



World Health
Organization
Uganda



Stakeholders Workshop to Pilot the Global Guidance Framework for The Responsible Use of The Life Sciences in Uganda

Kampala, Uganda, 21-23 November 2023

WORKSHOP REPORT



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Abbreviations

Africa CDC	Africa Centers for Disease Control and Prevention
BWC	Biological Weapons Convention
CBD	Convention on Biological Diversity
DUR	Dual Use Research
DURC	Dual Use Research of Concern
GHSA	Global Health Security Agenda
KPI	Key Performance Indicators
STI	Science Technology and Innovation
TWG	Technical Working Group
UNSCR	United Nations Security Council Resolution
WHO	World Health Organization

Executive Summary

Uganda agreed to pilot the operationalization of the Global Guidance framework for the responsible use of the life sciences as a result of the regional workshop to operationalize the framework in the WHO African region held in Nairobi, Kenya from 24 to 25 January 2023. As part of the strategic action plan for piloting the framework in Uganda, one of the key activities identified was the sensitization of relevant national stakeholders on its operationalization.

From 21 to 23 November 2023, Uganda hosted a three-day national stakeholder workshop in Kampala. The Uganda Office of the Prime Minister coordinated the workshop, with support from the WHO Country Office in Uganda, WHO Regional Office for Africa, and WHO headquarters. The workshop played a vital role in Uganda's capacity as the pilot country for operationalizing the [global guidance framework for the responsible use of the life sciences: mitigating biorisks and governing dual-use research](#) (the framework).

The workshop aim to present an overview of the framework and the pilot project; discuss an in-depth understanding of the current situation and existing biosafety and biosecurity activities, and dual-use research governance at the national level; and identify concrete applications of the framework to the Ugandan context.

The workshop convened over 80 stakeholders, representing diverse sectors such as human and nonhuman animal health, agriculture, environment, defense, security, and various partner organizations. They included structured presentations, informative panel discussions, interactive working group sessions, and comprehensive plenary discussions. This meticulous structuring ensured that participants from different backgrounds and sectors actively engaged with the content and contributed to the dialogue surrounding the operationalization of the Global Guidance Framework.

As an outcome of the workshop, stakeholders collaboratively developed a roadmap to facilitate the integrated, efficient, and cost-effective implementation of the framework in Uganda. This

roadmap details key steps, notably the creation of a functional high-level multisectoral national steering committee and a Technical Working Group (TWG). These bodies will play pivotal roles in guiding Uganda's pilot implementation of the framework. The outlined strategies in the roadmap include resource investment and stakeholder mapping, as well as the identification and prioritization of implementation activities. Moreover, the roadmap underscores the importance of effective regional and cross-sector collaboration with a focus on communication, the reinforcement of research oversight, resource mobilization strategies, and fostering international collaboration and information sharing.

Next steps involve refining the roadmap through a dedicated technical stakeholder workshop, conducting a high-level stakeholder's sensitization, and sustaining continuous country awareness. These initiatives aim to cultivate broad-based engagement, refine implementation strategies, and create a conducive environment for the responsible use of life sciences in Uganda. The results of Uganda's pilot project will extend beyond national interests to serve as a guiding model for the broader WHO African Region (AFRO). This way, Uganda aims to contribute valuable insights and best practices that can be adopted and adapted by other countries within the region, further advancing the goals of the framework.

1. Introduction

In the 21st century, life sciences have witnessed unprecedented acceleration, marked by groundbreaking discoveries and technological advancements that are shaping the trajectory of healthcare, research, and societal progress. Amidst the promises and potential, however, there are challenges that warrant careful consideration. The advancements in life sciences and the emergence of new technologies bring inherent risks, as research in this field holds the potential for both unintentional and intentional use. In that regard, the World Health Organization (WHO) recognizes the imperative of ensuring that the responsible use of life sciences remains at the forefront of global agendas.

In September 2022, WHO published the [global guidance framework for the responsible use of the life sciences: mitigating biorisks and governing dual-use research](#) (the framework) representing a milestone in the organization's commitment to fostering global biosecurity. This framework constitutes a systematic guide for Member States in formulating robust policies, regulations, and governance structures for biorisks management and dual-use research governance in the context of the One health approach.

The framework emphasizes the imperative of nuanced comprehension of dual-use risks, underscoring the critical need to fortify dual-use research governance frameworks. Offering a comprehensive set of values and principles, a practical six-step implementation guide, and specialized checklists, the framework equips Member States and stakeholders with the tools necessary for effective implementation. Moreover, it integrates realistic scenarios and real-world case studies, enriching the understanding of governance intricacies in the context of biorisks and dual-use research.

Recognizing the global relevance of biorisks mitigation and dual-use governance, the framework advocates for adaptability, rejecting a one-size-fits-all approach. It champions a diverse toolkit, comprising formal and informal mechanisms tailored to specific stakeholders, goals, and contexts. Emphasizing the importance of adaptability, the framework underscores the necessity to contextualize its guidance to address the unique needs and priorities of different countries.

During the regional workshop to operationalize the framework in the WHO African region (AFRO) held in Nairobi, Kenya from 24 to 25 January 2023, Uganda agreed to pilot the operationalization of the framework. This pilot project started in August 2023. The experiences

garnered from Uganda's pilot are anticipated not only to inform national policies but also to substantively contribute to the broader operationalization of the framework across the WHO African region. One of the key strategic activities of the action plan to pilot the framework in Uganda was the sensitization of relevant national stakeholders on its operationalization. In this regard, a 3-days national key stakeholders' workshop was held in Kampala, Uganda, from 21 to 23 November 2023, under the coordination of the Office of the Prime Minister with the support of the WHO Country Office in Uganda, the Regional Office for Africa, and WHO headquarters.

Spanning three days, the workshop comprised presentations, panel discussions, working group sessions, and plenary discussions. This structure aimed to foster active participation and engagement, ensuring a comprehensive exploration of key topics and meaningful interactions throughout the event. The opening ceremony, presided over by the Director General of the Ministry of Health of Uganda, served as a ceremonial kickoff, setting the tone for a workshop acting as a catalyst for actionable insights and collaborative efforts in promoting responsible life sciences use.

2. Objectives of the workshop

2.1 General objective

Sensitization of the key stakeholders on the operationalization of the global guidance framework for the responsible use of the life science and dual use research in the context of Uganda.

2.2 Specific objectives

1. To provide an overview of the framework, and other regional and national related existing initiatives
2. To introduce the pilot project in Uganda and the expected outcomes
3. To discuss and understand the current situation of biosafety and biosecurity in Uganda.
4. To discuss and determine concrete applications of the framework to the context of Uganda.
5. To agree on actions/strategies to translate the insights of the discussion towards a national action plan to enable effective domestication adoption and implementation.

3. Summary of the discussions

The workshop convened over 80 participants spanning various sectors, encompassing human health, nonhuman animal health, plants and agriculture, environment, Security, internal affairs, foreign affairs, academia and various development and implementing partners. Additionally, the workshop was graced by the presence of representatives from the Africa Centres for Disease Control and Prevention (Africa CDC), the WHO Country Office for Uganda, WHO headquarters and virtual presence of representatives from the WHO Regional Office for Africa (WHO AFRO). This inclusive participation underscored the collaborative and cross-sectoral nature of the workshop, fostering a rich exchange of perspectives and expertise, during the three day-course of the workshop.

3.1 Session one focusing on the opening and objectives of the workshop.

The session was chaired by Andrew Niwagaba Bakainaga, Country Advisor – Health systems strengthening from the WHO country office for Uganda. The workshop was inaugurated by Charles Olaro, Director Health Services – Curative, who represented the Director General of the Ministry of Health of Uganda. Complementing these opening remarks were additional contributions from Anna Laura Ross, Unit Head - Emerging Technologies, Research Prioritization and Support Research for Health Science Division from the WHO headquarters, , Andrew Niwagaba Bakainaga from the WHO Country Office for Uganda, and Godfrey Nsereko, National Coordinator, Saving Lives and Livelihoods Program, Eastern RCC at Africa CDC. Furthermore, the chair of this session, presented the objectives and expected outcomes of the workshop, its format and working methods.

In the workshop opening remarks, the significance of the workshop on the operationalization and domestication framework in Uganda was highlighted. The speakers emphasized Uganda's unique role in piloting the implementation of the framework in the AFRO region and the responsibility to provide valuable insights for the broader regional context. Uganda's commitment to integrating responsible scientific practices and fostering a research environment that is both innovative and ethically grounded was acknowledged amidst prevailing challenges such as inadequate investment in research and existing gaps in biosafety and biosecurity regimes. The role of the health sector in addressing health challenges, including the COVID-19 pandemic, and the opportunity to leverage responsible research practices to safeguard public health was further underscored. The speakers applauded the collaborative nature of the workshop and the need for sustained commitment beyond the workshop. They also highlighted

the regional impact of Uganda's efforts, positioning the country as a trailblazer in influencing regional policies and practices for the responsible use of life sciences. A call for collective responsibility in shaping the narrative of responsible life sciences use was made, urging all stakeholders to actively contribute to the contextualization of the framework within Uganda's landscape using the One Health approach. The speakers concluded by expressing their wishes for insightful discussions and a shared commitment to advancing the responsible use of life sciences in Uganda and beyond.

Cathycia Rajatonirina Technical Officer - Emerging Technologies, Research Prioritization and Support Research for Health Science Division from the WHO headquarters provided an overview of the key elements of the global guidance framework for the responsible use of the life sciences and the plan for its operationalization which has started at regional and national levels. She described the process through which the framework was developed applying a consultative and multidisciplinary approach, involving stakeholders from different sectors and levels from around the world. The aim of the framework is to mitigate biorisks and govern dual-use research which is a global issue impacting all countries although countries have different starting levels, contexts, priorities and needs. She underscored the need to recognize that this requires a shared responsibility and as such there is no standard and unique approach that can be used to mitigate biorisks and govern dual-use research. She also emphasized on the need for collaboration and engagement among actors to address the evolving challenges and major gaps in the governance of biorisks. Practical tools and mechanisms were presented, including an overview of the 6-step approach. The project activities planned for the coming years up to 2026, were presented including continued engagement and collaboration as well as awareness-raising activities, framework adaptation and piloting, and mentoring of regional and local champions and capacity building. Finally, the importance for making available accompanying tools to support the operationalisation of the framework were highlighted. The development of a training course and an integrated implementation and monitoring tool to cover mapping, situation analysis, implementation, mitigation and key performance indicators are therefore planned. . The second presentation, led by Chipo Nancy Ngongoni, Health Innovation Ecosystems Management Specialist from WHO AFRO, delved into regional strategies and initiatives on bio risks and dual-use research.

In her presentation, she provided a comprehensive overview of the intricate health challenges facing Africa. These challenges encompass a dual burden of communicable and non-communicable diseases, frequent disease outbreaks, and emerging threats such as infectious

diseases and antimicrobial resistance. A focal point of her address was the urgent requirement for localized solutions and resilient health systems. Emphasis was placed on the pivotal role of research in effectively addressing these challenges. The presentation delved into the WHO AFRO strategy on research for health, highlighting key pillars such as capacity building, priority setting, adherence to good research practices, and the translation of evidence into practical applications and policy. The articulated goals and objectives of the strategy underscore critical aspects, which include fostering country ownership, harmonizing and aligning research activities, ensuring the dignity and safety of research participants, promoting evidence-based decision-making, and optimizing resource utilization.

Furthermore, a monitoring and evaluation framework designed to track the progress and impact of the strategy was presented. Notably, this framework encompasses considerations related to ethical, legal, societal, safety, and security risks inherent in the generation and utilization of evidence in the life sciences. Participants were further informed of WHO AFRO's ongoing initiative to develop an adaptation guide to provide clear guidance on tailoring the framework to specific regional contexts emphasizing the importance of aligning the framework with specific regional needs and considerations.

In another engaging presentation, Joseph Nkodyo, the National Coordinator, Biosafety Biosecurity program for Uganda Ministry of Health provided a comprehensive overview of biosafety and biosecurity capacity, laws, and regulations. Emphasizing the country's utilization of the Global Health Security Agenda (GHSA) packages and its biosecurity interventions in response to emerging biological risks, he detailed the strengths that exist including implementation of the one health approach, having a national inventory of select agents, a biorisk management in service training curriculum with trained and certified personnel, up to date biosafety and biosecurity manual, functional research ethics committees, institutional biosafety committees, Biosafety and Biosecurity association. The challenges faced in implementing biosafety and biosecurity were also mentioned, such as the absence of a distinct law, lack of dedicated budget, and infrastructural and some technical gaps. To aid in the operationalisation of the framework, he recommended the inclusion of biosecurity and biosafety indicators among the key performance indicators (KPIs) monitored regularly by all Ministries, Departments and Agencies (MDAs) and reported quarterly. More so, the need to fast track the enactment of the biosafety Biosecurity bill and guidelines and strengthen the functionality. He concluded with emphasis on the need for licensing of professionals and institutions at national level, comprehensive training, research and partnerships.

The second session wrapped up with a presentation by Brenda Nakazibwe, the Team Lead of the Pathogen Economy from the Uganda Science, Technology, and Innovation, Secretariat-Office of President (STI-OP). Her presentation centered on Uganda's governance in Science, Technology, and Innovation, providing insights into the strategic frameworks and mechanisms in place to steer and regulate advancements in these critical domains of dual use of life sciences research. She highlighted the mandate of STI which is to mobilize, coordinate, and provide strategic oversight and policy guidance to scientists and stakeholders in various institutions. Also STI bureaus, regulations and policies were highlighted. Her presentation also covered the Pathogen Economy that coordinates and facilitates research and development, technology transfer and commercialisation of innovations. Participants were informed of the different fields covered by the Pathogen Economy, including Vaccine development, diagnostics for human, animals and plants, medical equipment and therapeutics in humans, animal and plants.

3.3 Session three on introduction to the pilot project

3.3.1 Introducing the piloting of the framework project in Uganda and the expected outcomes

The session was chaired by Emmanuel Turyatunga, Assistant Commissioner, Office of the Prime Minister and an introduction of the pilot project was presented by Sandra Matinyi from the WHO Country Office for Uganda. Participants were informed that Uganda had agreed to pilot the operationalization of the framework further to the regional workshop held in Nairobi Kenya in January 2023 and the pilot project started in August 2023 under the coordination of office of the prime minister. She presented objectives of the pilot project that included to assess the feasibility, appropriateness, and applicability of the framework; understand stakeholder perspectives; document lessons learned; identify emerging issues; propose improvement strategies and contribute to the ongoing discourse on responsible use of the life sciences. She provided a progress report on completed priority activities such as the stakeholder field survey and the timelines of the subsequent planned activities and anticipated outcomes. She provided some insights into the current capacities in biosafety and biosecurity and dual-use research governance in Uganda based on results from the survey. Of organizations surveyed, 92% were directly involved in research, 47% of the surveyed stakeholders had a good understanding of dual-use research in the context of life sciences and 81% were not familiar with the framework under pilot underscoring the need of increased awareness creation. Strengths identified in the survey included the existence of the Biosafety and Biosecurity Association of Uganda (BBAU),

accredited laboratories, in service training programs, and national coordination efforts. Participants contributed to the discussion pointing to the fact that Uganda is signatory and had ratified a number of relevant treaties and protocols including the Biological Weapons Convention (BWC) with an active national focal person, Convention on Biological Diversity (CBD), the Cartagena protocol on biosafety, United Nations Security Council Resolution (UNSCR) 1540 etc. Areas for strengthening discussed included legislation, domestication of some of the treaties and protocols, financing, supervision, and facility certification.

Finally, emphasis was made on the fact the results obtained from the pilot will offer valuable guidance for the operationalization of the framework in other countries. This insightful presentation marked the conclusion of day one, setting the stage for further in-depth discussions and activities in the subsequent workshop sessions.

3.3.2 Working groups discussion to discuss and determine concrete applications of the framework to the context of Uganda

The second day of the workshop commenced with the continuation of Session 3, led by Godfrey Nsereko from Africa CDC. Participants were divided into four predetermined working groups, each assigned with specific tasks.

The first objective was to engage in discussions aimed at determining whether the framework adequately addresses the unique perspectives of various stakeholders and the country.

The second focus was on brainstorming and discussing the specific needs and challenges associated with the domestication, adoption, and implementation of the framework.

Following these group discussions, a plenary session was convened to allow participants to collectively share and discuss the findings from their respective working groups. This collaborative approach encouraged a comprehensive exploration of the framework's applicability and relevance within the diverse contexts represented by the various stakeholders and their respective sectors.

Overview of the Stakeholders' presentation.

The stakeholders actively underscored the imperative to align the framework to Uganda's distinct needs, particularly considering the absence of specific national legislation addressing biorisk management and dual-use research governance. Participants from diverse sectors, including human health, animal health, and the environment, acknowledged the framework's

relevance while expressing concerns about identified gaps and areas that necessitated further exploration. Notably, stakeholders emphasized the significance of accommodating the diverse roles and responsibilities of non-conventional actors, such as traditional medicine practitioners, within the African context.

During this comprehensive working group discussion, stakeholders identified critical needs for the successful implementation of the framework. These included the need for increased awareness creation, the establishment of streamlined legal frameworks particularly the national biosafety and biosecurity legislation, the need to designate focal points to support effective implementation, and development of robust monitoring and evaluation mechanisms. Challenges were also candidly acknowledged, including gaps in legal frameworks, insufficient capacity, and the imperative for multisectoral collaboration. Key resources for the framework's adoption and implementation were mapped, including financial support, human resources, political will, infrastructure, and legislative backing. Overall, stakeholders perceived the framework as a valuable tool tailored to address Uganda's specific challenges, emphasizing its potential to foster responsible life sciences practices in the country.

3.4 Session four Discussion and recommendation of implementation and domestication strategies for the framework.

3.4.1 Working group discussion on strategies for the introduction and implementation of the framework in Uganda

This session was chaired by Morgan Oita, Project Manager at Infectious Diseases Institute. Participants transitioned into working groups with two primary objectives; to deliberate and determine specific applications of the framework within the context of Uganda, and to formulate recommendations for implementation and domestication strategies.

The engaged discussions within these working groups yielded a spectrum of implementation and domestication strategies that were subsequently presented in a plenary session. Key strategies from the working groups included; the establishment of a functional high level multisectoral National Steering Committee and a Technical Working Group (TWG), which bodies will be instrumental in guiding Uganda's journey of piloting the framework.

Other strategies discussed included; strengthening multisectoral stakeholder engagement for ownership; strengthening international collaboration and information sharing systems and platforms; building capacity through training and mentorship programs aligned to facilitate the

use of some elements of the framework; enhance communication awareness on the framework implementation through promotion, collaboration, and partnerships among key stakeholders; strengthen research oversight to include dual-use research governance, advocate for resources and funding opportunities to include dual use research governance and strengthen monitoring and evaluation systems in alignment to the WHO or National reporting structures. Additionally, the stakeholders highlighted the need for the following; effective communication with stakeholders to harness life science research and build relations with different sectors; establish a secretariat to capture the documentation of all ideas and review priority areas.

The proposed strategies, reflecting the collective insights of the participants, were then synthesized into a cohesive draft roadmap. This roadmap serves as a guide for the operationalization of the framework in Uganda, outlining the steps, strategies, and key considerations necessary for effective implementation and integration into the country's specific context.

3.4.2 First panel discussion on collaboration mechanisms and continuous engagement strategies, resource mobilization and monitoring and evaluation

Day three started with the panel discussion chaired by Sandra Matinyi designed to facilitate discussions on key aspects including exploring collaboration mechanisms and continuous engagement strategies among multiple and multidisciplinary stakeholders, brainstorming on resource mobilization strategies to effectively operationalize the framework, and delving into the critical topic of monitoring and evaluation of the framework. This panel provided a platform for key stakeholders to share insights, exchange ideas, and collectively contribute to the strategic considerations necessary for the successful implementation of the framework in Uganda.

The panel comprised diverse stakeholders, including Emmanuel Turyatunga from the Office of the Prime Minister, Joseph Nkodyo from the Ministry of Health, Col. Chris Bagamba, National Focal Person – Biological Weapons Convention, and Faith Bagamuhunda, Health Security Specialist from the Ministry of Security. With regard to fostering collaboration, effective strategies include drawing inspiration from successful initiatives, the panelists emphasized the need of ensuring alignment of the framework with existing laws and establishing structured enforcement approaches, highlighting the significance of a comprehensive stakeholder mapping, assigning mandates to specific bodies and establishing sector-specific focal points.

These strategies would contribute to successful collaboration by promoting openness, transparency, and collaborative efforts.

To maintain ongoing engagement, practical mechanisms such as establishing a coordination body with clear roles and responsibilities, strengthening relationships, creating an enabling environment, and integrating the framework at national and regional levels were proposed. Information sharing among stakeholders was identified as a key step for the effective implementation and operationalization of the framework.

Resource mobilization strategies discussed included internalizing the framework, conducting partner mapping, involving government and implementing partners, and advocating for framework funding at national and regional levels. For sustainability, the panelists emphasized the need for government funding, public private partnerships and international partnerships, the panelists highlighted the framework's potential to attract funding from the government if aligned with national plans. Finally, the panelists underscored the need to create a robust monitoring and evaluation framework.

3.4.3 Second panel discussion on fostering coordination, promoting partnerships and synergies and resources mobilization for sustainable actions by partners

The panel discussion was chaired by Andrew Nsawotebba from the Uganda Ministry of Health. This panel featured Godfrey Nsereko from Africa CDC, Andrew Niwagaba Bakainaga from WHO Country Office for Uganda, and Soatiana Cathycia Rajatonirina from WHO Science Division. The discussion here centered on strategies for identifying and fostering partnerships in the implementation of Biosafety and Biosecurity. The panelists gave recommendations based on lessons from previous projects and these included, conducting comprehensive stakeholder mapping; conduct thorough needs assessment to understand what each stakeholder requires and how collaboration can address those needs; establishment of open and transparent communication strategies; conduct joint resource mobilization; cross-sector collaboration with partners from diverse sectors such as academia, industry, government, and non-governmental organizations (NGOs); leveraging existing national and/or regional frameworks, strategies and initiatives, understanding the current existing frameworks at national and regional levels and the different partners involved and updating them on the current knowledge in biosafety and biosecurity and enforcing inclusion of all stakeholders; participation in relevant conferences, workshops and forums dedicated to biosafety and biosecurity to provide opportunities for networking with potential partners; capacity building and joint advocacy; developing long term

vision for partnership beyond the immediate projects; and finally consideration of what incentives can be offered to stakeholders to motivate and sustain partnership. It was therefore emphasized that successful partnerships are built on trust, shared goals, and effective communication. These recommendations underscored the significance of a multifaceted and collaborative approach to building effective partnerships in the context of Biosafety and Biosecurity implementation.

3.5 Session 5 on the roadmap for the implementation and operationalization of the global guidance framework for the responsible use of the life sciences in Uganda

The afternoon of day three was dedicated to the presentation and review of the draft roadmap. Emmanuel Turyatunga from the Office of the Prime Minister took the lead in presenting the draft roadmap. This session marked a pivotal moment in the workshop, allowing participants to collectively review and provide feedback on the roadmap that had been developed based on the proposed strategies from previous working group discussions. The collaborative effort in refining the roadmap aimed to ensure that it accurately reflected the collective insights and recommendations of the diverse stakeholders present, contributing to a comprehensive and well-informed plan for the operationalization of the Global Guidance Framework in Uganda.

4. Outcomes of the workshop

The workshop yielded valuable outcomes for the stakeholders involved. Firstly, there was an increase in awareness regarding the responsible use of life sciences and dual-use research among the participants. This heightened awareness is crucial for fostering a shared understanding and commitment to responsible practices in the life sciences.

Additionally, the workshop facilitated the documentation of stakeholder profiles, providing a clearer picture of the diverse range of participants and their respective roles and interests in the field. This documentation is instrumental for future collaboration and coordination efforts.

Furthermore, the workshop served as a platform to elucidate Uganda's current situation regarding biosafety and biosecurity, encompassing aspects such as skills, infrastructure, legislation, and more. This comprehensive understanding of the existing landscape provides a foundation for informed decision-making and strategic planning moving forward.

The stakeholders collaboratively developed a roadmap which outlines the strategies and several key steps aimed at facilitating the integrated, efficient, and cost-effective implementation of the framework in Uganda. These strategies are;

- Establishment of functional committees including a functional high-level multisectoral national steering committee and a Technical Working Group (TWG) was identified as key. These bodies are to play instrumental roles in guiding Uganda's implementation of the framework.
- Strengthening multisectoral stakeholder engagement was highlighted as a strategy to ensure widespread ownership and collaboration across various sectors.
- Enhancing international collaboration and information-sharing systems and platforms was emphasized, acknowledging the importance of global cooperation in addressing biosafety and biosecurity challenges.
- Building capacity through training and mentorship programs aligned with the framework's elements was identified as a key strategy to empower stakeholders and facilitate effective implementation.
- Enhancing communication awareness on the framework's implementation through promotion, collaboration, and partnerships among key stakeholders was highlighted to ensure a well-informed and engaged community.
- Strengthening research oversight to include dual-use research governance was identified as essential, emphasizing the need for comprehensive oversight mechanisms.
- Advocating for resources and funding opportunities, specifically directed towards dual-use research governance, was recognized as crucial to sustain and advance implementation efforts.
- Strengthening monitoring and evaluation systems in alignment with WHO or National reporting structures was identified to ensure ongoing assessment and improvement of the framework's implementation. This strategy involves drafting a monitoring and evaluation plan and tools with defined key performance indicators (KPIs).

5. Next steps: Immediate action items and follow-up activities

Following the workshop, the pilot project is poised for dynamic progression. Immediate action items will involve convening a dedicated workshop with technical stakeholders to meticulously

consolidate valuable feedback received from diverse contributors and further refine the draft roadmap. This crucial step will be seamlessly followed by a high-level stakeholders' advocacy and sensitization meeting, ensuring key decision-makers are informed and engaged. Furthermore, a strategic plan is in place to sustain continuous country awareness-raising efforts regarding the framework. These multifaceted activities collectively aim to achieve several objectives, including ensuring broad-based engagement, fine-tuning the implementation strategy based on expert insights, and fostering a conducive environment for the responsible use of life sciences. Subsequently, plans for follow-up activities will be initiated to sustain momentum and capitalize on the groundwork laid during these critical phases. A link was also shared for upcoming webinars to be conducted about the framework to raise more awareness among stakeholders.

References

1. Global guidance framework for the responsible use of the life sciences: mitigating biorisks and governing dual-use research. Geneva: World Health Organization; 2022 (<https://apps.who.int/iris/handle/10665/362313>, accessed 13 February 2023).
2. [Regional workshop to operationalize the global guidance framework for the responsible use of the life sciences in the WHO African Region](#)

Annex 1

List of participants from the national stakeholders' workshop to pilot the global guidance framework for the responsible use of life sciences in Uganda from 21 to 23 November 2023.

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