THE REPUBLIC OF UGANDA | NATIONAL ONE HEALTH PLATFORM (NOHP)

Policy Brief

Uganda's National Action Plan 2.0 on Antimicrobial Resistance (2025-2029): Priorities for Action

Key Takeaways

Urgent action to combat AMR: AMR endangers Uganda's healthcare system, stalls economic growth, and worsens social inequalities by driving up medical costs, reducing productivity, and disproportionately impacting vulnerable communities.

Importance of multisectoral coordination: Combating AMR in Uganda necessitates collective responsibility and a unified, whole-of-society approach, engaging multiple ministries and government agencies beyond the health sector at all levels.

Advancing equity in AMR containment: NAP-AMR II drives inclusive access to lifesaving antimicrobials and embeds gender-responsive interventions to protect vulnerable populations, ensuring no one is left behind in the fight against AMR.

Need for strengthened public awareness: Enhancing national public awareness campaigns aimed at educating the public about the dangers of antimicrobial misuse will help foster healthier behaviours and reduce unnecessary antibiotic use.

Introduction

Addressing Antimicrobial Resistance (AMR) in Uganda

AMR is an escalating global health and economic challenge. In 2021, 1.14 million global deaths were directly attributable to bacterial AMR, and with low-resource settings facing the greatest burden (1). In Uganda, high levels of AMR remain a growing threat, with some common bacteria showing resistance rates of up to 80% against widely used antibiotics like penicillin and cotrimoxazole (2). In 2019 alone, **AMR was linked to 7,100 deaths in Uganda, with an additional 30,700 deaths associated with resistant infections—surpassing the 29,000 deaths caused by human immunodeficiency viruses (HIV) and tuberculosis (TB) (3).** This growing resistance could cost the country **5-7% of GDP by 2050** due to lower productivity, a shrinking workforce, reduced food production, higher healthcare costs, and economic strain on households (4). For instance, households in Uganda incur a tenfold increase in treatment costs for drug-resistant tuberculosis (US$ 3,722 per case) compared to drug-susceptible TB (US$ 396 per case) (5). Prioritizing AMR on the policy agenda is therefore vital to Uganda's long-term development, driving progress in health, social well-being, and sustainable growth. To realize these goals, comprehensive strategies and effective implementation are essential to address AMR. **This policy brief evaluates progress under the first National Action Plan (NAP) on AMR, outlines key priorities for the NAP-II on AMR that emerged from the Smart Choice Process for intervention prioritization, and offers recommendations for sustainable implementation in combating AMR.**

Global Strategy Lab | AMR Policy Accelerator

Moving from National Action Plan (NAP) AMR to NAP-II On AMR

Uganda developed its first NAP on AMR in 2018, along with the establishment of the National One Health Platform (NOHP). The NAP on AMR (2018-2023) focused on five objectives: (1) promoting public awareness, training and education; (2) enhancing infection prevention and control (IPC); (3) optimizing the access and use of antimicrobials; (4) supporting surveillance; and (5) investing in research and innovation. Significant milestones were achieved during the first NAP on AMR (Box 1); however, with less than optimal funding falling below 20%, implementation remains incomplete and uneven across the One Health (OH) sectors (6).

Key lessons from NAP on AMR implementation challenges include:

1. A strong **OH governance framework** ensures multisectoral coordination in facilitating and implementing AMR activities (5–9).
2. **A whole-of-society, multisectoral response, requires dedicated budget allocations across ministries.** The enforcement of the National Drug Authority Policy and Act to regulate the use of antimicrobials is hindered by insufficient financial resources allocated for diagnostics and surveillance capacities, resulting in minimal adherence to ethical practices among healthcare providers (5–9).
3. **Strengthening knowledge, awareness and behavioral change on AMR** is critical as the public lacks information on the impact of antimicrobial misuse on health, food security, and the environment, leading to poor health-seeking behavior, self-medication, and excessive antibiotic use in livestock (5–9).

BOX 1: NAP AMR (2018-2023) KEY SUCCESSES

Awareness, Training & Education

- Conducted national awareness campaigns, including regular AMR conferences, most recently hosting the 9th annual conference in November 2024, and participation in World Antimicrobial Awareness Week.

Infection, Prevention & Control

- Implemented the National Infection Prevention and Control Guidelines (last updated in 2013) nationwide, with IPC Committees established in most tertiary healthcare facilities.

Surveillance

- Routine Antimicrobial Susceptibility Testing performed at 25 human health facilities, with monthly AMR reports submitted to the National Animal Disease Diagnostic and Epidemiology Center.
- Developed a National Antimicrobial Resistance Surveillance Plan (2019-2023) by the Technical Working Group.

Stewardship

- Implemented the Supervision Performance Assessment and Recognition Strategy (first adopted in 2011) at the district level to monitor adherence to guidelines supporting optimal antimicrobial use, including the National Treatment and Clinical Guidelines.

Research and Innovation

- Established the Ministry of Science, Technology and Innovation, with institutions like the National Chemotherapeutics Laboratories and universities undertaking AMR research to inform interventions.

Governance

- Developed an OH governance framework (2018-2022) with various technical working groups established.

NAP-II Development Process and Highlights

The development of NAP-II on AMR was coordinated by the Uganda National Antimicrobial Resistance Sub-Committee (UNAMRSC), with support from the Food and Agriculture Organization Uganda and the UK Fleming Fund Phase II Country Grant II Project, ensuring ongoing multisectoral engagement throughout the process. The revision involved five key phases:

Five highlights emerge in the NAP-II to strengthen national efforts in addressing AMR (8):

1. **Emphasis on prevention:** Focused efforts on strong IPC measures, along with targeted health promotion and disease prevention initiatives across the human, animal, and environmental sectors, help preserve the efficacy of antimicrobials. These actions aim to contribute to the broader public health objective of reducing infections and lowering the demand for antimicrobials.
2. **Gender equality and equity principles:** The NAP-II integrates gender-sensitive strategies, ensuring that interventions are inclusive and consider the needs of marginalized populations. It further aims to promote equitable access to effective antimicrobials, prevent resistance in underserved communities, and safeguard against exacerbating existing inequalities through AMR initiatives.
3. **A comprehensive governance framework:** A structured governance framework with defined stakeholder roles aims to support strategic leadership, policy guidance, and accountability in AMR containment. The NOHP plays a pivotal role in coordinating cross-sector collaboration across human, animal, environmental, and wildlife health sectors, aligning AMR strategies with OH principles and international standards.
4. **Enhanced private sector involvement:** The NAP-II aims to encourage greater private sector engagement in AMR efforts, leveraging innovation, resources, and expertise. This includes contributions to surveillance, policy development, resource mobilization, antimicrobial alternatives, and advancements in stewardship practices.
5. **Priority interventions:** High-impact interventions have been prioritized through a multisectoral, context-specific, and transparent decision-making process using the SCP. This approach aligns with the incremental phased approach adopted in NAP-II, setting immediate, medium-term, and long-term targets that enable Uganda to monitor progress and adjust interventions based on resource availability.

NAP-II Intervention Priorities & Implementation Recommendations

The NAP-II on AMR maintains the five strategic objectives outlined in NAP-AMR I (Figure 1) and highlights key intervention priorities for each objective. To guide implementation, recommendations are proposed (Figure 2), drawing from stakeholder insights during the SCP and relevant literature (9,10,12–14).

Figure 1. Five Strategic Objectives of Uganda's NAP 2.0

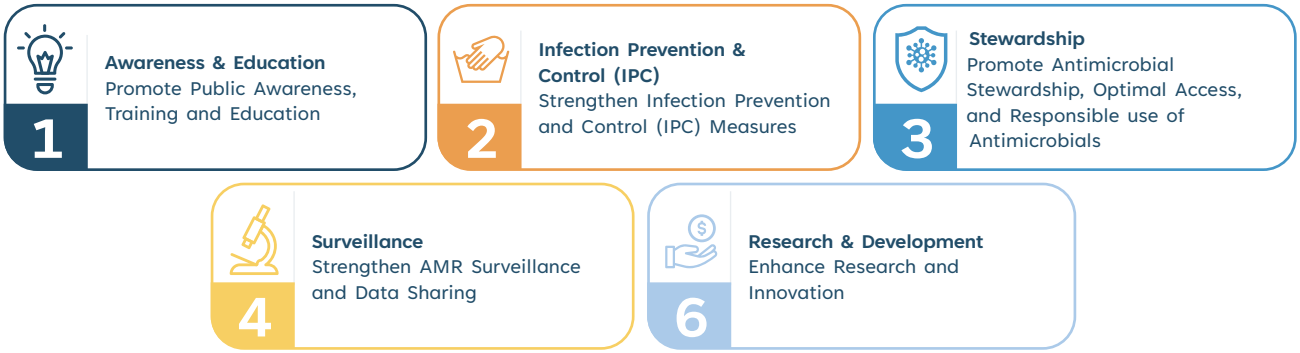

Figure 2: NAP Strategic Objective Priorities & Recommendations to Guide Implementation

Intervention Priorities	Implementation Recommendations
1 Promote public awareness, training, and education by integrating NAP-II strategies into government ministries, departments, agencies (MDAs) plans and conducting regular awareness campaigns.	» **Institutionalize AMR strategies at the subnational government level** to mobilize resources, identify policy gaps, develop, disseminate and implement communication strategies. » **Strengthen community engagement and sensitization** to drive behavioral change through targeted messages and multisectoral outreach to schools, healthcare, and animal facilities (11). » **Enhance the technical working committee (TWC)'s functionality and OH representation** for a coordinated AMR communication strategy.
2 Strengthen IPC measures by enhancing coordination mechanisms, improving IPC programs, and bolstering responses to multidrug-resistant organisms.	» **Prioritize protocols for diagnosing, treating, tracking, and responding to multidrug-resistant organisms** to enhance prevention and curb unnecessary antimicrobial use. » **Establish sectoral IPC TWCs** to standardize practices and conduct regular assessments for consistency across sectors. » **Expand IPC practices to the environmental sector** to improve WASH infrastructure and maintenance.
3 Promote optimal access and responsible use of antimicrobials by enforcing regulations against unauthorized use, strengthening antimicrobial stewardship governance, and institutionalizing AMS practices at all levels to ensure adherence to updated guidelines across OH sectors.	» **Advance regulatory oversight and enforcement** through enhancing governance structure including the National Drug Authority (NDA) to ensure adherence to standardized guidelines across sectors (12). » **Allocate funds** to support national awareness of regulations, harmonize contravening laws, and strengthen enforcement and litigation. » **Integrate AMS practices** through sensitization, training, capacity-building, and alignment of AMS guidelines with existing policies.
4 Strengthen AMR surveillance and data sharing by improving AMR testing and laboratory capacity and establishing a national framework for AMR data management across sectors.	» **Establish a centralized data system** to integrate and disseminate surveillance data, ensuring informed decision-making across OH sectors. » **Secure funding to enhance laboratory capacity** through investments in equipment, infrastructure, personnel, and supply chain management, ensuring a steady supply of consumables for testing. » **Prioritize key pathogens for microbiology testing** by upgrading laboratory infrastructure, equipment, and supplies, and strengthening sample referral management.
5 Enhance research and innovation by prioritizing local research areas and expanding partnerships with national and international institutions to support AMR research.	» **Adopt an OH approach** by designating sectoral focal points to guide AMR research coordination strategies. » **Foster collaborative AMR research** across academia, public health, industry, and international partners under the National Council for Science and Technology's guidance on the research agenda. » **Improve sensitization on existing AMR research** to align priorities and strengthen cross-sector coordination.

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This policy brief was written by the AMR Policy Accelerator team, comprised of Nicole Chung, Suzanne Garkay Naro, and Kadia Petricca, in consultation with partners in Uganda, including Rogers Kisame, Musa Sekamatte, Carolyne Nyamor, Solome Okware, Winnie Agwang, Anita Kisakye, Alice Namatovu, Henry Kajumbula, Emmanuel Isingoma, Saudah Namubiru, Katumba Godfrey, Katumba Hannington, Harriet Akello, Patrick Atimnedi and Yvette Ssebunya.

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