PGA Regional African Workshop to Promote Biological Security

"Implementation of the Biological Weapons Convention and UN Security Council Resolution 1540 (2004) in Africa"

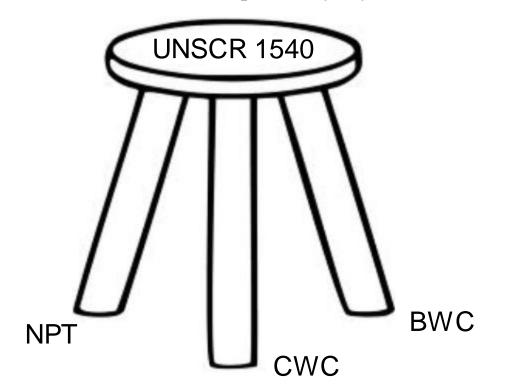
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Understanding UNSCR 1540 & the BWC: How do these two instruments relate to each other?

- UNSC Resolution 1540, adopted in April 2004, is the 'seat' or platform from which the international system implements what is called the 'non-proliferation regime'
- Under UNSCR 1540, this regime or set of conventions seek to prevent the development, acquisition and use of chemical, biological, radiological and nuclear (CBRN) materials as weapons of mass destruction primarily by non-state actors



Implementing UNSCR1540: Why is this important to peace and security?

	United Nations	S/RES/1540 (2004)	
C	Security Council	Distr.: General 28 April 2004	
	Resolution 1540 (2004)		
	Adopted by the Security Council at it	1056th meeting	
	on 28 April 2004	s 4950th meeting,	
	The Security Council, Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,* constitutes a threat to international peace and security,		
	Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,		
	Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,		
	Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,		
	Affirming its support for the multilateral prevent the proliferation of nuclear, chemic importance for all States parties to these treatie promote international stability,	cal or biological weapons and the	
	* Definitions for the purpose of this resolution only:		
	Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use.		
	Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.		
	Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.		

- If more state actors like North Korea possessed weapons of mass destruction, or worse, non-state actors like ISIS were to acquire these weapons, what impact would that have on global security?
- How would that affect the security balance in places like the Middle East and other conflictprone parts of the world?
- What would be the impact on trade and the international economic system as a whole?

Leveraging UNSCR1540 Implementation: Meeting Obligations under the NPT, CWC & BWC

Important to note that any action on UNSCR 1540 implementation also serves to meet important mandates under the three core nonproliferation regimes:

- Under the Biological and Toxin Weapons Convention, action under Article III of the BWC to also substantively satisfies obligations under Operative Paragraphs 2 and 3 of Resolution 1540 which covers legal requirements relating to the manufacture and trade in strategic goods
- For the Chemical Weapons Convention, meeting obligations under Article VII of the Convention which mandates action covering National Implementation Measures related to prohibitions under the Convention also meets requirements under Operative Paragraph 3 of UNSCR 1540 which simultaneously requires legal and regulatory control over strategic goods and dual use materials
- A similar approach has been used in relation to meeting Article II requirements under the Nuclear Nonproliferation Treaty and Operative Paragraph 2 of Resolution 1540 pertaining to the manufacture and acquisition of nuclear/radiological weapons and related materials

United Nations Security Council Resolution 1540

A Critical Element in advancing Regional Biosecurity

S/RES/1540 (2004)

2. Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

- Mandates from Operative Paragraph 2 of Resolution 1540 is key to biosecurity governance and supports the full implementation of the Biological and Toxin Weapons Convention (BWC)
- UNSCR 1540 implementation activities should be viewed as a corollary to ongoing efforts to implement the BWC

The Biological Weapons Convention (BWC) What are the fundamentals of the Convention?

- The BWC mandates States "not to transfer to any recipient whatsoever, or in any way assist, encourage or induce any State, group of States or international organizations to manufacture or otherwise acquire biological weapons"
- The BWC mandates that countries that are party to the Convention undertake "never in any circumstances to develop, produce, stockpile or otherwise acquire or retain microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes"
- The BWC also prohibits "weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict"
- States Parties must also destroy, or to divert to peaceful purposes all agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention, which are in its possession or under its jurisdiction or control and ensure that necessary safety precautions shall be observed to protect populations and the environment.

Implementing the BWC:

How is this important to the safety and security of the public?

How does implementing the BWC promote and enhance biosecurity and biosafety?

- The BWC seeks to prevent the acquisition, possession and use of biological agents that have the potential to kill millions, cost billions in economic losses, and create political and economic instability, whether naturally occurring, accidental, or manmade.
- The risk of a catastrophic biological event is magnified by global travel, urbanization, terrorist interest in weapons of mass destruction as well as rapid advances in technology, including risks posed by newly developed or manipulated pathogens with pandemic potential.
- For African States, an effective biosecurity regime seeks to reduce, among other things, biological risks posed by advances in technology and improves infectious disease surveillance
- While regional entities like the Africa Center for Disease Control (Africa CDC) have significantly improved surveillance capacities over the years, there is still significant work to be done

Implementing the BWC:

How is this important to animal health and the environment?

- The COVID-19 pandemic, a human public health crisis resulting from a virus of potential animal origin, underlined the validity of the One Health concept in understanding and confronting global health risks.
- Often used to coordinate multi-sectoral prevention and response efforts of zoonotic diseases (those that may transmit from animals to humans, or humans to animals), it is critical for the control of diseases such as rabies, avian flu and tuberculosis.
- Health risks are increasing with trade globalisation, global warming and changes in human behaviour, all of which provide multiple opportunities for pathogens to colonise new territories and evolve into new forms.
- While most risk assessments focus on the transmission of pathogens from animals to humans, animal health is also greatly impacted by diseases passed from humans. SARS-CoV-2, tuberculosis, various influenza viruses, among others, can harm or be fatal to different species of animals. Gorillas and chimpanzees, with their close genetic makeup to humans, are particularly susceptible to human diseases.

The BWC and Food Security: Leveraging Biosecurity to Deal with Threats to Food Security

- Agroterrorism, or any biological attack against the agricultural industry/food supply, has become a growing concern over the past 20 years
- Notwithstanding, very little has been done to build counter capacity in this domain, particularly in the global south where states are particularly vulnerable to such terrorist acts
- In the US, the state of Indiana passed a law in 2001 classifying agroterrorism as a weapon of mass-destruction. Pennsylvania soon followed, passing a similar law
- US Government officials speculate that the cost in terms of damages is directly proportional to the time it takes to diagnose the cause, and could easily range up to \$140 billion
- There is great interest in entomology and plant pathology department at institutions of higher learning to assist in monitoring and tracking insects and plant diseases.

Biosecurity Governance in Africa: What are the essential elements?

The regional approach to biosecurity governance is informed by the *functional interpretation* of what biosecurity entails, from a security and public safety perspective: *The prevention of the deliberate misuse of biological pathogens and toxins with the intention to harm people, animals, plants and the environment*

Treaties & Agreements:

- The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons and on their Destruction (Biological Weapons Convention)
- United Nations Security Council Resolution 1540
- International Health Regulations (IHR): World Health Organization (WHO)
- Global Health Security Agenda (GHSA)

Creatively Leveraging the BWC: Promoting Environmental Biosecurity

- For African States, biosecurity as a holistic term, encompasses policy and regulation to protect agriculture, food and the environment from biological risk
- In this regard, ministries of agriculture, science and technology and health in Africa have primary responsibility for managing biosecurity, including managing biosecurity risk, to the environment
- Leveraging the BWC implementation process to protect the environment and to manage/mitigate the deliberate introduction of plant pathogens which directly affect food security and the biodiversity is of utmost importance
- Effectively managing biosecurity risk to the environment is a fundamental part of a functional national biosecurity system which seeks to preserve animal, plant and human health
- There is an urgent need for African States to develop and implement policies and programs that protect and conserve the environment through the conducting of risk analyses, including import risk analyses, so that goods and people arriving in the region do not pose an unacceptable biosecurity risk

World Organization for Animal Health (OIE) Cooperation with the AU on Biological Threat Reduction

- Fostering biothreat reduction activities in the region and to minimize/mitigate biological risks that are both related to the accidental or deliberate release of animal pathogens or biological toxins
- With the advent of globalization and the increasingly speedy movement of goods and commodities including live animals there is a growing concern about zoonotic diseases and their potential impact
- Preventing the increasing encroachment on and destruction of natural habitats further compounded by climate change, as well as other ecological changes
- Focusing the current threat that weaponized infectious diseases and biological toxins can pose to both humans and animals and the need for security policy personnel and practitioners to view biological threats more seriously
- The aim is to build **multi-sectoral synergies** to promote the prevention, preparedness and response to biological threats.

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