemic delays and inconsistencies, especially due to demographic and inventory data issues.*
- *Early coordination and validation at national level are critical for improving accuracy and timeliness.*
- *The JAP Upload Tool represents a major step toward efficiency and transparency in submissions.*
- *Accurate medicine reconciliation is indispensable for forecasting and for maintaining donor trust.*
- *Countries welcome digitization and automation pilots, provided they remain user-friendly and adaptable to country contexts.*

Day 3: Data Utilization for Programmatic Decision-Making I – Foundations of Data Use

Day 3 marked a shift from reporting to **using data for decision-making**. The core message, introduced by **Jorge Cano**, was that data must serve as a **catalyst for action**, guiding choices on where to implement MDAs, when to stop interventions, and how to allocate limited resources. Real-life examples demonstrated how poor coverage data in Angola triggered corrective planning, and how delays in pre-TAS surveys in Nigeria led to unnecessary continuation of MDA. Tools like the **ESPEN IU Planner** were highlighted as practical aids for identifying funding gaps and mobilizing partners.

Julia Dunn (CHAI) outlined a **data-to-action framework**, beginning with defining key decisions, identifying indicators, and cycling through collection, analysis, action, and review. She emphasized that data use is not a reporting exercise but a continuous loop that supports planning, operational efficiency, and evaluation. She also introduced CHAI's forthcoming **NTD Data Use Resource Hub** to support countries with frameworks and tools.

Katie Shanahan (JSI) expanded on the foundations of being "data-driven": fostering a **culture of data use across all roles**, selecting tools that match country contexts, and strengthening analytical capacity. She stressed that even imperfect data can be valuable when applied, and that feedback loops improve both quality and ownership.

The **country case studies illustrated this vividly**:

- **Kenya** used granular ward-level mapping to refine SCH and STH targeting, expanding MDA from 13 to 22 IUs and increasing treatment from 196,000 to 2.1 million people. Harmonization of school- and community-level data reduced duplication and improved equity.
- **Nigeria (Kano State)** applied real-time digital tools (ODK, DHIS2, dashboards) to monitor MDAs daily. Problems such as insufficient distributors, refusals, and delayed campaign starts were detected and corrected quickly through mop-ups, improving coverage significantly. The **CHIP dashboard**, integrated into the ESPEN Portal, provided visibility of progress across LGAs.

Participants also explored the **ESPEN Portal**, with sessions showing dashboards, maps, and custom data queries. Feedback praised its accessibility but highlighted gaps, such as missing tutorials, inconsistent translations, and limited export functions. NTDeliver, a supply chain tracking tool, was also reviewed, with requests for clearer navigation and bottleneck visibility.

Key Takeaways (Day 3):

- *Data should be linked directly to decisions and actions, not just compliance reporting.*
- *Kenya and Nigeria demonstrated the power of granular and real-time data use to improve efficiency and equity.*
- *Tools like the ESPEN Portal, IU Planner, and CHIP dashboards are increasingly central for planning and advocacy.*
- *Countries emphasized the need for continuous improvements in digital tools—especially tutorials, translations, and integration with national HMIS.*

Day 4: Data Utilization for Programmatic Decision-Making II – Advanced Applications and Strategic Planning

Day 4 deepened the focus on **strategic applications of data**, illustrating how countries can move beyond routine reporting to **scenario planning, forecasting, and refined intervention strategies**.

Julia Dunn (CHAI) introduced a structured cycle for using data in planning: defining decisions, analyzing evidence, and iteratively adjusting strategies. Drawing lessons from malaria, she showed how NTDs can adopt similar approaches for risk stratification, intervention targeting, and resource allocation.

Country case studies brought valuable insights:

- **Madagascar** integrated LF MDA with a polio campaign, reducing costs by over 75% while achieving full geographic coverage for LF for the first time since 2014. Despite initial coordination challenges, joint microplanning and strong ministerial leadership ensured success.
- **Tanzania Mainland** applied the **SPPA survey methodology**, enabling ward-level classification of SCH and STH prevalence and guiding differentiated MDA strategies. Results showed significant intra-council variation, underlining the importance of granular data.
- **Zanzibar's 2025 impact survey** revealed low SCH prevalence (2.4%) but very high STH prevalence (58%, particularly in Pemba). This led to programmatic adjustments toward reduced SCH treatment in some areas and intensified biannual MDA and WASH integration for STH.

The workshop also introduced the **ESPEN GenAI Assistant**, an AI-powered support tool embedded in the ESPEN Portal. Demonstrations showed how it could provide real-time answers about indicators, JAP submissions, and thresholds, offering multilingual support and reducing delays in accessing guidance.

Hands-on exercises on **scenario planning**, led by Katie Shanahan (JSI), allowed participants to test options for adjusting MDA frequency, targeting surveys, or reallocating resources under different constraints. Countries applied ESPEN Portal tools to develop IU-level disease profiles and analyse trends, reinforcing how data can shape future strategies.

Key Takeaways (Day 4):

- *Strategic use of data allows programmes to plan proactively, allocate resources efficiently, and adjust interventions to context.*
- *Madagascar, Tanzania, and Zanzibar demonstrated how integrated campaigns, precision surveys, and impact assessments inform evidence-based adjustments.*
- *The ESPEN GenAI Assistant has strong potential to enhance country access to timely, context-aware support.*
- *Scenario planning exercises showed that countries can make data-informed trade-offs even without advanced modelling, provided processes are structured and transparent.*

Day 5: Strengthening Forecasting and Supply Chain Planning *(draft placeholder)*

The final day of the workshop shifted attention to the **forecasting of medicine needs, supply chain planning, and stewardship of donated commodities**, areas that remain critical for the sustainability of NTD interventions.

Gurmeet Philora (JSI) introduced the fundamentals of **forecasting and supply planning**, clarifying their complementary roles: forecasting estimates the medicines required for upcoming campaigns, while supply planning translates these forecasts into procurement and shipment schedules, taking into account existing stocks, pipeline orders, lead times, and costs. He emphasized that forecasting is not a one-off annual exercise but an **iterative process** that must be updated regularly with consumption, demographic, and epidemiological data. Robust and reliable inputs—population figures, endemicity, inventories, and funding commitments—are essential for generating meaningful estimates.

He illustrated how different types of forecasts serve different purposes:

- **Short-term forecasts** (e.g., JRSM) guide annual donation requests.
- **Medium-term forecasts** support advocacy, budgeting, and donor engagement.
- **Long-term forecasts** help anticipate shifts in commodity needs due to epidemiological changes, treatment guideline revisions, or donor transitions toward government-led procurement.

Key supply chain challenges—inventory reconciliation, funding uncertainties, outdated demographics, and poor integration of new survey data—were discussed alongside solutions. A **multi-year forecast (MYF)** combined with regular supply planning can help countries anticipate these challenges, improve JRSM accuracy, and align better with donor timelines.

Country experiences enriched the discussion:

- **Kenya** presented how it compared three forecasting approaches: the MYF tool, pre-populated JRSM, and its final submitted JRSM 2026. While MYF provided strategic, long-term estimates, the submitted JRSM figures were more accurate, incorporating harmonized community and school-based prevalence data, county-level microplanning, and confirmed funding commitments. The exercise revealed gaps such as mismatches in administrative boundaries, lack of a formal quantification team, and incomplete inventory data. Kenya concluded that a **multidisciplinary forecasting team, inclusive planning, and stronger alignment between IDB/DHIS2 platforms and JAP submissions** are critical to improving accuracy and sustainability.
- **Madagascar** shared its experience harmonizing data across LF, SCH, and STH programmes while coping with logistical challenges, outdated census data, and delayed survey results. Reliance on donor funding and incomplete inventory reconciliation remain barriers. The country stressed the importance of **integrated planning, regular data reviews, nomination of regional focal points, and institutionalized SOPs** for supply chain management.

Participants then explored the **Multi-Year Forecasting (MYF) tool**, designed to alert stakeholders early to changes in demand, support pharmaceutical production planning, and help countries build more reliable three-year forecasts. The tool, which mirrors JRSM methodology and can integrate SCH workbooks, is being piloted in several countries with plans for full rollout as part of the JAP package by 2026.

A **practical exercise** guided by **Sylivia Swai (inSupply Health)** allowed participants to apply forecasting assumptions using dummy data. Country teams updated forecasts by disease (LF, Oncho, SCH, STH), adjusted for funding likelihood, and compared requirements under different scenarios. The exercise illustrated how small changes in assumptions—such as funding availability, survey delays, or shifts in target populations—can significantly affect medicine needs, underlining the importance of **iterative, transparent, and evidence-based quantification processes**.

The session on **stewardship and medicine transfers**, led by **Penny Smith (TNR Strategies)**, reminded participants of the scale of global donations (e.g., 199 million PZQ and 128 million mebendazole tablets shipped in 2024 to Africa) and the responsibility of countries to manage these resources effectively. Poor stewardship—over-ordering, stockpiling, or failing to redistribute unused stock—risks jeopardizing future donations. Practical lessons included:

- Apply **First Expiry–First Out (FEFO)** to minimize wastage.
- Ensure **inventory visibility** at all levels.
- Explore **in-country utilization** before considering transfers abroad.
- Use transfers between countries strictly as a **last resort**.

Countries were invited to comment on a draft **decision tree for medicine transfers**, designed to reduce expiries and make better use of leftover stock.

The day concluded with a **wrap-up and closing remarks** from **Dr. Elizabeth Juma**, who emphasized that forecasting, supply chain planning, and stewardship must be fully embedded into programme cycles. She stressed the importance of multidisciplinary quantification teams, stronger integration of logistics with treatment data, and routine monitoring of both forward and reverse flows in the supply chain. Dr. Juma closed by commending participants for their active engagement throughout the five days and reaffirmed ESPEN's commitment to supporting countries with follow-up technical assistance, webinars, and integration of workshop lessons into national strategies.

Key Takeaways (Day 5):

- *Forecasting and supply planning are continuous, data-driven processes, not one-off tasks.*
- *Multi-year forecasting enhances advocacy, donor coordination, and preparedness, but must be complemented by validated JRSM submissions.*
- *Kenya and Madagascar's experiences underscored the importance of inclusive quantification processes, data harmonization, and institutionalized SOPs.*
- *The MYF tool is a promising innovation to strengthen long-term planning and alignment with JRSM.*
- *Effective stewardship of donations requires robust inventory management, FEFO principles, and coordinated redistribution mechanisms.*
- *Building a culture of accountability and shared responsibility in supply chain management is essential to sustain access to medicines and maintain donor trust.*