



# RADAAR

Regional AMR Data Analysis  
for Advocacy, Response, and Policy

## Way Forward: AMR Policy & Advocacy

Catalyzing the Effective Use of AMR Data/Evidence to Drive Policy



Satyajit Sarkar (RADAAR/IVI)  
June 2022

# Locating all our work in the bigger picture of the global AMR response ... (1)

## Management Response

Evaluation Title	Comprehensive Review of the WHO Global Action Plan on Antimicrobial Resistance
Commissioning Unit	WHO Evaluation Office
Link to the evaluation	<a href="#">Main report : Volume 1</a> <a href="#">Annexes : Volume 2</a> <a href="#">Evaluation Brief</a>
Evaluation Plan	Organization-wide Evaluation Workplan for 2020-2021
Unit Responsible for providing the management response	HQ/AMR/AMA

Comprehensive Review of the WHO Global Action Plan on Antimicrobial Resistance

Volume 1: Report

September 2021



WHO Evaluation Office

A few examples of the WHO and AMR Tripartite+ Sectt. response to the review:

- A comprehensive One Health research agenda being developed
- Major consultation being initiated on AMR awareness and behavior change
- Forthcoming guidance on NAP 2.0 implementation through a **“people centred framework for addressing AMR”**
- Guidance and tools for making compelling the economic case and advocacy for resource mobilization for AMR
- Etc...

**BRIEFING NOTE**  
**THE GLOBAL ACTION PLAN**  
**ON ANTIMICROBIAL**  
**RESISTANCE AT A**  
**CROSSROADS:**  
**INSIGHTS FROM THE WHO'S**  
**COMPREHENSIVE REVIEW**

### Table of Contents

I. Global Governance Challenges	V. Beyond the Industry Roadmap to Innovation
II. Access vs Excess in Healthcare	VI. Monitoring for Accountability
III. Need for One Health Approach	VII. AMR Financing and National Action Plans
IV. WHO Collaboration with Partners	VIII. Pandemic Preparedness and Prevention and AMR

January 2022



ReAct

# Locating all our work in the bigger picture of the global AMR response ... (2)

## WORLD BANK SUPPORT FOR FINANCING NATIONAL ACTION PLANS: AN OVERVIEW OF INSTRUMENTS AND PROCESSES

April 2022



### The process for countries to request financial support



Discussions on overall development priorities take place between the Bank and the Government and are formalized in the **Systematic Country Diagnostic (SCD)**



AMR as a Health, Water or Agriculture sector priority is identified in the **Country Partnership Framework (CPF)** and a nominal funding amount is allocated towards a prospective loan



The **Minister of Finance and Head of Government** agree with their relevant authorities to seek Bank financing for a sector (Health, Agriculture, Food)



The Minister of Finance sends a **signed letter to the Country Director of the Bank to request financing** and a loan process is initiated

### Provisions for technical assistance from the WHO & FAO

- Clients of the World Bank can use World Bank financing for technical assistance and implementation support from UN agencies, including the World Health Organization and the Food and Agriculture Organization.
- This mechanism has been widely used through the COVID-19 pandemic for the provision of vaccines, with the World Bank and UNICEF partnering to support clients across the world. In many countries, the Government formally designated UNICEF as an implementation partner of choice to work alongside the World Bank as the lead financing partner.
- This can also help to ensure the use of global guidelines and approaches, which are led by WHO, FAO and OIE



*The World Bank can provide technical assistance to diagnose key issues and develop implementation plans, for example, a recent **Public Expenditure Review in Mali***



*A higher-level corporate process determines whether the financing available to a country is on **credit or grant terms***



## Webinar: Understanding options for World Bank financing to address AMR

5 April 2022

**Tuesday 5 April 2022**

15.30-16.45 CET. Interpretation provided in French, Portuguese and Spanish.

#### Webinar objectives:

- Provide an overview of the World Bank's instruments and process for financing actions to address AMR

# Locating all our work in the bigger picture of the global AMR response ... (3)



## The value of vaccines in reducing antimicrobial resistance (AMR)

Global Vaccine Immunization Research Forum

Mateusz Hasso-Agopsowicz



## The Action Framework to leverage vaccines against AMR and AMU



Strong high level statement from WHO on the need to realize the full potential of vaccines in the fight against AMR



Expanding use of licensed vaccines to maximize impact on AMR



Develop new vaccines that contribute to prevention and control of AMR



Expanding and sharing knowledge of vaccine impact on AMR



## Global and Regional Burden of Attributable and Associated Bacterial Antimicrobial Resistance Avertable by Vaccination: Modelling Study

Chaelin Kim,<sup>1</sup> Marianne Holm,<sup>1</sup> Isabel Frost,<sup>2</sup> Mateusz Hasso-Agopsowicz,<sup>2</sup> Kaja Abbas<sup>3</sup>

<sup>1</sup> International Vaccine Institute, Seoul, Republic of Korea

<sup>2</sup> World Health Organization, Geneva, Switzerland

<sup>3</sup> London School of Hygiene & Tropical Medicine, London, United Kingdom

# RADAAR Background & Scope ... (1)

IVI-led project, under the Fleming Fund Regional Grant Round 2

## RADAAR THEMATIC DOMAIN

**'Policy, Planning, and Advocacy'**

## **RADAAR Objectives**

Identify barriers/enablers to AMR data sharing and analysis

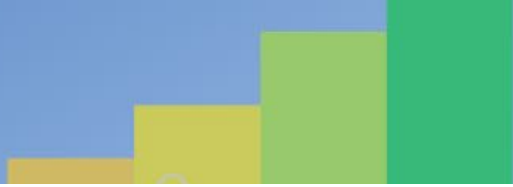


Establish mechanisms to facilitate policy dialogue



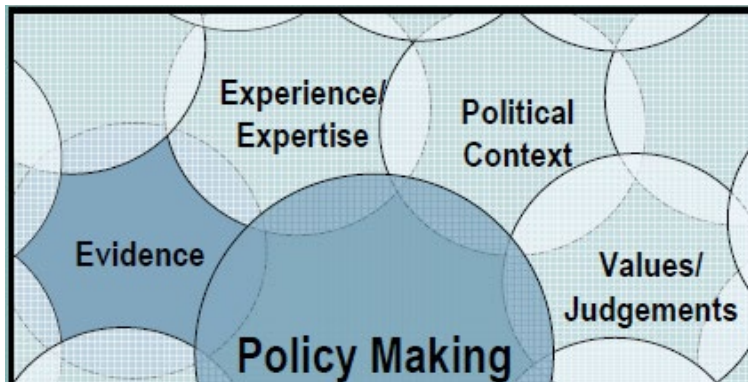
Create a demand for policy-relevant AMR data and analysis

# Using Data and Evidence to Drive Policy



## Policymakers Ask

1. Where are we today?
2. Where do we need to go?
3. How do we get there?
4. What works?
5. How much is it going to cost?



## 'Technical' Policymaking

For example:

- Treatment Guidelines
- Transmission Pathways

## 'Social' Policymaking

AM consumption  
access without the Excess

...tion of AM driven by  
human decisions and actions  
within their 'lived' realities.

Linkage between the 'technical'  
and the 'social' dimensions need  
to be understood better.

## REQUIRED

- Reliable up-to-date evidence
- In an easy-to-understand format
- Lends itself to weighing options

*"Politicians don't like to read, but  
they love to count"*

Fundamentally, weighing 'policy  
options' is an economic evaluation.

Too much focus on the content of  
policy and too little on the policy  
process, context, and role of various  
actors can often derail efforts.

## ‘Whole-of-Government’ and ‘Whole-of-Society’

### BUT....

- Actions to address drug-resistant infections on the ground are simply not happening at the scale and urgency required.
- Groundswell of public and societal support is needed to push and hold political leaders accountable.
- Current AMR communication and advocacy approaches need to be dramatically re-framed and scaled-up.



### AMR:

**In search of a  
'secondhand smoke'  
moment?**

# Current framings of the AMR problem and response

Differential Framing and Discourse of the AMR Problem	
Policy Frame	Policy Focus and Intervention Characteristics
1. A healthcare issue	Focus on the healthcare sector; promotion of early diagnosis and treatment through rational/prudent use of antimicrobials and antimicrobial stewardship.
2. A development issue	The high burden of infectious diseases and lack of awareness in LMICs drives overuse and misuse of antimicrobials. Universal and equitable access to quality antimicrobials seen as a right to health. Achievement of SDGs imperiled.
3. An innovation issue	Lack of new compounds and diagnostics. Market failure and lack of incentives for R&D in the pharmaceutical sector. Incentivization of R&D through new mechanisms
4. A security issue	AMR viewed as a threat to individual and national (health) security as a result of globalization and imperiling the global North. Focused on systematic surveillance, capacity building, and containment of AMR 'at source' (i.e. largely the global South)
5. A One Health issue	Developed in the context and as a response to rising incidences of zoonoses and the large-scale overuse/misuse of antibiotics in food animal production, requiring multi-sectoral engagement. Globally endorsed overarching approach for containing AMR. Despite operationalization challenges, improved coordination and collaboration between human, animal, and environmental sectors is the policy response emphasis.
<p><i>Source: Adapted from Wernli, D., Jørgensen, P. S., Morel, C. M., Carroll, S., Harbarth, S., Levrat, N., &amp; Pittet, D. (2017). Mapping global policy discourse on antimicrobial resistance. BMJ global health, 2(2), e000378.</i></p>	



# A conceptual re-framing of the AMR problem and response

**Acknowledging and Foregrounding**  
the ‘Access versus Excess’ dilemma facing policymakers in LMICs

## A Proposition

### ESTABLISH:

1. **Attaining and Sustaining ‘*National Antimicrobial Security*’**  
as the overarching **Strategic Goal of National Action Plans (NAPs)**

### RECONFIGURE:

2. NAPs as a **Progressive Pathway** to achieving ‘*National Antimicrobial Security*’,  
with a robust ‘Theory of Change’ and time-bound numerical targets.

# A conceptual re-framing: *Attaining and Sustaining 'National Antimicrobial Security'*

## Working Definition

Every country **retains the continued ability** to treat infectious **diseases of the highest burden** with **effective and safe antimicrobials** in an **affordable and equitable manner** by **preventing the emergence and spread** of AMR, and thereby **reducing the impact** of infectious disease on the **human, animal, environmental, and economic health** of the country.

Starting when?  
By when?  
Till when?

Which diseases or pathogens have become, or are becoming, resistant to the antimicrobials currently available and being used in the country?

Which infectious diseases have the highest burden and economic impact on the country?

Which antimicrobials have become, or are in imminent danger, of becoming ineffective in the country due to resistance or sub-standard quality?

**ENSURING**

**ACCESS  
without the  
EXCESS**

Access to which important antimicrobials is being denied due to costs or availability?

What impacts can and need to be reduced, by how much, and by when?

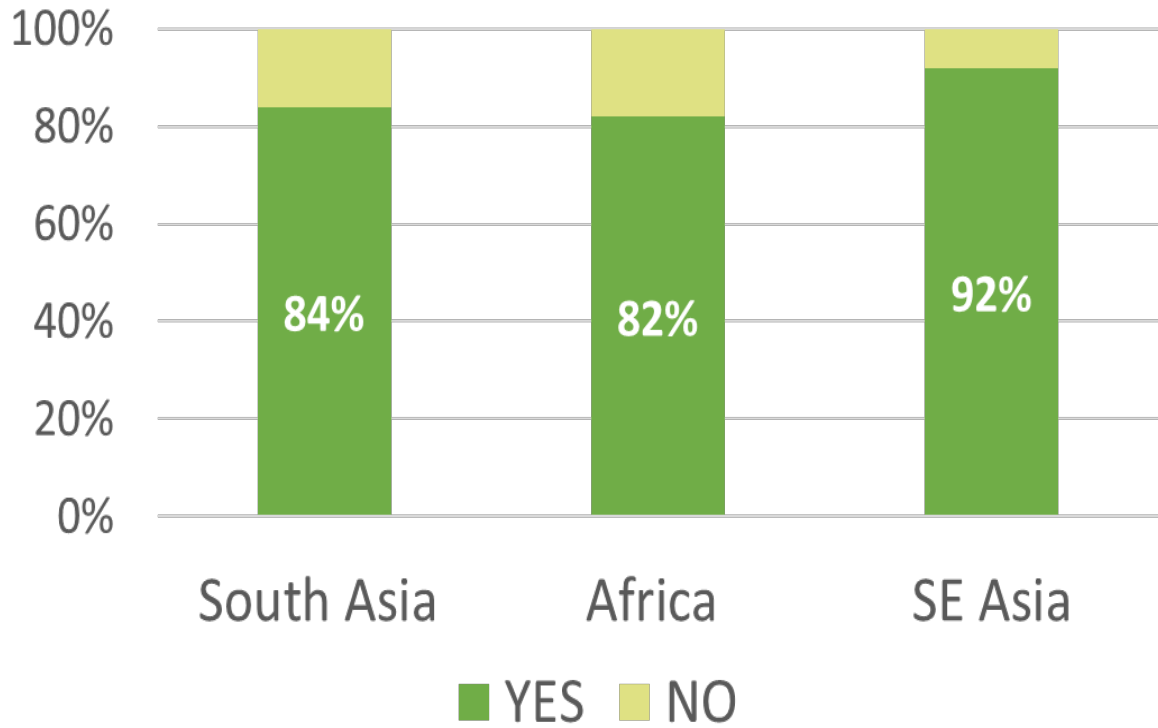
What are the antimicrobial consumption and usage levels and patterns (including professional and social behaviors and practices) that are driving the emergence and spread of AMR?

Do the benefits outweigh the costs?  
Which sector needs the highest investments?  
Investments in which sector will bring the maximum and quickest benefits? Are the required investments affordable?

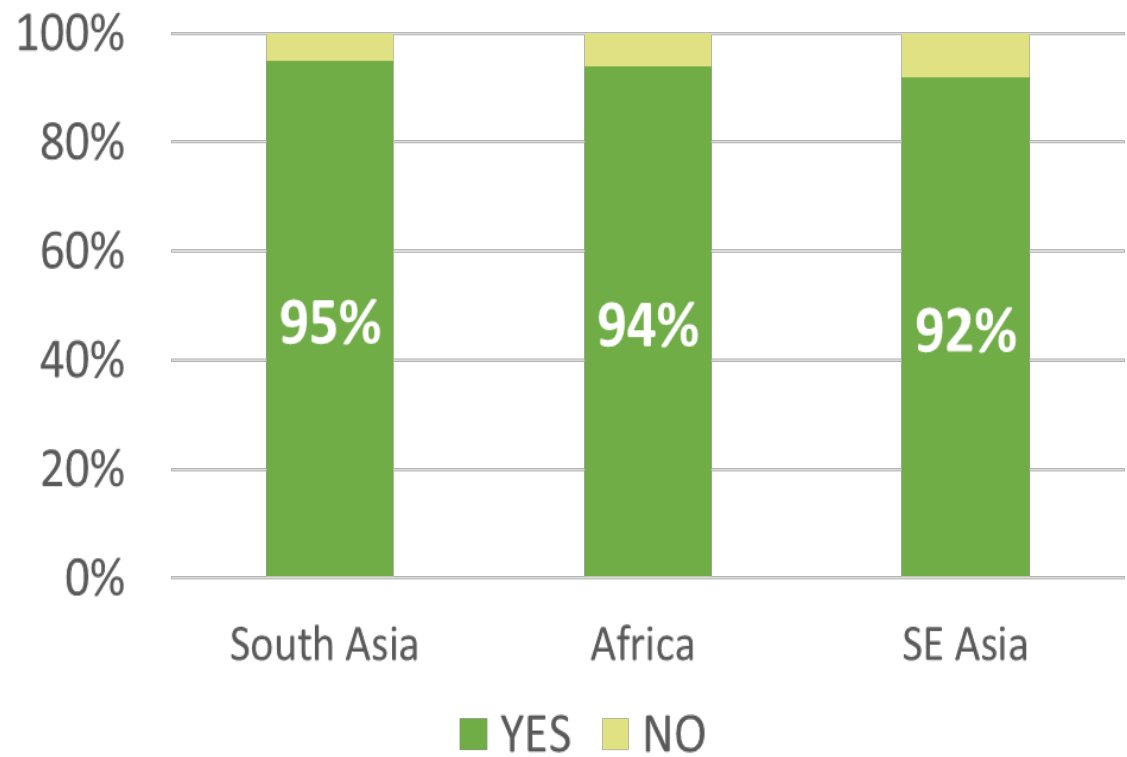
# Snap Poll 4: Response to 'National Antimicrobial Security' Concept

RADAAR Regional Data Workshop

Do you think that the concept of achieving "National Antimicrobial Security" will resonate strongly with Political/Government/Policy Leadership?



Would you like to participate in further developing the concept of achieving "National Antimicrobial Security"?



South Asia (n=44), Africa (n=34), SE Asia (n=24)

## ~~National Antimicrobial Security~~

### REVISED Proposition

#### ESTABLISH:

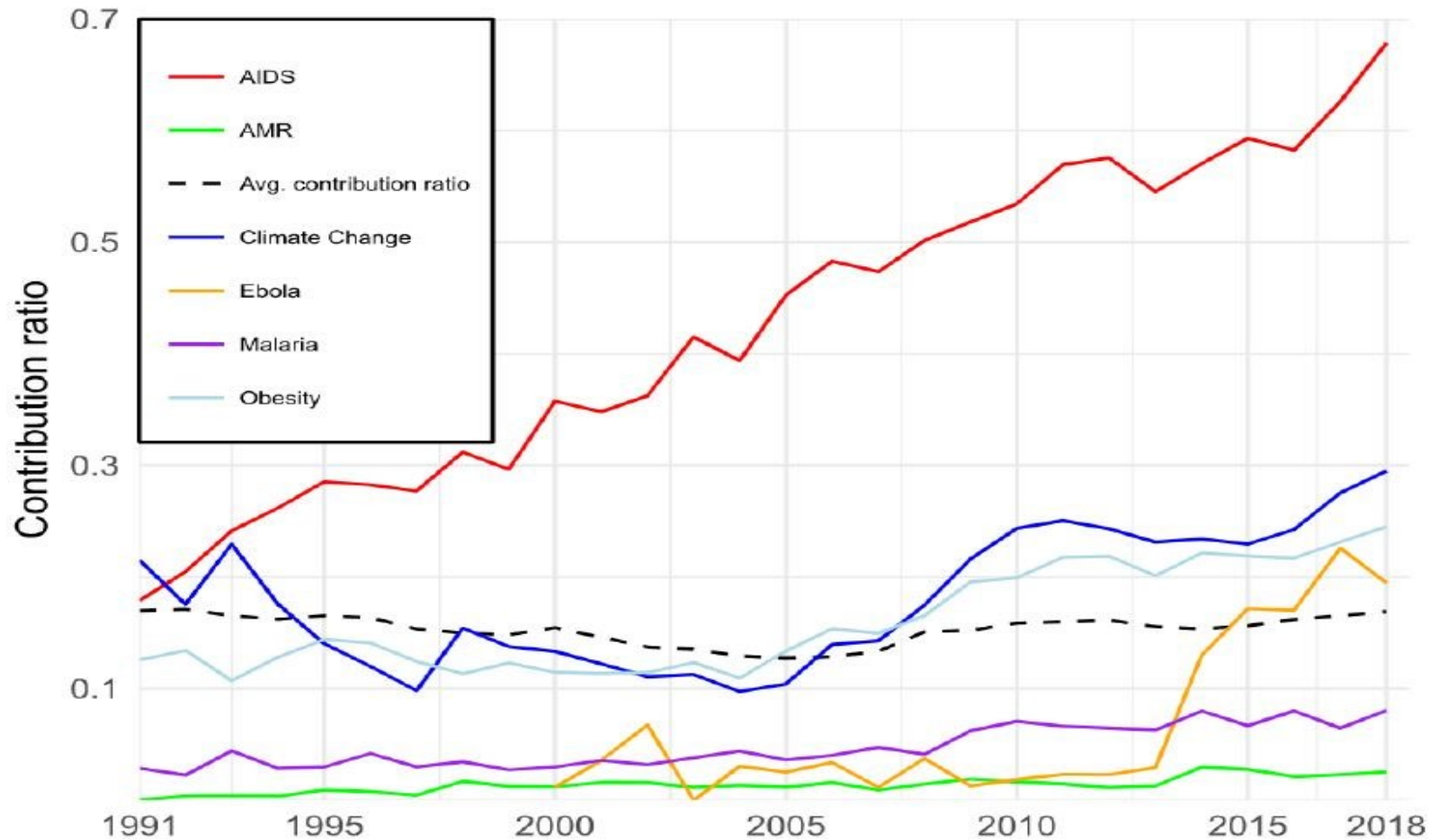
1. ***'Retaining and Sustaining Country Antimicrobial Efficacy'***  
as the overarching **Strategic Goal of National Action Plans (NAPs)**

#### RECONFIGURE:

2. NAPs as a **Progressive Pathway to *'Retaining and Sustaining Country Antimicrobial Efficacy'***, with a robust 'Theory of Change' and time-bound numerical targets.

# Linking the 'technical' with the 'social'

Contribution and ratio of social science versus science in The Web of Science



**Source:** Frid-Nielsen, S. S., Rubin, O., & Baekkeskov, E. (2019). The state of social science research on antimicrobial resistance. *Social Science & Medicine*, 242, 112596.

# Surveillance Re-Imagined: 'Joined-up' Data Collection and Analysis

Annual Average Number of AMR Publications		Share of Social Science articles in the Social Sciences Citation Index
2000 - 2009	2010 - 2017	1956 - 2018
7,200	16,300	1,311

**Source:** Frid-Nielsen, S. S., Rubin, O., & Baekkeskov, E. (2019). The state of social science research on antimicrobial resistance. *Social Science & Medicine*, 242, 112596.

**Emergence and spread of AMR is driven by human action/behaviors. AMR prevention and control will require strong linkages between epi-surveillance and socio-behavioral data:**

- Intricate and complex link with livelihoods
- Prescribing habits, consumer/patient demands, farming practices
- The 'Political Economy' of AMR

## **Emerging Imperative (?)**

**Consider: A passive sentinel AMR Socio-Behavioural Surveillance System**

# Tripartite AMR Country Self-assessment Survey (TrACCS)

Comparison of 2019-2020 and 2020-2021 data of same 136 countries (including 18 FF countries)

Is the country using relevant Antimicrobial Consumption/Use and/or Antimicrobial Resistance data to amend national strategy or inform decision-making, at least annually?

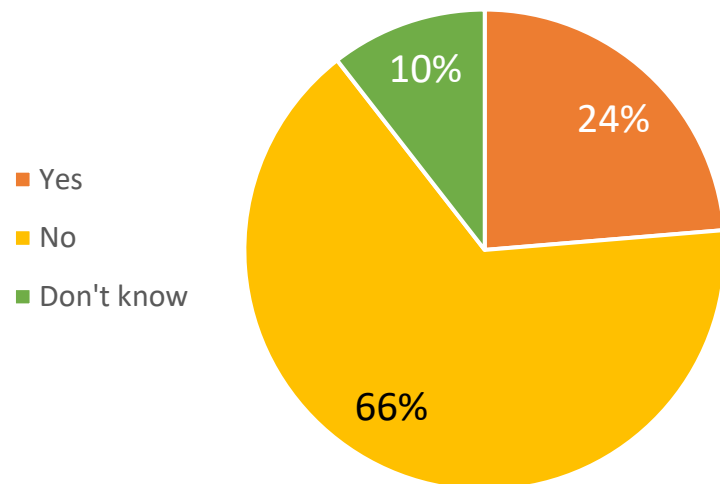
HUMAN HEALTH	2019 - 2020			2020 - 2021		
	YES	NO	NO REPLY	YES	NO	NO REPLY
GLOBAL (n = 136)	65%	29%	6%	65%	24%	11%
FF Priority Countries (n = 18)	56%	44%	0%	56%	39%	6%

ANIMAL HEALTH	2019 - 2020			2020 - 2021		
	YES	NO	NO REPLY	YES	NO	NO REPLY
GLOBAL (n = 136)	46%	42%	12%	48%	38%	15%
FF Priority Countries (n = 18)	33%	61%	6%	33%	61%	6%

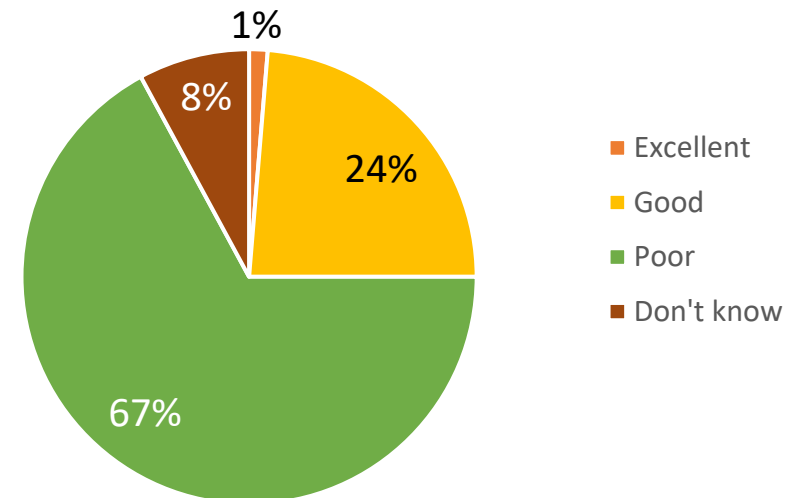
April 2022:

# RADAAR Bi-Regional (Africa & Asia) Policy Workshop: 'Snap' Poll (n = 76)

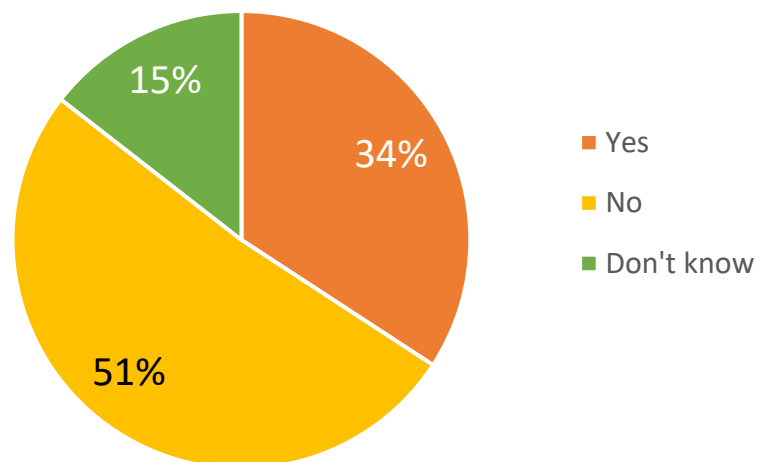
Are countries able to systematically analyze and translate emerging AMR/U/C data and evidence to effectively inform or influence policy?



How would you rate the current capacities in LMICs to translate AMR data/evidence to effective policy briefs and pitches to policymakers?



Is there a dedicated or ad hoc team at the national level specifically tasked with analyzing and translating AMR/U/C data and evidence into policy briefs for decision-makers?

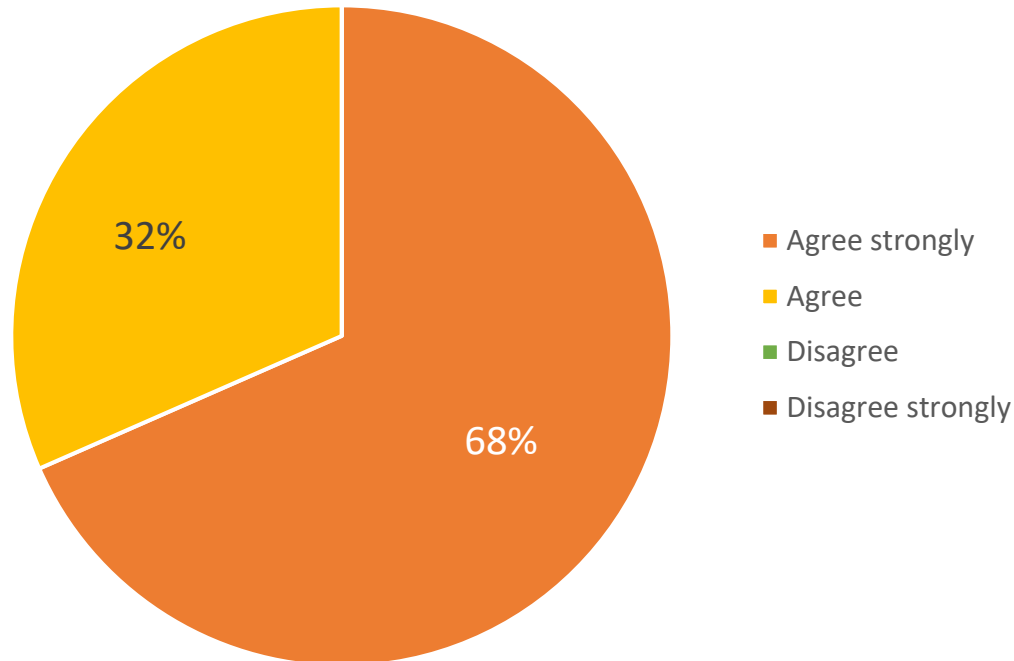




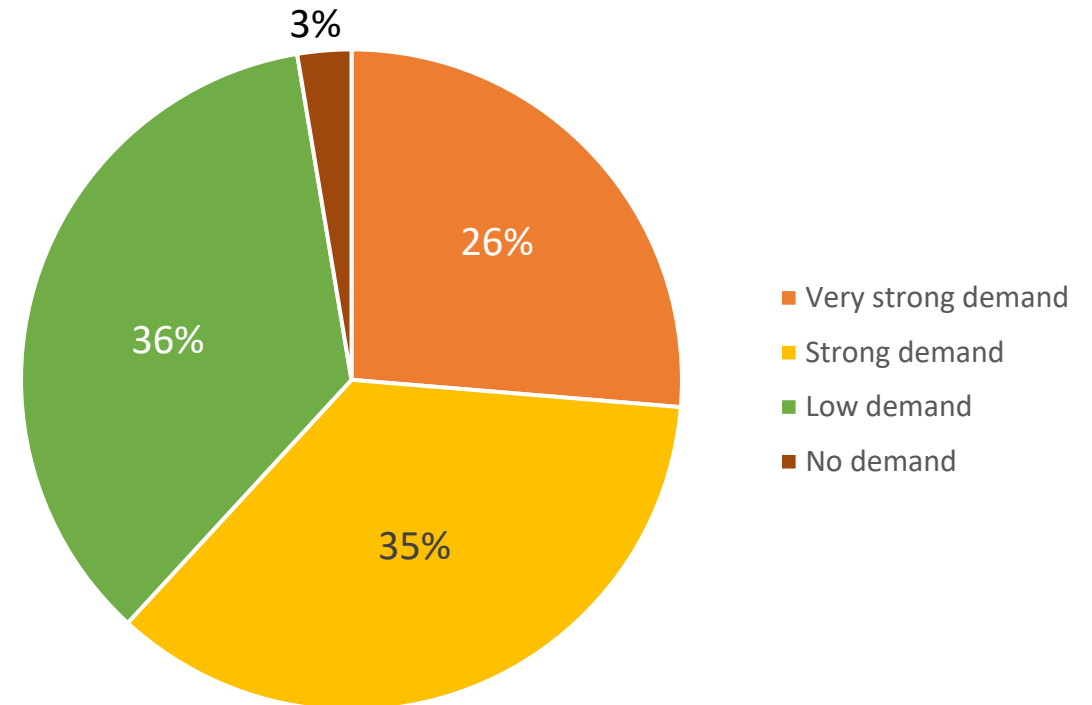
April 2022:

# RADAAR Bi-Regional (Africa & Asia) Policy Workshop: 'Snap' Poll (n = 76)

Do you think LMICs would benefit significantly from participating in a capacity strengthening initiative for translating AMR/U/C data and evidence into effective policies?

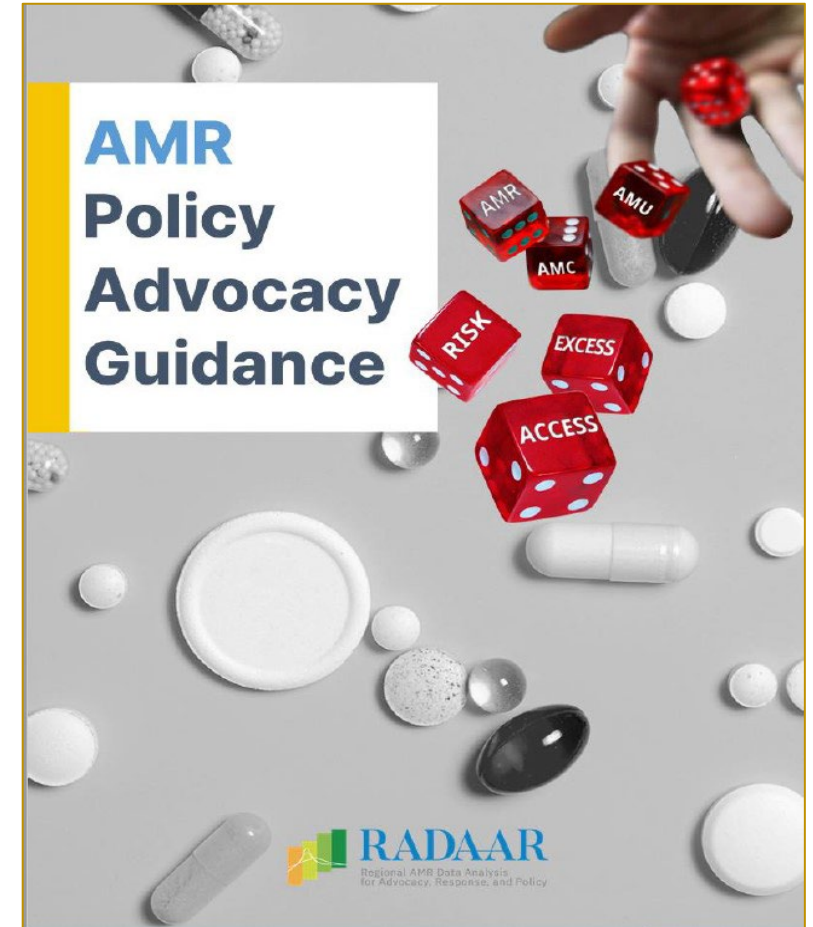


Is there any demand from policy and decision-makers for evidence-informed policy briefs to weigh options for making effective policy choices?



From the 90 KIIs, an Online Survey with 200+ respondents, 3 Regional Data Workshops, and a bi-Regional policy workshop, some clear needs/demands emerged:

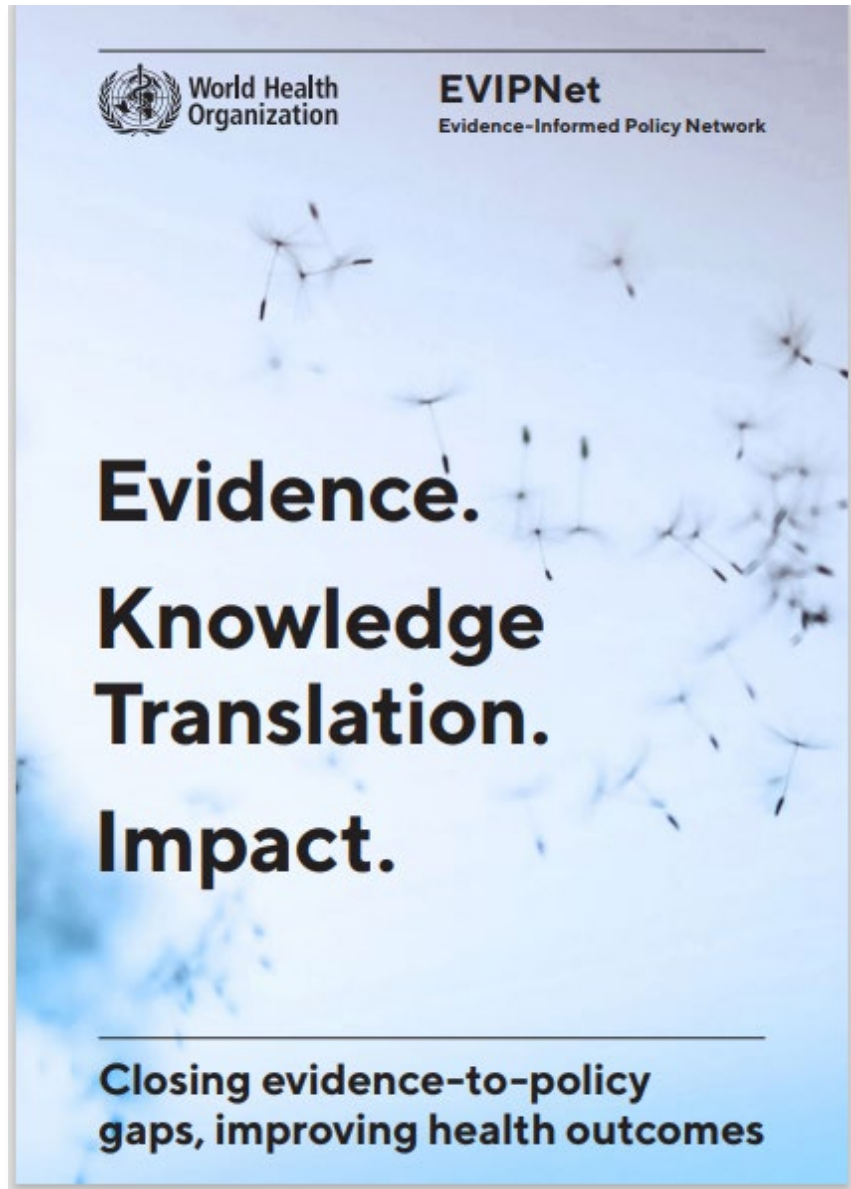
- There was lack of systematic ‘step-by-step’ how-to guidance on AMR policy advocacy
- Countries felt that they had limited capacities to conduct data analysis and visualization to help make compelling pitches to politicians/policymakers
- Countries were eager to participate in capacity-building initiatives for translating AMR data/evidence into effective policies.



***“Developing and piloting an approach to strengthening national and regional capacities to translate AMR data and evidence into effective policies”***

**A collaborative initiative between the RADAAR Project of the International Vaccine Institute and EVIPNet of the World Health Organization.**

# Evidence Informed Policy Network (EVIPNet) ... (1)



- Promotes the use of research evidence in policy-making to improve health systems through a networked structure
- Increases country capacity in knowledge translation
- Institutionalizes knowledge translation through the establishment of knowledge translation platforms
- Is a network of networks
- 'Live' in 3 WHO Regions: EMR, EUR, and Americas. AFR and SEAR - recent engagement

# Evidence Informed Policy Network (EVIPNet) ... (2)

## Currently Under Development

## RADAAR One Health Regional Framework for Strengthening Country Capacities for Translating AMR/U/C Data and Evidence into Effective Policies

- Twin-track approach:

- Track 1: Regional data collection, sharing, and analysis
- Track 2: Translating AMR data/evidence into action

- Differentiated support for:

- 'Technical' policymaking
- 'Strategic' policymaking

- 'Regionalization' of data sharing/analysis:

- Regionalization of national initiatives
- Regionalization of global initiatives

- Possible establishment of regional AMR knowledge translation hub(s) for technical support to countries



# Overview of RADAAR – EVIPNet pilot initiative rollout

## JUNE

Constitute in-country steering and working group

Convene national stakeholder consultation

Identify and prioritize AMR policy issue(s).

## JULY

Series of national/regional training workshops, webinars, and consultations

Data/evidence collation

Track indicators

## AUG

Series of national/regional training workshops, webinars, and consultations

Data/evidence collation

Track indicators

## SEPT

Synthesize evidence

Write and finalize evidence/policy brief

Assess uptake/usefulness

## OCT

Productionize evidence/policy brief

Finalize manuscript

## NOV

Conduct RADAAR-EVIPNet WAAW virtual conference with pilot countries

Disseminate all RADAAR-EVIPNet outputs

# RADAAR – EVIPNet Pilot Initiative: Objectives & Outcomes

## OBJECTIVES

### (Phase-1: June – Nov 2022)

*Developing and piloting an accelerated approach to strengthening national (and regional) capacities to translate AMR data and evidence into effective policies – a collaborative initiative between the RADAAR Project of IVI, EVIPNet of WHO, and AMRCCs of Nepal, Bangladesh, Uganda, and Malawi.*

### Phase-2 (Jan 2023 – Mar 2025)

*Take initiative to scale in all 22 Fleming Fund priority countries in Asia & Africa*

## Additional RADAAR Phase-2 workstreams being considered/developed under the rubric of AMR “Policy, Planning, and Advocacy”

- Scoping, developing, and piloting a model (‘proof-of-concept’) for an AMR socio-behavioral surveillance system, potentially in collaboration with the new Behavioural Insights & Sciences (BIS) Unit at WHO-HQ.
- Development and rollout of training and country capacity-building workshops on AMR policy advocacy based on the RADAAR guidance

## MAIN EXPECTED OUTPUTS

1. Country/Context-specific Policy Brief
2. Series of facilitated training workshops (including mentoring and coaching)
3. Foundation established for an AMR knowledge-translation platform

## MAIN EXPECTED OUTCOMES

1. Improved levels of AMR data sharing and analysis across stakeholders/sectors
2. Increased demand by policymakers for policy - relevant AMR data/evidence
3. Improved uptake/demand AMR policy briefs

## BENEFIT TO COUNTRIES

1. Enhanced technical skills/capacities for AMR knowledge translation
2. Establishment of a country-level AMR knowledge translation platform and team
3. Recognition of country researchers through co-authored publications; opportunity to technically support other countries (in Phase-2 scale-up).



## THEREFORE:

Critical for countries to understand what really constitutes policy-relevant data and evidence.

***‘AMR is not a problem to be solved, but a phenomenon to be continuously managed.’***

*Kirchelle C, Atkinson P, Broom A, et al (2020) Setting the standard: multidisciplinary hallmarks for structural, equitable and tracked antibiotic policy. BMJ Global Health.*

## BECAUSE:

***Not everything that can be counted counts,  
and not everything that counts can be counted.***

*(Attributed to multiple sources)*

**Thank You**