Topic 1: Redirecting Military Spendings and Efforts towards Climate Security

General Overview:

As our world faces escalating impacts of climate change, there is a growing debate on whether a portion of these military spendings should be directed towards climate security. According to studies, the global military expenditures have reached up to $2.4 trillion in 2023 while climate risks continue to rise. This topic shed lights on the need to shift spendings on resources from armed defenses to address the growing threats associated with climate change. Climate change has intensified natural disasters, reduced access to clean water, and lead the scarcity of primary resources. These continuous negative impacts have been fueling competition and conflict between countries over resources increasing the military conflicts and therefore spendings annually. Climate change, consequently, is no longer an environmental concern, but rather a critical global security issue and directly linked to military and nuclear threats. This topic recognizes the potential for military spendings to promote global security by investing in climate resilience efforts to reduce its impacts and threats on the environment.

Subtopic 1: Military infrastructure for Climate Adaptation and Disaster Response:

As climate change continues to increase the frequency and intensity of natural disasters, military infrastructure can play a pivotal role in reducing the impacts associated with the disasters caused by climate change. Armed forces often have equipment that are made particularly for rapid relief in times of flooding, hurricanes, or any natural disaster. By redirecting a portion of the military spendings annually, bases could be built for disaster response and climate adaptation. These areas could be used to store emergency kits, supplies, and coordinate evacuation. In doing so, an aspect of climate security can be restored and adaptation efforts will be evident therefore promoting overall global peace.

Subtopic 2: Military technology for climate mitigation and security:

Military technology is traditionally designed for defense, combat, and warfare purposes. However, when directed strategically, they hold immense potential in support climate adaptation, mitigation, and security. Military institutions have enough technical expertise to lead advancements in sustainably technology. These sustainable technologies include the development of alternative fuels for their aircrafts, investing in energy efficient systems and carbon reducing systems which together, can significantly reduce the environmental footprint of military forces and eventually reduce the impacts of climate change.

Subtopic 3: Recognizing the environmental impact of military operations:

Military operations have significant environmental impacts often contributing to an increase in pollution, ecosystem degradation, and greenhouse gas emissions which are all major contributors to climate change. Military operations include large scale weapon testing and training exercises, the construction of military bases which can cause long term damage to land, air, and water systems. The global defense sector which includes military operations is one of the largest institutional sectors that contribute to carbon emissions, fossil fuels in vehicles, aircrafts, and ships. Furthermore, in regions with active conflicts, military operations are increased resulting in even more severe environmental consequences like deforestation, habitat loss, and decreased biodiversity. Beyond the impacts on the ecosystems, the cleanup and restoration of the affected areas requires substantial financial capabilities and resources that not all regions can afford. Recognizing the environmental footprint of these military operations would allow member states to shift towards greener options, reduce their use therefore aligning with climate security goals and to promoting security and peace on a regional and global scale.

Topic 2: Establishing nuclear weapon free zones (NWFZs) in South Asia

General Overview:

Nuclear weapon free zones are regions where countries collectively commit, through legally binding agreements, to prohibiting the development, testing, and use of nuclear weapons. These zones are marked primarily to promote regional peace without contributing to international nonproliferation and disarmament efforts. These zones are frequently marked in volatile regions in specific. Volatile regions are characterized for being politically instable, face frequent conflicts, ethical or religious tensions and mostly important are at high risk for violence and war. These areas are often less economically developed and lack effective conflict resolution mechanism, and have weak governance structures. Putting volatile regions into context of international peace and security, they pose significant risks due to rapid conflict escalation especially when weapons are involved. South Asia is a volatile region in this context and it is a candidate for the establishment of nuclear weapon free zones in this region. South Asia consists of many countries that face considerable challenges some of which include political tensions, and instability, and ongoing historical conflicts. Moreover, it is home to two nuclear armed states which are India and Pakistan which face many conflicts that create a fragile security environment. The existence of nuclear weapons in these counties and environments raises the risk of escalation and accidental conflict which poses as a threat to overall global peace and security.

Subtopic 1: Evaluating the effectiveness of verification mechanisms in ensuring compliance in (NWFZ):

Verification systems are essential to the success of nuclear weapon free zones to be established. These mechanisms will ensure that member states of the assigned regions will comply with the rules and regulations of nuclear weapon free zones ensuring that they abide with their commitments in prohibiting the development, testing, possession or use of nuclear weapons. Effective verification builds upon transparency and trust to ensure international security. Some of these mechanisms include regular inspections, satellite monitoring systems, reporting requirements and the establishment of frameworks for further verification. The verification systems are crucial in volatile regions as they tend to be more challenging due to the political tensions and weak governance structures. In South Asia in particular, there are many tensions between states like Pakistan and India which require verification systems to ensure nuclear weapons are not used during conflicts. Evaluating the effectiveness of verification mechanisms in these zones in South Asia will ensure that all countries involved and marked will follow the rules and regulations of the nuclear weapon free zones.

Subtopic 2: Social benefits of NWFZs in South Asia:

In South Asia, the establishment of nuclear weapon free zones could offer many social benefits ultimately reducing the risk of nuclear weapon integration in conflicts between the nations. Some of the immediate social benefits is the reduction of risks associated with nuclear weapons. This includes the mitigation of the threats of nuclear wars, accidental launches, radiation which affects the health of individuals, or miscalculations. Due to the already existing tensions and nuclear threats in South Asia, the establishment of these zones will ease public anxiety creating a safer environment for the citizens of the region. Moreover, the reduction of the nuclear risks will foster stronger cooperation between the members of the region, encouraging dialogue and encouraging a shift between national priorities from defense spendings to social facilities like schools, healthcare centers and others that will increase the standard of life for the citizens and overall increasing social stability for the future generations of South Asia's population.

Subtopic 3: Environmental benefits of NWFZ in South Asia:

The environmental benefits of establishing the nuclear weapon free zones in South Asia are crucial, especially when considering their history with nuclear tests and the associated ecological consequences that came along. The establishment of these zoes would open many opportunities for the improvement of the region's state in terms of its ecosystems, biodiversity, and overall atmosphere. The use of nuclear weapons not only pose social and economic threats to the region but also to the environment. For instance, when India conducted nuclear weapons, it led to radiation contamination of the surrounding environment killing many species and disrupting food chains and habitats. Therefore, a nuclear weapon free zone would eliminate further nuclear tests ultimately preventing additional radiative pollution of land, wind, and water which are all vital resources for living organisms. Beyond future presentation, the NWFZs would encourage member states of the region to redirect their investments to more sustainable practices like environmental initiatives, renewable energy installations, and ecological conservation efforts. Moreover, this will not only benefit the regional ecosystems of South Asia, but it will also contribute to global environmental health and their efforts could inspire other regions to shift their focus from nuclear threats to sustainable efforts like green technologies preventing environmental degradation.

Topic 3: **Addressing the Risks of Cyber Warfare and Autonomous Weapons Systems**

General overview:

Cyber warfare and autonomous weapons systems have been showing rising threats that have been challenging traditional notions of security and international law. Cyber warfare revolves around the use of digital attacks to damage or destruct critical infrastructure which are mostly used in military fields like power grids and communication networks without showing clear tracking of the attacker. Regarding the autonomous weapons systems (AWS), they are systems that select and engage targets without the need for human intervention therefore raising ethical, legal, and security concerns. The lack of the human interference in the systems increases the risk of malfunctions or casualties. Pairing these two technologies have the potential to reduce global security especially because they have been integrated into military strategies without clear, transparent, international regulation strategies. Moreover, the rapid development of these technologies has caused competition between nations which therefore fuels conflict. Therefore, addressing these risks involves international cooperation in order to establish clear standards, guidelines and legal frameworks.

Subtopic 1: Legal challenges of autonomous weapon systems:

Autonomous weapons systems (AWS) present significant legal challenges within the framework of international law. Due to the fact that these weapon systems can identify, select, and engage targets without any requirement for human intervention, one of the primary concerns is their potential incompatibility with the international humanitarian law, principles that revolve around accountability, and distinction in particular. As these weapons operate on their own, they often tend to lack human judgement and contextual awareness. For that, there is a risk that these systems cannot differentiate between military targets and innocent civilians. In addition, the use of these weapons rises serious inquires for accountability. In the event of unintended civilian casualties, it becomes unclear who is legally responsible for these actions. This uncertainty weakness the enforcement of the international law and limits the ability for victims in their pursuit for justice.

Subtopic 2: Importance of cyber warfare protection infrastructure:

As we are in an era where digital technologies are being deeply embedded into national defense systems, military infrastructures, and daily governance it is crucial that cyber warfare protection infrastructure is established. As cyber threats continue to evolve in sophistication and scale they stand as a serious threat and risk to national security, economic stability, and overall public safety. A strong cyber defense infrastructure revolves around not only advanced technologies like firewalls and intrusion detection systems, but also secure protocols, real time monitoring capabilities. This infrastructure is essential as it should serve as a defensive shield capable of protecting critical defense networks and sensitive data against any cyber-attacks aimed at the defense systems.

Subtopic 3: Recognizing the potential impacts of cyber-attacks on national defense systems:

Cyber-attacks that target national defense systems are classified as one of the most serious threats to a countries security and safety as they are often associated with catastrophic consequences. Defense systems including communication networks, weapon control systems, satellite systems and data charts are being digitalized more and more over the years. If attackers gain access to these defense systems, they can alter the settings to disrupt miliary commands, defense infrastructure, leak information or even interfere with the operation of weapons systems. One of the main impacts of these attacks is the disruption of the operational readiness of the defense. For instance, if cyber-attacks

target military communication or navigation systems during an ongoing conflict the affected state could lose its strategic tactics that were prepared beforehand and they may fail to coordinate their next defensive operations. Furthermore, this unauthorized access and theft of sensitive and confidential military data can give the attackers insights of their technological assents and operations.