NG-China Symposium on Health Report: **Lessons on Pandemic Preparedness and Response: Insights from China and Nigeria**

The Federal Ministry of Health and Social Welfare, in collaboration with the Infectious Disease Institute of Nigeria, convened a Symposium themed**: Lessons on Pandemic Preparedness and Response: Insights from China and Nigeria** on Monday, 30 March 2026, at the Event Centre, Transcorp Hilton Hotel, Abuja.

The symposium served as a platform for experts from Nigeria and China to share lessons from China's experience and Nigeria's evolving systems, identify context-appropriate adaptations, and lay the groundwork for a Nigeria–China partnership framework for pandemic preparedness and health security.

The event was structured across two technical session blocks, each comprising two panel discussions that examined surveillance and early warning systems, emergency response coordination, community engagement and risk communication, and opportunities for Nigeria–China collaboration in research, technology transfer, and local vaccine manufacturing.

The overall goal of the symposium was to strengthen Nigeria's pandemic preparedness and response capacity by drawing actionable lessons from China's experience and fostering a long-term Nigeria–China partnership on health security.

The specific objectives of the Symposium were to:

1. **Review and compare China and Nigeria's surveillance and early warning systems**, including the role of digital tools, laboratory networks, and data sharing.
2. **Examine models of emergency response coordination, rapid facility mobilisation, and health systems resilience** used in both countries.
3. Explore effective approaches to **community engagement, risk communication, and trust building during large-scale health emergencies**.
4. Identify priority areas for **Nigeria–China collaboration in research, technology transfer** (including Mpox vaccine clinical trials), and **capacity strengthening** for emerging infections.
5. Develop concrete policy and **partnership recommendations for integrating Nigeria–China collaboration into Nigeria's national health security** and UHC agendas

The symposium was well attended by a diverse group of high-level stakeholders, including:

Health Sector Leaders - **Prof. Muhammad Ali Pate**, Coordinating Minister of Health and Social Welfare; **Dr. Iziaq Adekunle Salako**, Honourable Minister of State for Health; **Ms. Daju Kachollom**, S.mni, Permanent Secretary, Federal Ministry of Health and Social Welfare; **Dr. Charles Nzelu**, Director, Department of Public Health, FMoH&SW.

Political Ministers - **Alhaji Idi Mukhtar Maiha**, Honourable Minister of Livestock Development; **Senator Abubakar Kyari**, Honourable Minister of Agriculture and Food Security; **Dr. Bahijatu Abubakar,** Director of Pollution Control and Environmental Health

Chinese Delegation - **Prof. George F. Gao**, Renowned Academician and Director General, Institute of Microbiology, Chinese Academy of Sciences; and other **delegates from the Institute of Microbiology**

and affiliated institutions, including **Prof. Jianxun Qi,** Health Systems Policy Expert, China, **Dr. Zhuobing Zhang**, **Dr. Liukui Wang,** Chinese Academy of Sciences, **Prof. Han Wang** of Peking University, **Dr. Hong Yang**, Epidemiologist, China CDC, **Siyuan Wang,** Junshi Biosciences, Director in PM, and **Prof. Haitao Hu**, Microbiologist and immunologist, China.

International and Development Partners - **Dr. Pavel Ursu**, WHO Country Representative; **Dr. Meghna Desai**, Country Director, US CDC; **Dr. Sedjro Catraye**, ECOWAS RCSD/WAHO; **Dr. Alinon Kokou**, West Africa Regional Director, Africa CDC; **Elsie Ilori**, CEPI; **Dr. Aurelien Pekezou Tchoffo**, WHO Health Emergencies Programme.

Heads of National Health Agencies - **Dr. Jide Idris**, Director General, NCDC; **Dr. Muyi Aina**, Executive Director, NPHCDA; **Prof. John Oladapo Obafunwa**, Director General, NIMR;

Chief Mrs. Moji Makanjuola, MFR moderated the symposium alongside **Dr. Abiodun Oguniyi**, NCDC and **Mrs. Claire Adelabu-Abdulrazak**, NTA.

SESSION HIGHLIGHTS

OPENING SESSION

The opening ceremony featured welcome remarks, goodwill messages, and special remarks from dignitaries and key stakeholders, who commended the leadership of **Prof. Muhammad Ali Pate,** Coordinating Minister of Health and Social Welfare, and **Dr. Iziaq Adekunle Salako,** Honourable Minister of State for Health, for convening this timely and critical symposium on pandemic preparedness and response.

Speakers reaffirmed their commitment to strengthening Nigeria's health security architecture and emphasised the urgency of proactive preparedness, noting that the next pandemic is not a question of if but when.

Call to Order and Introductions

Chief Mrs. Moji Makanjuola welcomed participants and acknowledged dignitaries present. Participants recited the Nigerian and Chinese national anthems, after which Mrs Moji introduced her co-compete, Dr. Abiodun Oguniyi (NCDC) and Mrs. Claire Adelabu-Abdulrazak (NTA), and provided a brief background to the symposium, framing its purpose as an opportunity to draw lessons and gain insights for improving Nigeria's pandemic preparedness.

She noted that the COVID-19 pandemic reshaped the world by exposing both the strengths and vulnerabilities of health systems, and that the symposium provided a platform to learn from two countries with unique approaches, diverse challenges, and valuable lessons in resilience, coordination, and innovation.

Welcome Address

Dr. Iziaq Adekunle Salako, Honourable Minister of State for Health acknowledged dignitaries in attendance. He delivered his welcome address, describing the symposium as both timely and

essential given the dire state of public health funding and the growing consensus that the next pandemic is not a question of if, but when. He recalled that the COVID-19 pandemic, which according to the WHO claimed over 7 million lives worldwide, did not merely test health systems, it reminded the world that infectious diseases know no borders and that even the wealthiest countries could be brought to their knees.

He noted that Nigeria, despite its weak health system, performed reasonably well in responding to COVID-19 through coordinated national efforts, strong leadership, partner support, and a great deal of improvisation and innovation.

Dr Iziaiq further commended China's response for its rapid response mechanisms, disciplined implementation, technological integration, and community mobilisation, and emphasised that the two countries have much to learn from each other. He highlighted that since COVID-19, Nigeria has made significant progress in fortifying its health security landscape, including digitisation of infectious disease surveillance through SORMAS, continuous training of health workers, strengthening of diagnostic infrastructure including nationally accredited reference laboratories, and establishment of infectious disease centres and public health emergency operations centres in all states.

He also noted that under President Tinubu, **health security is a fourth pillar of the Health Sector Renewal Investment Initiative,** and that **Nigeria is actively participating in the final rounds of talks on the WHO pandemic agreement.**

While acknowledging that clear progress has been made, Dr Iziaiq was candid that much work remains. He called on all delegates to focus on providing actionable plans, policies, partnerships, and innovations and to amplify voices for stronger global health preparedness, expressing his expectation that insights generated would meaningfully contribute to strengthening Nigeria's health security architecture.

Dr. Iziaiq ended his speech by calling for a **transition in pandemic preparedness strategy from a purely medical and microbiological focus to a broader transdisciplinary approach** that emphasises societal and cultural domains.

Goodwill Messages

Dr. Pavel Ursu, WHO Country Representative expressed appreciation to the Coordinating Minister of Health for his transformative leadership of Nigeria's health sector and acknowledged Prof. George Gao for his impact on global scientific collaboration. He underscored that **no nation, regardless of its strengths, can face global health threats alone, and that pathogens move faster than systems and very often faster than policies and politics.**

He drew the participants attention to the ongoing work on the WHO pandemic accord and the International Health Regulations, noting that both Nigeria and China are champions of the pathogen access and benefit sharing annex to be discussed at the World Health Assembly. He reaffirmed WHO's commitment to continuing to support Nigeria's health sector transformation and deepening the Nigeria-China partnership.

Representative of His Excellency Yu Dunhai, Ambassador of the People's Republic of China to Nigeria conveyed warm congratulations on the successful convening of the symposium and expressed sincere appreciation to all those committed to advancing China-Nigeria public health cooperation.

He noted that in September 2024, President Tinubu's visit to China led to the elevation of China-Nigeria relations to a comprehensive strategic partnership, laying a solid foundation for higher-level cooperation in health and scientific innovation. He reaffirmed China's commitment to South-South cooperation guided by the principles of equality, mutual benefit, and win-win outcomes, and pledged that the Chinese Embassy in Nigeria would always serve as a bridge and facilitator to actively support cooperation in public health.

Dr. Mahmoud Dalhat, President, Nigerian Infectious Disease Society brought greetings from the Board of Trustees, Executive Council, and all members of the Society, and described the event as not merely a symposium but as a coordinating meeting of all stakeholders in health security, noting the presence of representatives from all One Health ministries. He shared that **relationships and coordination systems should be built during peacetime, and outbreaks are not the time to establish new partnerships.**

Dr. Terfa Kene, National President, APHPN extended well wishes from **Prof. Christopher Abiodun, Chairman of the APHPN Board of Trustees**. He noted that COVID-19 exposed the issue of immunology and its relationship to vitamin D deficiency, which he described as a growing silent epidemic in Nigeria. He called on stakeholders to study areas that affect immunology as part of pandemic preparedness planning, noting that infectious diseases thrive when immune response is poor.

Additionally, He encouraged participants to consider adopting a primary healthcare facility near their village and contributing resources, including solar energy, to strengthen cold chain capacity at the community level.

Dr. Nanlop Ogbureke, Executive Director, Resolve to Save Lives conveyed greetings from RTSL CEO Dr. Tom Frieden and noted that Nigeria has made measurable progress on the WHO IHR monitoring and evaluation framework, with preparedness scores rising from **39% in 2017 to 54% in 2023**, and that RTSL was pivotal in supporting NCDC to push forward this assessment. She emphasised that preparedness is not abstract, pandemics test not only health systems but also the capacity for collective and concrete action, and finally reaffirmed RTSL's commitment as a partner to the Nigerian government in achieving this.**Special Remarks from Sectoral Ministers**

Senator Abubakar Kyari, Honourable Minister of Agriculture and Food Security affirmed the critical importance of pandemic preparedness planning and commended Prof. Muhammed Ali Pate for his contributions in the health and social development sector. He spoke to the food system transformation Nigeria desires and the Federal Ministry of Agriculture's focus on crop health and pest control services, noting that the ministry now has a Federal Department of Plant Health and Pest Control Services. He offered a reflective analogy: that as a person who has experienced loss begins grieving early so their tears are visible when gatherings occur, so too must we approach pandemic preparedness, with open eyes, planning early and planning right.

Dr. Bahijatu Abubakar, Director of Pollution Control and Environmental Health, represented Malam Balarabe Abbas Lawal, Honourable Minister of Environment and conveyed his remarks highlighting environmental surveillance and sustainable environmental practices as foundational

pillars of pandemic preparedness. Emphasising that most emerging infectious diseases—such as those experienced in both China and Nigeria are zoonotic, she linked their spread to environmental disruptions that facilitate transmission from wildlife to humans.

She also outlined Nigeria's efforts to strengthen surveillance through the Integrated National Environmental Health Surveillance System (INES), alongside an increasing focus on antimicrobial resistance from an environmental health perspective. The country's proactive engagement with the Pandemic Fund, through strong intersectoral collaboration, further reflects the importance of a climate-sensitive approach to public health preparedness.

Dr. Abubakar further drew attention to the growing challenge of hazardous medical waste management. She noted the sharp increase in medical waste during the COVID-19 pandemic and emphasised the urgent need for sustainable, high-capacity systems for hazardous waste disposal.

Alhaji Idi Mukhtar Maiha, Honourable Minister of Livestock Development, identified priority zoonotic threats, including rabies, highly pathogenic avian influenza, Ebola, African swine fever, tuberculosis, and anthrax, and noted the annual burden of Lassa fever as underscoring the urgent need for comprehensive environmental and animal health management. He stressed that the health of livestock is the very foundation of human health and that no pandemic response can have silos, a delay in communication is a window of opportunity for the pathogen.

He called on the symposium to catalyse bilateral cooperation between Nigeria and China on zoonotic disease control and commended China's establishment of the National Notifiable Infectious Disease Reporting System and Intelligent Infectious Disease Active Surveillance and Early Warning Systems as a model of comprehensive preparedness.

Setting the Context: A Decade of Global Pandemic Experiences

Prof. Muhammad Ali Pate, CON, Coordinating Minister of Health and Social Welfare

Prof. Pate opened by welcoming the Chinese delegation warmly and expressing admiration for Prof. Gao's work. He shared a recent paper published by scientists from the University of Sussex who had gathered fruit bats living on mango trees near the seat of government of a North Central Nigerian state capital and discovered antibodies to various influenza viruses, Nipah virus, Ebola, and coronaviruses — a stark reminder of the ever-present zoonotic risk. He traced the historical impact of infectious diseases on human civilization, from ancient plagues to the Spanish flu, HIV/AIDS, SARS, Ebola, Zika, and COVID-19 — reinforcing that the next pandemic is not a question of if, but when.

He noted that pandemics carry a heavy economic and security toll, accounting for an estimated 5.5% contraction in global GDP and almost $15 trillion in global GDP wiped off because of COVID-19. He expressed gratitude to the National Security Adviser's office for recognising pandemic preparedness as a national security and economic issue, noting that a dedicated officer coordinates with public health authorities across sectors.

Drawing from his experience, Prof. Pate distilled five key lessons for the decade ahead:

- **Preparedness must be proactive and sustained:** Investments in PHC systems, health workforce, diagnostics, and foundational infrastructure must be made before, not during a pandemic. It is too late to start investing when there is an outbreak.

- **Strong public health institutions are vital:** Referencing the NCDC, Irrua Institute, and the newly approved National Institute of Public Health and Infectious Diseases to be established in Zaria, he stressed that all federal institutions carry public health implications and must be coordinated, through mechanisms like the One Health Steering Committee where the ministers present are active members.
- **Community trust is essential:** In the post-truth world, keeping the trust of the people is vital. He cited the recent national summit of traditional and religious leaders as an example of deliberate engagement, ensuring communities will follow expert guidance rather than conspiracy theories when crises emerge.
- **Frontline health workers must be protected and empowered:** The Federal Government has retrained almost 79,000 frontline health workers in the last two and a half years. Without empowered frontline workers, response is impossible.
- **Local production capacity must be strengthened:** The president's presidential initiative to unlock the healthcare value chain has already seen six major new industrial efforts underway, with approximately 20 more in the pipeline to manufacture various elements and countermeasures. This must be built on sound science, including platforms for clinical trials through partners like CEPI.

Prof. Pate also highlighted the importance of digital innovation and data analytics, noting plans to set up a platform to build an ecosystem that allows Nigeria to leapfrog. He closed by appreciating the Chinese delegation for their partnership and encouraging all participants to listen actively and engage meaningfully.

Keynote Lecture: Strengthening Pandemic Preparedness and Response — China's Experience

Prof. George F. Gao, Renowned Academician and Director General, Institute of Microbiology, Chinese Academy of Sciences

Following the Prof. Pate's speech, Chief Mrs. Moji formally introduced Prof. George Gao, describing him as a world-renowned virologist, immunologist, and veterinarian with a PhD from Oxford, who served as Director General of China CDC from 2017 to 2022 and led China's response to major outbreaks including COVID-19.

Prof. Gao opened by thanking Prof. Pate for his visit to China and for the invitation to share China's experience. He noted that while China is not the most developed country, it is the fastest developing country and therefore has much to share. Health was framed in its fullest dimensions, physical, mental, and social, describing the social dimension as the reason for gathering together, and called the symposium itself a social health intervention.

Prof Gao then highlighted the rise in China's life expectancy from 35 years in 1949 to 79 years in 2024, with major cities now exceeding 80 years. This progress was attributed to three key phases: the "All-In-All Patriotic Health Movement" (from 1949), which mobilised the population for collective health action; the science and technology-driven era beginning in 1978, which strengthened infrastructure and human capital; and the current "Healthy China" phase, anchored on the principle of "people first, life first," with a focus on full life-cycle health coverage.

China’s pandemic preparedness journey was further illustrated through its national immunisation programme, identified as a critical pillar. The concept of 'social vaccine' was also highlighted in the context of HIV/AIDS and TB control, referring to public health measures such as community engagement, awareness campaigns, and behavioural change that complement biomedical interventions.

China’s cascaded disease surveillance system, spanning hospitals, provincial CDCs, and the national level was described as a key enabler of rapid detection and response. Supported by the Law on Prevention and Treatment of Infectious Diseases, the system mandates case reporting within two hours and confirmation within an additional two hours. This was illustrated by China's effective containment of a 2015 imported MERS case within one month.

On future pandemic risks, Prof. Gao emphasised that influenza and coronaviruses remain major threats due to their ability to mutate, recombine, and circulate in animal reservoirs. Using the H7N9 outbreak as an example, he highlighted the role of migratory bird pathways and live poultry markets in virus emergence. He also noted that he and international experts established **World Flu Day** in 2018 to strengthen global awareness and preparedness for influenza. Key drivers of emerging risks include climate change, globalisation, ecological disruption, and changing human behaviour.

A contextual lens was provided using the Nigerian setting, where evidence of fruit bats harbouring multiple high-risk pathogens near human populations highlighted the persistent risk of zoonotic spillover and reinforced the interconnectedness of human, animal, and environmental health within a One Health framework. He emphasised that pandemics do not emerge abruptly but evolve from outbreaks to epidemics and, if uncontrolled, into global crises, with COVID-19 illustrating their far-reaching public health, economic, and national security impacts.

Prof. Gao noted that key lessons from China’s experience underscore the need for continuous and proactive investment in resilient health systems, strong public health institutions, local manufacturing capacity, and the protection of frontline health workers. He also highlighted the importance of trust, community engagement, and effective risk communication, particularly in addressing misinformation.

Prof. Gao further introduced the concept of an “**infodemic**” and proposed a new field he called “**infodemiology**,” warning that misinformation and disinformation, often spread through platforms like TikTok, act like a virus in the information environment and must be actively countered. He concluded by calling for strengthened global collaboration guided by the four Cs—**cooperation, competition, communication, and coordination**, while advancing One Health, planetary health, and universal health coverage, noting that “**if we don’t work together, the virus will work together**”.

Question and Answer Session

The floor was opened for questions following Prof. Gao's keynote. A participant from the **Ministry of Livestock, Mr. Abdou Kalem Dero-Solong**, asked Prof. Gao to explain the role of competition in his four C principles, noting that competition is not a word commonly associated with health collaboration. Prof. Gao responded that human beings are by nature "a little lazy" and that competition is therefore essential to drive scientific progress, noting that over the past 200 to 300 years, science has played a vital role precisely because competitive scientific environments push people to work harder and generate new interventions.

Frank Mone of the PMG-MAN asked what role vaccine manufacturing and production has played in Prof. Gao's journey as a researcher. Prof. Gao responded that China's advantage lies in having many vaccine companies, and urged Nigeria to encourage both domestic and Chinese investors to build vaccine manufacturing capacity in the country, noting that Africa's overall vaccine manufacturing capacity urgently needs to be addressed.

A participant from the **Sydani Group, Lasisi Godwi**n, asked how China has been able to leverage its large youth population at the intersection of environmental, human, and animal health, and what best practices Nigeria could replicate. Prof. Gao spoke to China's deliberate engagement of young people across all levels of public health, and to the importance of coordinated mechanisms — noting that China's State Council established a unified team to coordinate across agriculture, animal health, and human health sectors when H7N9 emerged, and drawing parallels with Nigeria's coordinating minister structure.

Elsie Ilori from CEPI asked Prof. Gao to elaborate on the concept of the 'social vaccine.' Prof. Gao explained that it is a broad concept encompassing public education campaigns, health movements, trust-building activities, and behaviour change communications that protect communities from both disease and misinformation, comparing it to the work China did on HIV/AIDS and TB control in the absence of fully effective biological vaccines, including public campaigns involving China's First Lady. He added that in today's environment, the social vaccine must also counter the misinformation and disinformation spreading through platforms like TikTok.

Adekemi Walade from the CHAI asked two questions: how China has managed to achieve health equity and equality at population scale given the size and complexity of the country, and how China has managed cross-border transmission of infection with its many neighbouring countries.

Prof. Gao acknowledged that achieving equity at China's scale is not easy and remains a work in progress, but that the government has invested heavily through rural poverty reduction programmes. On cross-border transmission, he described China's approach of strengthening public health services in border areas, particularly in the southeast bordering Myanmar, Vietnam, and India — and distributing anti-malaria and anti-mosquito tools in high-risk regions, underpinned by the broad public vigilance culture of the "All-In-All Patriotic Health Movement."

A group photograph with Prof George Gao and the Nigerian Dignitaries and Ministers present was taken following the Q&A session before participants broke for tea.

TECHNICAL SESSION I

Panel Session I — Early Detection to Intelligence: Surveillance, Data, and Laboratory Systems

The panel session was moderated by **Dr. Terfa Kene, National President, APHPN**, and brought together Chinese and Nigerian experts to examine comparative surveillance architectures, laboratory networks, and digital tools for real-time disease intelligence. The session was made up of the following panelist:

1. **Dr. Hong Yang**, China CDC
2. **Dr. Jide Idris**, Director General, Nigeria CDC
3. **Prof. Christian Happi**, Institute of Genomics and Global Health

4. **Prof. Reuben Agbons Eifediyi**, Irrua Specialist Hospital
5. **Dr. Jenom Danjuma**, Epidemic Prevention
6. **Prof. Dimie Ogoina**, NDUTH
7. **Dr. Sedjro Catraye**, ECOWAS RCSD/WAHO

Question 1: To open the panel session, Dr Terfa noted that both China and Nigeria have expanded disease surveillance significantly in the last decade, but they operate in very different governance and health system contexts. He asked **Dr. Hong Yong, China CDC** and **Dr. Jide Idris, Director General, Nigeria CDC to share** from their experience, ***what the most important strengths and weaknesses of each country's surveillance architecture, especially in terms of speed, coordination, and decision-making?***

Dr. Hong Yong answered saying China's surveillance strength lies in its legal framework (The Law on Prevention and Treatment of Infectious Diseases) which mandates case reporting to CDC level within two hours, with confirmation in another two hours. She acknowledged that communication gaps between provincial and municipal CDCs remain an area for improvement.

Dr. Jide Idris stated Nigeria's surveillance system is relatively strong at the national level but faces significant challenges at the subnational level, in states and LGAs. He highlighted the need to build data collection capacity across all tiers, strengthen legal platforms, and deepen coordination. He drew a key structural contrast: China operates a centralised governance model while Nigeria's is decentralised.

Question 2: Regarding genomics and digital tools, Dr Terfa mentioned how sequencing became far more visible during COVID and asked **Dr Hong Yang** ***how China has institutionalised genomic sequencing as part of routine surveillance***, and to **Prof. Happi Christian, Institute of Genomics and Global Health**, ***what it will take for Nigeria to achieve the same sustainability.***

Prof. Christian Happi noted that Nigeria has institutionalised genomic sequencing and was the first country in Africa to develop a framework for genomic surveillance. Nigeria has a national network for genomic surveillance that covers not only pathogen genomics but also non-communicable diseases. The platform exists and is in the phase of implementation, the challenge now is sustainability, financing, and expanding the network of sequencing hubs to cover areas where capacity does not yet exist. He stressed the need to invest in R&D, noting that Nigeria now has the capacity to develop point-of-care diagnostics that do not require PCR equipment and can test for up to 49 different pathogens in a single assay, a capability that must be moved to the sub-national level and primary healthcare.

Dr. Jide Idris added that NCDC formed an alliance with genomics leaders during COVID and subsequently created a national genomics strategy, bringing together academic and institutional resources. The next level is institutionalisation, some laboratories are working, but sustainable financing is required to build on them at a zonal and national level.

Dr. Hong Yong answered the question by explaining China's cascaded training model, how national trains provincial, provincial trains municipal and this optimises sequencing resources. At the municipal level, routine antibody testing and nucleic acid testing are conducted, with virus isolation escalated to national level for full genomic sequencing. This tiered approach allows the national level to focus on sequencing while lower levels manage case volumes.

Question 3: Concerning digital innovations and the gap between data collection and decision-making, Dr Terfa explained that China has invested heavily in digital reporting and integrated public health intelligence while Nigeria has continued to strengthen SORMAS and genomic capacity, and asked ***what the biggest bottleneck is in turning surveillance data into real-time action, and what practical lessons from China are most adaptable to Nigeria***. He directed the question to **Dr. Catraye from ECOWAS/WAHO** and then to **Dr. Jenom Danjuma, Resolve to Save Lives** .

Dr. Catraye highlighted five key challenges identified in a recently published paper on surveillance digitalisation across West Africa: fragmentation and interoperability gaps between parallel surveillance systems; timeliness of verification, where the process of validation and risk escalation remains delayed; limited analytical capacity to translate data triggers into decision-making; human resource gaps at LGA and district level where information cannot be interpreted locally; and data governance and cross-border information sharing challenges, particularly in harmonising interventions across Anglophone and Francophone countries.

Dr. Danjuma noted that information itself is not the issue in Nigeria, the challenge is in the use of that information. He highlighted the weak interoperability of systems and data governance barriers, noting that most multi-sectoral data in Nigeria requires permission before it can be accessed. He referenced findings from the annual disease surveillance and review meeting led by NCDC, in which only a quarter of state epidemiologists and disease surveillance officers had basic to advanced proficiency in data analytics. He called for automated decision-support systems with predefined thresholds, so that when an event is detected in a community, the Disease Surveillance and Notification Officer knows to act within two to three hours and escalate to the next level.

Question 4: Regarding laboratory and reporting challenges, Dr Terfa noted that lab confirmation is often only as strong as the referral, reporting, and logistics systems around it, and asked: ***from both the China and Nigerian experience, what are the most critical building blocks for investment in an effective laboratory and reporting network for emerging infections, especially beyond major urban settings,*** specifically asking how a sample from a rural community gets to Irrua on time. He directed the question to **Prof. Rueben Eifediyi, CMD Irrua Specialist.**

Prof. Eifediyi shared the history and lived reality of Irrua, which was established in 1993 to investigate causes of strange illness, made a centre of excellence in 2001, and achieved in-house molecular diagnosis of Lassa fever by 2007. He noted that since establishing robust laboratory, referral, reporting, and logistics systems, no health worker at Irrua has died from Lassa fever. He described the importance of tiered laboratory systems with strong interconnectivity, quality management systems, external quality assurance, and integrated data reporting linking surveillance to treatment.

He highlighted Irrua's mobile laboratory deployed during both the 2014 Ebola response in Sierra Leone and more recently to Kaduna to reduce the Lassa fever burden at a military referral hospital. He stressed that confirmatory diagnosis is the most important aspect of any public health threat response, without it, an outbreak cannot be declared, a case cannot be adequately treated, and community engagement cannot be conducted effectively. He also called for local production of consumables, reagents, and PPEs, noting that Irrua went into local production of its own PPEs and eyeglasses during the 2018 Lassa outbreak when supplies ran out.

Dr Terfa then directed the same question to **Prof. Dimie Ogoina, Niger Delta University Teaching Hospital**, describing him as the Vice Chancellor who has redefined Nigeria's understanding of Mpox, to speak to the reporting challenges specifically around Mpox.

Prof. Ogoina recalled that in 2017, the first set of Mpox cases after a 38-year absence were reported in Bayelsa State in his hospital. Nigeria at the time had no capacity to make a diagnosis of Mpox, and samples had to be sent to Senegal, taking five to seven days before confirmation. During that waiting period, a patient died by suicide, practitioners were not familiar with the disease and the core challenge was confirmatory diagnosis. He emphasised that the most important aspect of any public health threat response is confirmatory diagnosis, without it, an outbreak cannot be declared, a case cannot be treated, adequate community engagement cannot happen.

He called for investment in point-of-care diagnostics, noting that if every endemic, epidemic, and pandemic disease can be diagnosed at point of care, it makes surveillance, clinical management, and community engagement all significantly easier.

Concluding the session, Dr Terfa asked each panelist to give a one-minute response: ***if Nigeria were to prioritise just two or three reforms over the next three years to strengthen early detection and intelligence, what should they be and what from China's experience is worth adopting directly?***

Dr. Hong Yong recommended building a real-time online national notifiable disease reporting system with unique case IDs accessible at all levels simultaneously, and developing hospital-based automated case capture software that can compare data epidemiologically and send reminders to staff.

Dr. Jide Idris recommended three things: building interoperable digital systems nationwide; building subnational capacity through continuous training as China does; and establishing sustainable genomics and laboratory systems.

Prof. Happi Christian called for an integrated one-health genomic surveillance system and investment in R&D for point-of-care diagnostics that can be deployed to the sub-national and primary healthcare level.

Prof. Eifediyi called for a strong laboratory system with a companion support and logistics referral system, an information centre linking data to surveillance, and investment in the development of antiviral medications and vaccine science for pandemic preparedness.

Dr. Danjuma called for building automatic time-bound decision-making windows, predefined thresholds so that surveillance officers know to act within two to three hours of detecting an event, with SORMAS as the platform to achieve this.

Dr. Catraye called for strengthening local capacity in the sub-region, district, and LGA, and for an integrated surveillance system where epidemiological, laboratory, and genomic data sit together in one system rather than fragmented verticals.

Personal Reflections by Dr Naomi Ogboi

Before the commencement of the second panel session, **Dr. Naomi Ogboi** shared a personal testimony, recounting the devastating loss of her only sister, a gynaecology senior resident, to Lassa fever after contracting the infection while performing a procedure at a facility in Jos. She described a

wait of over a week, almost ten days, for laboratory results due to logistical failures in moving samples from Jos to Abuja, during which the clinical team was treating an unconfirmed diagnosis. By the time the results came, it felt too late.

Dr. Ogboi urged the panel to speak to practical steps being taken to fast-track laboratory results, stressing that the numbers and statistics represent real people and real families still in mourning. Her account set an urgent and human tone for the session.

Panel Session II — Detection to Action: Emergency Response Systems and Coordination

The panel session was moderated by **Prof. Ismaila Dahiru Lawal, Provost, College of Medical Sciences, Ahmadu Bello University**, and brought together experts to discuss EOCs and incident management, Rapid response infrastructure and Coordination models. The following panelists participated in the session:

1. **Dr. Idowu Audu**, Incident Manager, Polio EOC
2. **Dr. Mahmoud Dalhat,** Kaduna State University representing **Prof. Akin Abayomi**, Commissioner of Health, Lagos State
3. **Mr. Siyuan Wang**, Junshi Biosciences
4. **Ms. Mercy Young**, representing **Bola Gobir**, CEO, Georgetown Global Health Nigeria
5. **Dr. Aurelien Pekezou Tchoffo**, WHO Health Emergencies Programme
6. **Dr. Patrick Nguku**, Regional Director, AFENET

Question 1: Prof. Ismaila Dahiru Lawal opened the session by noting that recent outbreaks have shown that detecting a threat is only the beginning, the harder challenge is converting intelligence into coordinated action. ***He asked: looking at China's emergency command structures and Nigeria's experience with Emergency Operations Centres, what features must determine whether response systems move quickly and coherently in the first 72 hours?*** He directed the question first to **Dr. Mahmoud Dalhat** representing Prof. Akin Abayomi, Commissioner of Health, Lagos State, then to **Mr. Siyuan Wang, Junshi Biosciences** and **Dr. Idowu Audu, Incident Manager, Polio EOC**.

Dr. Dalhat drew on three key outbreak experiences to illustrate how far Nigeria has come and what is still required. He recalled that a decade and a half ago, it could take almost a month for memos to pass through bureaucracy before outbreak response resources were mobilised. He cited the 2014 Ebola response and the COVID response as instructive examples where the key determinants of timely and effective response were: trained human resources ready to be deployed immediately; financial resources mobilisable before bureaucracy clears, noting that polio funds were available to mobilise Ebola responders within 48 hours, and NCDC had a revolving fund enabling COVID field workers to be deployed to Lagos within 24 hours; and political buy-in and coordination at the highest level, commensurate with the scale and magnitude of the outbreak.

Mr. Siyuan described how Junshi, in partnership with Prof. Gao's team, co-developed the anti-COVID neutralising antibody, compressing the normal 18-month preclinical development timeline to less than four months. The treatment received emergency use authorization across over 15 countries and was used to treat more than one million patients, with an estimated 15,000 lives saved. He attributed the success to three factors: a long-term industry-academia research relationship established well before the outbreak; strong government and regulatory facilitation enabling the world's first clinical trial for a COVID-19 antibody; and a company willingness to invest in long-term drug development even with uncertainty about whether the virus would still be present by the time trials completed.

Dr. Idowu Audu answered the question stating how Nigeria's EOCs have been operational for about 12 years. He stressed the importance of pre-establishing clear coordination systems with defined roles before an outbreak occurs. He outlined four elements that make an EOC perform well: a clear command structure with defined roles and deliverables for every individual and partner before an outbreak occurs; granular data analysis capability and real-time monitoring dashboards; accountability mechanisms shifting from process to output indicators, where each partner and working group signs off on specific deliverables; and alignment with states through bottom-up as well as top-down planning, with national response teams that regularly interface with states. He stressed that EOC structures must go beyond polio towards integrated teamwork that responds across all public health threats.

Question 2: **Prof. Ismaila** shared that both countries have had to mobilise large numbers of health workers rapidly during the crisis. ***What affordable and realistic models can Nigeria adapt to expand emergency treatment, isolation, logistics, and workforce mobilisation during a major public health event, without over-reliance on ad hoc systems as seen during COVID-19?*** He directed the question first to **Ms. Mercy Young**, then to **Mr. Siyuan Wang**.

Ms. Mercy Young, representing Bola Gobir, CEO, Georgetown Global Health Nigeria, noted that Nigeria has developed nationally owned tools but must scale and domesticate them, and that all 33,000 health facilities need access to the kind of advanced training that Irrua models. She called for building and maintaining registers of trained cadres (doctors, nurses, pharmacists, lay people, community volunteers, school teachers, community pharmacists) mobilised during COVID who still carry that knowledge and capacity. She highlighted ATBUTH's locally engineered automated isolation centre managed by Nigerian engineers and architects as a model. She also called out the gap in domesticating training programmes in Nigerian universities, noting that Burkina Faso had submitted a bid to offer as a master's programme a training that Nigeria developed and has been implementing since 2021.

Mr. Siyuan highlighted three infrastructure areas critical for rapid response manufacturing and pharmaceutical capability: cold chain infrastructure nationally and to the last mile, given that most biological drugs and vaccines require cold storage; regional diagnostic frameworks with a network of diagnostic and sample transportation hubs operating at different levels; and public-private partnership, noting that China leverages private sector players extensively for infrastructure construction and that Nigeria should deliberately involve private sector in building emergency response infrastructure.

Question 3: ***Concerning logistics and supply chain,*** **Prof. Ismaila** ***asked: supply chain disruptions remain a major bottleneck during emergencies, what are the most critical logistics capabilities Nigeria should institutionalise before the next pandemic, and what lessons from China are realistically transferable?*** He directed the question to **Dr. Aurelien Pekezou Tchoffo, WHO Health Emergencies Programme** and then **Dr. Patrick Nguku, AFENET**.

Dr. Aurelien affirmed that logistics is a critical pillar of the Incident Management System, but one that is consistently under-resourced in human and critical supplies, particularly at the LGA operational level. He pointed to China's innovative approaches including rapid facility construction and large-scale PPE production as worth studying, and noted persistent shortages of critical items and security challenges in accessing affected areas during Nigeria's outbreak responses.

Dr Patrick called for strengthening PHCs and hospitals in preparation, and logistics during the crisis, noting that NCDC has been working on a stockpile for medical countermeasures based on the epidemic calendar and high vulnerability areas. He stressed the importance of sample collection, referral systems, cold chain, and oxygen production and distribution. He noted that WHO and Africa CDC recommend $4–5 per capita for emergency preparedness while Nigeria currently allocates around 100–200 Naira per capita, describing domestic financing as "Vitamin M — Vitamin Money" without which nothing moves.

Question 4: On building a resilient emergency response architecture from national to state level, **Prof. Ismaila** asked ***what it would take for Nigeria to build a more resilient emergency response architecture that works from national to state level, what should be adapted from the China experience, what should come from Nigeria's own outbreak experience, and what should never be transplanted without major local modification? He asked two panelists to respond.***

Dr. Aurelien identified three things: strengthening the workforce as a deliberate preparedness strategy, replicating China's approach; strengthening points of entry, international airports, ground crossings, and seaports, learning from China's interconnected world mapping; and deepening the community-led approach using community volunteers and key community informants, which has proven essential in polio eradication and must be sustained given that outbreaks start and end in the community.

Dr. Idowu stressed that learning from past outbreaks and iterating the response process is essential. He also raised the importance of maintaining essential services during outbreaks, noting that during Ebola in Sierra Leone, a 60% drop in outpatients led to deaths from malaria, vaccine-preventable diseases, and non-communicable conditions. He concluded that partner funding is declining and that government structures, including traditional institutions at the community level, must be built up to bridge surveillance systems and response networks.

Panel Session III — Trust, Communities, and Behaviour: The Social Side of Pandemic Response

The panel session was moderated by **Prof. Yusuf Bara Jibrin, ATBUTH**, and brought together Nigerian and Chinese experts to examine community engagement models, trust-building strategies, and approaches to managing misinformation during health emergencies. The session was made up of the following panelist:

1. **Safiya Shuaibu Isa**, Director of Advocacy and Partnerships, Nigeria Health Watch
2. **Prof. Haitao Hu**, Microbiologist and immunologist, China
3. **Dr. Tochi Okwor**, Director of Prevention and Health Promotion, Nigeria CDC
4. **Dr. Liukui Wang**, Institute of Microbiology, Chinese Academy of Sciences
5. **Dr. Dan Gadzama** (Associate Professor), Director of Public Health, Health Service and Environment Secretariat, FCT, Abuja

Question 1: **Prof Yusuf** opened by noting that pandemic response is not only a technical challenge but also a social and behavioural one, and that while China's response has often relied on compliance with government directives, the Nigerian context requires deeper community engagement. He asked **Prof. Haitao Hu, Microbiologist and Immunologist** from China, and **Safiya Shuaibu Isa, Director of**

Advocacy and Partnerships at Nigeria Health Watch, w***hat these differences teach us about what makes people listen, comply, or resist during a pandemic.***

Prof. Hu spoke as a scientist who works on vaccines and therapies, sharing a key lesson from his own experience: that if you build a vaccine that is highly protective in the lab or in clinical trials but people refuse to use it, its real-world efficacy is essentially zero. The pandemic response is therefore not simply a technical problem but fundamentally a social one. He described both the top-down compliance model in China and the community-based engagement model in Nigeria as two different versions of the same thing, the social contract, and emphasised the need to make policy-making processes transparent, and to communicate to the public that scientific discovery is always an evolving process with things known and things still unknown, in order to build ongoing trust.

Mrs Safiya shared that in Nigeria, engagement must start from trusted voices, whether community leaders, religious leaders, traditional leaders, or locally influential individuals. The entry point into communities is relational and must be negotiated, because communities respond to messages that come through platforms they already trust, such as church WhatsApp groups or local religious platforms, rather than centralised messaging. She stressed that this engagement must be consistent and not activated only at moments of crisis.

Question 2: Prof Yusuf further shared that Nigeria's experience with COVID-19 has shown that trust in local actors, community leaders, and frontline health workers can be just as important as trust in government or foreign institutions, and asked **Dr. Tochi Okwor, Director of Prevention and Health Promotion at Nigeria CDC**, ***what the most effective strategies are for building trust among the populace, especially during an epidemic.***

Dr. Tochi spoke as someone who leads a department that responds to four to ten outbreaks simultaneously. She stressed that trust cannot be built at the point of crisis but is built by sitting with communities before crises occur, through consistent health promotion and preventive engagement. She identified three critical elements.

1. First, consistency of engagement, noting that a mother who experienced a stock-out at a health facility will not be easily persuaded during an outbreak.
2. Second, working with trusted local actors in a deliberate and intentional way, integrating traditional rulers into NCDC's risk communication and community engagement technical working groups with clear terms of reference.
3. Third, transparency and listening, noting that trust grows when people feel heard rather than simply informed. She gave the example of a Borno State community that considers the Mastomys rat a delicacy, stressing that top-down messaging without understanding local context destroys trust, while co-creation and human-factor design, as demonstrated in a Borno State Lassa fever project, makes a measurable difference.

Prof Yusuf proceeded to ask **Dr. Liukui Wang, Institute of Microbiology, Chinese Academy of Sciences**, whether China uses a similar or different strategy for engaging communities early before an epidemic starts.

Dr. Wang explained that China's approach relied on two-way risk communication, ensuring traditional and community institutions were actively carried along throughout the response, with grassroots health workers and government structures playing incentivised roles as trusted voices rather than merely issuing directives. He emphasised that when people feel heard and their fears addressed with

empathy, trust is built, and called for training not only scientists and clinicians but also communicators who can bridge the gap between public health goals and community realities.

Question 3: On countering misinformation, **Prof Yusuf** noted that in Nigeria misinformation often spreads rapidly through informal social networks, religious leaders, local politics, and digital media, and asked **Safiya Shuaibu Isa** ***what practical approaches government or partners can use to counter misinformation in real time without undermining public trust.***

Mrs Safiya noted that during COVID-19 social listening work with NCDC, messages that resonated most were those that acknowledged communities' fears and uncertainties, including the economic impact of lockdowns, while explaining what was being done to address them. She called for using the same trusted channels through which misinformation spreads to debunk and address it, and reiterated the importance of closing the feedback loop, returning to communities to report on what was heard and what is accurate.

Prof Yusuf then asked **Dr. Tochi** to further share strategies for rebuilding trust and managing misinformation ahead of the next pandemic. **Dr. Tochi** described misinformation as a problem of both trust and speed, with rumours circulating faster than official responses can counter them. She called for a pre-bunking approach, proactively saturating communities with accurate information before crises occur, linked to the social vaccine concept. She cited the Kwara State NYSC case as a positive example of social listening picking up a rumour at the local level quickly, enabling rapid debunking before it could spread. She reiterated the importance of co-created, community-led solutions that respect people as experts in their own local circumstances.

Dr. Dan Gadzama, Director of Public Health at the FCT Health Service and Environment Secretariat, also shared insights and strategies for Nigeria in terms of managing misinformation and community engagement:

Dr. Gadzama referenced **Prof. Gao's** concept of the social vaccine, stressing the importance of rolling out epidemic information before outbreaks occur. He noted that during COVID-19 vaccination rollout, uptake increased significantly once ward council structures, including traditional rulers, religious leaders, and ward development committees, were deliberately engaged because these are people communities trust. He highlighted NCDC's community-based misinformation monitoring and community-based misinformation response network as recent initiatives worth scaling. He cautioned that a punitive or censorship-based approach to misinformation in a democratic society will have a boomeranging effect, and warned against over-centralising messages given Nigeria's diverse regional contexts.

To conclude the session, the moderator invited two panellists to give 30 seconds of advice on how to strengthen preparedness for a future outbreak.

Prof. Hu called for a global approach to vaccine hesitancy, stressing the need to educate the public on how vaccines work, their potential side effects, and the iterative nature of scientific discovery, keeping the process transparent.

Safiya Shuaibu Isa called for institutionalising community listening, consistently engaging community and traditional leaders not only during emergencies, and leveraging the social platforms through which people already trust information.

Policy Dialogue — Building a. Nigeria–China Partnership Framework for Health Security

The policy dialogue was moderated by **Dr. Muyi Aina, Executive Director, NPHCDA**, and brought together heads of key Nigerian research and regulatory institutions alongside Chinese counterparts to focus on South–South cooperation, joint research, technology transfer, and vaccine research and development. The session comprised of the following panelist:

1. **Pharm. Bitrus Fraden**, Director Post Marketing and Surveillance, NAFDAC representing **Prof. Mojisola Adeyeye**, Director General, NAFDAC
2. **Prof. Jianxun Qi**, Institute of Microbiology, Chinese Academy of Sciences
3. **Elsie Ilori**, CEPI
4. **Prof. Sylvanus Okogbenin**, Irrua Specialist Teaching Hospital
5. **Dr. Zhuobing Zhang**, Institute of Microbiology, Chinese Academy of Sciences
6. **Dr. Alinon Kokou**, West Africa Regional Director, Africa CDC
7. **Prof. John Oladapo Obafunwa**, Director General, NIMR.
8. **Prof. Han Wang**, Peking University.

Dr. Muyi opened by summarising the three preceding panel discussions noting that there is no such thing as emergency listening if you were not already listening before.

Question 1: Dr Muyi asked the panelists to consider ***what the two to three core objectives of a Nigeria–China health security partnership should be to achieve the most impact, and whether the focus should be research collaboration, technology transfer, preparedness, capacity, manufacturing, or all of the above.*** He directed the question to **Pharm. Bitrus Fraden represented the NAFDAC DG**, then to **Prof. Jianxun Qi, Institute of Microbiology, Chinese Academy of Sciences**, and finally to **Prof. Sylvanus Okogbenin, Irrua Specialist Teaching Hospital**.

Pharm. Fraden Outlined three priorities:

1. Joint surveillance and joint research linking regulatory agencies, CDCs, and laboratory networks to jointly identify emerging pathogens;
2. Capacity building through personnel exchanges allowing staff from both countries to understudy each other; and
3. Phased local manufacturing beginning with fill-and-finish, noting that NAFDAC's lot release protocols are already in place making this immediately actionable.

Prof. Qi described a general immune-focused platform for vaccine design built on the identification of dominant epitopes of key pathogens, producing highly stable and highly productive immunogens. He gave examples of a COVID-19 subunit vaccine distributed to over 315 million doses worldwide and an RSV vaccine under development, and proposed this platform as applicable to Lassa fever vaccine development. **He recommended building a general coordination platform between the two countries to identify key persons and facilitate joint work.**

Prof. Okogbenin called for strengthening end-to-end preparedness and response systems encompassing surveillance, laboratory diagnostics and networking, and case management as the foundational priority. He also called for technology transfer in vaccines, therapeutics, and diagnostics, and highlighted the manufacturing of personal protective equipment as a key and often overlooked

area for collaboration, noting that during the 2018 Lassa outbreak Irrua went into local production of its own PPEs, boots, and eyeglasses when supplies ran out.

Question 2: **Dr. Muyi** then noted that China has major strengths in public health infrastructure, digital and data systems, manufacturing, and research, while Nigeria through polio, Ebola, and other major outbreaks has developed significant outbreak response experience and growing institutional capability. ***He asked where the highest value areas for practical collaboration over the next three to five years are,*** directing the question to **Dr. Zhuobing Zhang, Institute of Microbiology, Chinese Academy of Sciences**, then to **Dr. Alinon Kokou, West Africa Regional Director, Africa CDC**, and then to **Prof. John Oladapo Obafunwa, Director General, NIMR**.

Dr. Zhang proposed a joint biologics development framework for infectious diseases, noting that China's innovative research capacity combined with Nigeria's outbreak experience creates a natural partnership. He outlined a phased model beginning with joint laboratory construction and talent cultivation, noting that Prof. Gao already has two Nigerian doctoral graduates now working in Nigerian universities, progressing through fill-and-finish manufacturing to full manufacturing capacity transfer. He noted that Good Manufacturing Practice standards are more important than hardware and proposed that Nigeria sequence its ambition from GMP standards at the distribution and formulation end, working upstream towards fermentation and purification over time.

Dr. Kokou highlighted China's digital surveillance system as a direct technology transfer opportunity for Nigeria, referencing the 7-1-7 framework that Africa CDC is implementing. He called for vaccine production facility development at state level in Nigeria and expanded bilateral research collaboration, citing Lassa fever as a natural area of joint focus given Nigeria's experience, and noting that Nigeria has a great deal that China can also learn from in terms of operational research during outbreak response.

Prof. Obafunwa drew on bilateral discussions held the previous Saturday between the NIMR team and the Chinese delegation, identifying low-hanging fruits including diagnostics for hepatitis B, hepatitis C, HIV, Lassa fever, and Mpox; vaccine development processes; technology transfer through equipment and personnel training in toxicology and genomics; and clinical trials. He stressed that technology transfer requires not just physical space and equipment but simultaneous personnel training, so that trained personnel return to find equipment ready.

Question 3: **Dr Muyi** then noted that partnerships and technology transfer often fail not because of a lack of intent or ambition but because the mechanisms are weak, and asked ***what concrete institutional arrangements, joint infrastructure investments, training, regulatory mechanisms, or shared research programmes will be needed to move from goodwill to implementation***. He directed the question to **Dr. Zhang**, then **Pharm. Fraden**, and **Prof. Han Wang, Peking University**.

Dr. Zhang called for sustainable, long-term mechanism building rather than short-term source exchanges, including joint laboratory construction between NIMR and the Institute of Microbiology under the Belt and Road laboratory framework, and talent cultivation through scholarship-supported student exchanges.

Pharm. Fraden noted that NAFDAC holds MRA Tier 3 status for medicines and called for Nigeria to work towards achieving the same for vaccines. He proposed beginning with a fill-and-finish collaboration model with Nigerian personnel seconded to China for technical training before returning to implement locally, noting that the regulatory infrastructure is already ready.

Prof. Wang proposed a handover framework for the joint development of biologics against infectious diseases built in phases: beginning with joint development of biological products, progressing through fast-track industrial manufacturing, and then transferring manufacturing capacity to Nigeria for local production. He emphasised that Good Manufacturing Practice is the critical software of any manufacturing facility, more important than the hardware, and proposed that Nigeria sequence its ambition from GMP standards at the distribution and formulation end working upstream towards fermentation and purification over time.

Question 4: **Dr Muyi** asked **Elsie Ilori, CEPI,** ***what realistic pathways exist for Nigeria to leverage China's experience to build local vaccine manufacturing capacity, starting with emerging threats including Mpox.***

Elsie Ilori stressed that COVID-19 made clear that no country can rely on global supply chains for timely access to vaccines and diagnostics during a crisis. She outlined four realistic pathways: a phased step-by-step approach that sequences ambition to match infrastructure, workforce, regulation, and market readiness; focus on platform and ecosystem capability rather than single products; structured partnerships around technology transfer and absorptive capacity; and a long-term strategy linking manufacturing ambition to preparedness outcomes rather than single product cycles. She also spoke to CEPI's Enable 1.5 Study as a platform for clinical trial engagement in the region.

To close the session, **Dr Muyi** asked what the two or three most practical next steps are that both Nigeria and China should commit to within the next 12 months.

Prof. Obafunwa called for strengthening and institutionalising surveillance and laboratory networks as the most immediate priority that will directly save lives within the year.

Dr. Kokou called for co-creation around key priority areas, proposing that Nigeria and China identify areas each will improve, establish exchange visits, and build on Nigeria's five-year strategy plan for emergency preparedness and response as the framework for joint action.

Panel Discussion Reflections

To give the closing reflections from the Panel Sessions, the compere, Prof Moji invited **Prof. Abdulsalami Nasidi, Former Director General, Nigeria CDC and Prof. Oyewale Tomori, Former President, Nigeria Academy of Science**

Prof. Abdulsalami Nasidi, Former Director General, Nigeria CDC, called for making **health security a political agenda, describing it as no longer optional but a national security and economic stability priority**. He outlined core capacity gaps requiring attention: advanced laboratory systems, genomic surveillance, health data integration, vaccine and biologics manufacturing workforce, field epidemiology in resource-constrained environments, community-based outbreak control, and multiple disease surveillance systems.

He proposed a structure for institutional collaboration: government-to-government agreement; institutional pairing of NCDC with China CDC and universities with research institutes; and pharma-biotech company partnerships. He also raised the issue of the GoN-USG agreement, calling on the Minister to ensure that Nigeria's $3 billion domestic contribution is invested strategically so that by

the time the agreement concludes, Nigerians can analyse their own data and process their own pathogens without dependence on external parties.

Prof. Oyewale Tomori, Former President, Nigeria Academy of Science, also offered a candid reflection, noting that the US CDC was set up in 1946 as the Center for Disease Control and only added "Prevention" in 1980, yet no one speaks of prevention because the world is focused on control, controlling things that have failed to be prevented. He warned that bilateral arrangements can block regional agreements and described the benefits of aid as analogous to feeding a ram all year only to slaughter it at Ramadan.

He challenged the nature of the GoN-USG agreement, noting that the $2 billion US contribution comes largely as materials, reagents, and consultancies from the US industry, and urged that Nigeria's $3 billion be used strategically to ensure that by the end, Nigerians can process their own pathogens and analyse their own data.

He also challenged NCDC directly on Lassa fever: every year 10,000 suspected cases are reported and 1,000 confirmed, asked what the other 9,000 are, and stated that NCDC should be doing research to answer this question, not just reporting negative results. **He called for Nigeria to invest in its own genuine readiness as the foundation for any meaningful collaboration.**

CLOSING SESSION

Award of Excellence Presentation to Professor George F. Gao by Prof. Muhammad Ali Pate, CMoSHW

Prof. Pate began by responding to both Prof. Tomori's and Prof. Nasidi's reflections on dependency. He acknowledged that while Nigeria has made significant progress over the past thirty years, COVID-19 exposed the fragility of that progress and the dangers of systems built largely on external donor funding. He described the disruptions of 2025 as having made clear that Nigeria cannot outsource the delivery of its health system, it is the primary responsibility of the sovereign government to invest in the health of its people.

He noted that this government, under President Tinubu, unveiled a sector-wide agenda built on national ownership and increasing domestic financing in 2023. When the major US funder threatened to step back in 2025, the experience revealed the risk of dependency; when re-engagement occurred, the shared agreement was to work toward exit from dependency by 2030, requiring Nigeria to gradually increase domestic allocations so that external partners can shift to trade, investment, and research-based partnerships.

"Nigeria may face resource constraints, but it also has its dignity. The vision is not to remain perpetual recipients of aid, but to become a country that invests in its own people's health with conviction." — **Prof. Muhammad Ali Pate**

Prof.Pate proceeded to appreciating Prof. Gao for his presence and his erudite presentation, noting that his remark that "China is the world's fastest developing country" reflected a humility that resonated with those who are still on the path of development. He then formally honoured Prof. Gao in two ways: first by bestowing on him a traditional Nigerian chieftaincy title — ***Wakili of Chigari Misau*** — dressing him in the accompanying regalia from his own chiefdom in Bauchi; and then by officially presenting the ***Award of Excellence 2026*** on behalf of the Federal Ministry of Health and Social

Welfare in recognition of **his outstanding contributions to global health science and his enduring partnership with Nigeria**.

Other Chinese delegates joined Prof. Gao on stage for photographs.

Summary of Key Takeaways

Dr. Charles Nzelu, Director, Department of Public Health, FMoH&SW, noted that the day's sessions had generated a coherent set of priorities that must now translate into action.

He presented the following recommendations and commitments:

- **Establish Real-Time, Interoperable Surveillance Systems**: Build nationwide digital surveillance and data systems to enable early detection, rapid verification, and timely response at all levels, drawing on China's real-time disease reporting model.
- **Strengthen Laboratory and Diagnostic Capacity:** Equip health facilities with diagnostic tools and test kits for point-of-care testing, and build robust laboratory networks supported by efficient logistics and referral systems.
- **Invest in Emergency Response Coordination:** Strengthen Emergency Operations Centres with clear command structures, defined roles, and outcome-focused accountability, aligned with state-level implementation plans.
- **Build Community Trust Through Deliberate Engagement:** Integrate traditional and religious leaders into technical working groups, establish community-level systems to identify and counter misinformation, and invest in proactive community education before outbreaks occur.
- **Accelerate Local Vaccine Manufacturing and Technology Transfer:** Establish a Nigeria–China framework for co-development and local production of vaccines, therapeutics, and diagnostics, with phased transfer of manufacturing capacity to Nigerian institutions.
- **Establish Long-Term Collaborative Research Platforms:** Create joint laboratories between Nigerian and Chinese institutions for sustained collaboration on diagnostics, clinical trials, genomics, and vaccine development, including Mpox vaccine trials.
- **Strengthen the Frontline Health Workforce:** Protect and empower frontline health workers through training, equipment, and safety protocols, and domesticate training programmes at community, facility, and university levels for long-term sustainability.
- **Mobilise Sustainable Funding for Preparedness:** Establish dedicated, legislated funding for pandemic preparedness and response, ensuring financing reaches subnational levels where capacity gaps are greatest
- **Leverage Digital Innovation for Decision-Making:** Adopt and adapt digital surveillance tools, including hospital-based case-capture systems and integrated reporting dashboards, to enable real-time, evidence-based decision-making
- **Strengthen Cross-Border and Regional Collaboration:** Deepen cooperation with ECOWAS/WAHO, Africa CDC, and regional networks on cross-border surveillance, information sharing, and community-led response.

Closing Remarks

Dr. Charles Nzelu delivered the closing remarks on behalf of **Ms. Daju Kachollom, S.** mni, Permanent Secretary, Federal Ministry of Health and Social Welfare.

He reflected that the discussions drawing on past pandemic experiences, surfaced accounts of innovative strategies, resilient health systems, and the importance of rapid, coordinated response, and affirmed that global solidarity remains central to effective pandemic preparedness.

Dr. Nzelu further quoted ***"Preparedness is not a one-off responsibility, it is an ongoing commitment that requires continuous coordination and deepening partnership within and beyond national borders. The future of global health security depends on the quality of the partnerships we build today"***

He extended appreciation and gratitude to Prof. George Gao and the Chinese delegation, panelists, resource persons, moderators, development partners present, the planning and organising committee, and all participants.

Chief Mrs. Moji Makanjuola offered warm closing remarks, expressing the hope that the symposium would ignite further action to build health systems prepared not just for pandemics but for emergency response at all times.

Participants were formally dismissed at 5:45 p.m. Members of the press were immediately invited to the stage for a press conference with the two ministers and Professor George Gao for a brief interactive session with the Nigerian media.