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Pandemic Agreement

(The Hindu, 01-08-24)

The 77th World Health Assembly failed to sign the Pandemic Agreement despite two years of intense negotiations.

What is a Pandemic Agreement?

- The Pandemic Agreement is a proposed international treaty designed to strengthen global pandemic preparedness and response.
- The goals of the agreement are to prevent future pandemics, reduce inequities in access to healthcare, and establish mechanisms for sharing resources and information during health emergencies.
- It seeks to address the shortcomings exposed by the COVID-19 pandemic and establish a more equitable and effective framework for managing future health emergencies.

Merits of such an agreement:

- The agreement would foster **greater collaboration and coordination** among countries in areas such as surveillance, information sharing, research, and resource allocation
- It aims to ensure fair and **equitable access to vaccines**, treatments, and diagnostics for all countries, particularly those with limited resources
- It ensures **accountability** for actions taken during pandemics and establish mechanisms for monitoring compliance with international health regulations
- The agreement **promotes a holistic approach** to health that recognizes the interconnectedness of human, animal, and environmental health

What were the key issues that has delayed the finalization of the Pandemic Agreement ?

Three core issues prevented the agreement's adoption:

- **Pathogen Access and Benefit Sharing (PABS):** Ensuring equitable access to pathogens and benefits from their use.
- **Technology transfer, local production, and intellectual property:** Balancing intellectual property rights with the need for widespread access to vaccines and treatments.
- **One Health approach:** Integrating animal, human, and environmental health to prevent and respond to pandemics.

Other issues which has added to the delay are:

- **Geopolitical and economic interests:** Competing interests among nations, particularly between high-income and low- and middle-income countries.
- **Enforcement and compliance mechanisms:** Challenges in establishing robust monitoring and evaluation systems to ensure implementation and accountability.

What is the main disagreement regarding the PABS system?

Benefits of such a system:

- Ensuring that developing countries receive a fair share of benefits from research conducted on pathogens originating from their regions.
- Promoting equitable access to vaccines and treatments during pandemics.

The challenge or the disagreement is:

- Low- and middle-income countries (LMICs) push for a guarantee of at least 20% of shared pandemic products. They also push for mandatory technology transfers and intellectual property waivers to ensure diverse manufacturing capacities globally
- High-income countries argue that 20% should be the maximum limit, with some not agreeing to 20% at all. Also, these countries advocate for voluntary terms.

What are the challenges in implementing the One Health approach?

- High-income countries, particularly the EU, strongly support it
- LMICs view it as an unfunded mandate that strains their already limited resources
- Concerns about the additional burden on resource-constrained countries

Can you answer the following question?

Discuss the benefits and the potential challenges in the negotiation and implementation of the Pandemic Agreement.

Problem Power: small modular reactors (SMRs)

(The Hindu, 01-08-24)

What are Small Modular Reactors (SMRs) and their potential advantages?

- SMRs are smaller versions of conventional nuclear reactors (10 MWe-300 MWe each)
- They aim to be safer and commercially feasible
- Advantages include:
 - Higher energy content of nuclear fuel
 - Modular design
 - Smaller operational surface area
 - Lower capital costs

What are the main challenges facing SMRs?

- Ensuring commercial viability while maintaining safety standards
- Managing external costs, including proliferation resistance measures
- Frequent refueling needs and plutonium yield, stressing proliferation resistance
- Fixed baseline costs and safety expectations that don't decrease with smaller size

How does the privatization of nuclear power generation impact SMR development?

- Increases demand for regulatory safeguards against radioactive material diversion
- Requires 'safeguardable' reactor designs, potentially increasing capital costs
- Necessitates balancing commercial interests with stringent safety and security measures

What factors will determine the success of SMRs in India?

- Commercial viability in the face of external costs
- Availability of stable market conditions and power grids
- Opportunities for mass production of parts
- Balancing the price of proliferation resistance with economic feasibility
- Competing with larger reactors that benefit from economies of scale

Can you answer the following question?

Evaluate the potential of Small Modular Reactors (SMRs) in India's nuclear energy landscape. Discuss the challenges and suggest strategies to overcome these hurdles while ensuring energy security.

