

Climate Literacy and the UN Peacekeepers: Implications for Peace and Stability

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Abstract

This article examines the role of UN peacekeepers in creating awareness about the effects of climate change and establishes links with national security policy making process in host nations. A social survey was carried out to determine links between the United Nations Peace Keeping Operations (UNPKOs) and importance of climatic literacy. The data was gathered from 120 UN peacekeepers, 84 per cent of them supported constructive perspective of climatic literacy in maintaining peace and stability in conflict zones. Since the impact of climate change is a wide subject, the scope of this article, therefore, is limited to how the UN peacekeepers can help the host nations through climate literacy campaign.

This paper is a contribution to a global awareness campaign as well as source of empirical evidence to enhance capacity of UNPKOs and the host nations to help formulate a sustainable policymaking process to counter the threats of climate change. The article concludes that there is a need to consider climate change as a national and international security threat and, therefore, building capacity of UN peacekeepers through climate literacy program is important.

Keywords: Climate Change, National Security, Climate Literacy, UN Peacekeeping Mechanism, Policymaking.

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Introduction

Climate change is a periodic modification of earth's climate brought about as a result of changes in the atmosphere as well as interactions between the atmosphere and various other geologic, chemical, biological, and geographic factors within the Earth system.¹ The disasters cause by climate change are hardly known to the people especially to those of the under developed world. Ironically, the impact of climate change is more severe in these parts of the world though it originates mainly from developed world.² One of the main causes of not mitigating the impact of climate change is climate literacy inter alia. Climate Literacy is “an understanding of your influence on climate and climate's influence on you and society.”³ Coincidentally, the United Nations (UN) peacekeeping forces are deployed in that part of the world which itself is not the cause of the climate change but effected severely. Apparently, there is no direct link between climate change and the UN peacekeeping forces but there could be substantial empirical evidences of how the climate change affects the peace operation and its impact on the cause of the conflict. This requires a separate study to ascertain but, first there is a need to assess the level of climate literacy among the UN peacekeepers.

Ban Ki Moon, the Former Secretary-General of the UN notes on the report of greening the blue helmet “Vision of a Sustainable UN -2020:”

[...] The journey has begun. We are working to reduce the environmental footprint of our peacekeeping missions and our Nairobi and New York headquarters are setting new standards in energy efficiency. But we still have a long road to travel.⁴

It seems that the mandate of the UN peacekeeping missions consists of two interrelated responsibilities:

¹ Amster Randall, “Toward a climate of peace.” *Peace Review* 25, no. 4 (2013): 473-479. <https://www.britannica.com/science/climate-change>

² “Top 5 Most Polluting Countries,” *Sustainability for All*, <https://www.activesustainability.com/environment/top-5-most-polluting-countries/>

³ “Climate Literacy,” *The Essential Principles of Climate Sciences*, Second Version, March 2019, www.climate-science.gov

⁴ “Greening the Blue Helmets — United Nations,” http://www.un.org/en/events/environmentconflictday/pdf/UNEP_greening_blue_helmets_ES.pdf

- a) To manage conflict regions assigned by the UN
- b) To identify and work on climate change related security concern

It has been realised that there is a link between peacekeeping missions and climate change and its impact. The evidence suggests that a greater number of deaths have been linked to climate change than to those in wars and low intensity conflicts.⁵ These conflicts include guerrilla warfare, terrorism and any act of violence that is generated within a fragile state. A study conducted in 2007 concluded that:

“predicted climate change poses a grave danger to national security...it acts as a threat multiplier for unpredictability in some of the most volatile parts of the world and will create tensions even in currently stable parts of the world.” The ensuing analysis demonstrates that the human lives and livelihood face major issues from non-traditional security threats”.⁵

The major peacekeeping missions in the world are the nations most exposed to climate change. In the absence of new methods, peace does not stand a chance.⁶ The international community especially Germany has made it a top priority to sharpen the UN response to climate change. In the words of the German Foreign Minister, “time’s up in ignoring the security threats presented by climate change.”⁷

Currently, the UN peacekeeping missions have been working in different countries that are facing severe climate change effects.⁸ This research contextualises the UN Sustainable Development Goal 13 (SDG13) which encourages the states, national and international legal bodies to urgently implement practical framework of action to mitigate climate change and its negative implication. Furthermore, it is profoundly crucial to improve education, raise awareness about climate change and enhance human and institutional capacities to reduce risks of violence in the conflict

⁵ Niklas Swanström, Traditional and Non-Traditional Security Threats in Central Asia: Connecting the New and the Old, *China and Eurasia Forum Quarterly*, vol. 8, no. 2 (2010): 35-51,

https://www.researchgate.net/profile/Niklas_Swanstroem/publication/262420563_

⁶ L. Sander, “Climate Change Threatens Peace Efforts: SIPRI,” *DW News*, June 26, 2019.

⁷ A. Davis, “Germany Pushes Climate Change as Security Risk,” *DW News*, June 4, 2019.

⁸ “United Nations Peacekeeping, ‘United Nations,’” <https://peacekeeping.un.org/en>

zones. The SDG13 warns that the global warming must be below 1.5°C and it is vital to avert the worst impacts of climate change. The greenhouse gas emissions cause enormous damage to environment. The US, China, India, and Russia are among the biggest polluter countries.⁹ However, China has developed plans to “go green,” and implementing policies to dismantle coal-plants and reducing overall emission levels. According to the main findings of Global Climate Risk Index 2020:

“Public all over the globe is facing the reality of climate change...this is revealing in an increased volatility of extreme weather-related events. Between 1999 and 2018, about 495000 people died universally and losses of US\$ 3.54 trillion were incurred as a straight result of more than 12,000 dangerous weather events...The UNEP Adaptation Gap Report 2016 cautions of increasing impacts and resulting upsurges in global adaptation costs by 2030 or 2050 that will likely be much higher than currently expected: [...] 2 to 3 times higher than current global approximations by 2030, and potentially 4 to 5 times higher by 2050.”¹⁰

Therefore, international approach to deal with the climate change needs doctrinal transformation. Ostensibly, the UN peacekeeping operations have the potential to become the source and guide to address how to combat the climate change catastrophe in the regions of conflict

In practice, protecting mother nature should be incorporated as one of the major national security imperatives with the statement that “Nature doesn’t need people, people need nature.”¹¹ This reflection directly addresses the survival of this planet especially for the next human generations. It is this fundamental doctrine that constructs the basis of this research — thus presenting climate literacy in relation to the role of the UN peacekeepers. Most importantly, the terminology climate literacy should be understood in terms of its linkages between public and peacekeepers from different sections of society who assist peacekeeping missions and policymakers in the conflict zones. The existing literature on the subject researched is scanty and due to an inherited limited

⁹ “Top 5 Most Polluting Countries,” *Sustainability for All*

<https://www.activesustainability.com/environment/top-5-most-polluting-countries/>

¹⁰ Eckstein, David, Vera Künzel, Laura Schäfer and Maik Wings, “Global Climate Risk Index, 2020,” *Bonn: German watch* (2019).

¹¹ Harrison Ford, “Nature Doesn’t Need People. People Need Nature,” *KABAR* February 12, 2019.

approach, the existing sources have failed to incorporate the effects of climatic change in national security policymaking. The host nations of the UN peacekeeping missions consist of two-third of the African countries. Therefore, this study can become a source to conduct a comprehensive research for broader UN peacekeeping strategic mandate. Separate and independent studies on the effects of climate change can be found but still there has been less emphasis on climatic change as a national security threat.¹²

The other assessment is that climate change, as a subject, has failed to qualify for critical discourse analysis and consequently military/police/civilians officers serving in the UN peacekeeping missions and the population in host nations cannot relate to the threat/risk of climate change. Also, this research articulates the importance of climate literacy because linkages between effects of climate change and peacekeeping operations remain unclear, and hence failure to develop comprehensive policies.¹³ This research is a step forward to introduce the subject of climate change in the domain

National Research Council, Committee on Climate Change, US Transportation, Transportation Research Board, Division on Earth and Life Studies, Potential Impacts of Climate Change on US Transportation: of national security, and thus an effort is made to encourage policy makers to register seriousness of non-traditional security threats such as earthquakes, extreme heat, water scarcity, irregular rain, tsunami, famine and drought.

Through this research, an attempt has also been made to assess the role of UNPKOs in connection with climate change and national security — and why climatic literacy as a method can help create awareness to counter climate change. The analysis of contemporary policies of international/national institutions demonstrate that there is a need to include effects of climate change in training modules of the UN peacemakers so that climate

¹² Amitav Acharya, "The Periphery as the Core: The Third World and Security Studies," York Space Institutional Repository (1995), <https://yorkspace.library.yorku.ca/xmlui/handle/10315/1412>

¹³ Special Report 290, vol. 290, Transportation Research Board, 2008.

literacy can help building capacity, strategy/tactics among the UN peacekeepers.¹⁴

With this background, the main objectives of the study are:

- a) To analyse the role of the UN peacekeepers in creating awareness about climate literacy
- b) To address the links between conflict management and operational mandate of the peacekeepers
- c) To evaluate contours of climate literacy and how it enhances the capacity of peacekeepers

Finally, it emphasises the need to include climate change as a national security threat. It also establishes how policymakers can utilise data provided by the UN peacekeepers in combating climate change. However, it remains to be seen if a host nation considers incorporating recommendations by the UN peacekeeping missions with regards to countering climate change and national security policymaking process. It is also a moot point of the level of convergence (i.e. high, medium, or low) between the UN peacekeepers about climate literacy. In this context, this study elaborates that climate literacy is recognised by a very slim segment of nation states. The aim of this article is to explore a connection between the UN peacekeeping missions and climate literacy and how a robust early warning system can complement national security policymaking process.

Theoretical Framework

The article begs the question whether climate change should be part of national security policy making process. Climate change is often attributed to long term human activity that increases greenhouse gas emission and alters the earth's atmosphere. This study utilises climate literacy as a method to understand the impact of climate change on a society and how it poses threat to national security. This research explores three interconnected factors between climate change and national security. Firstly, it is important to comprehend national policy of climate change of a host nation. Secondly, to use a meaningful method to

¹⁴ Michelle Betsill and Harriet Bulkeley, "Cities and Climate Change," vol. 4, (Routledge, 2003).

campaign about climate change and its effects on lives and livelihood, and thirdly, to enhance capacity and mandate of UN peacekeepers. The UN peacekeepers can become a source of practical knowledge and guidance to combat climate change because it has become one of the major impediments in economic progress in the conflict zones.

Importantly, climate literacy is linked to national security policymaking i.e., securitising and validating climate change threats and prioritise capacity building of the UN peacekeepers.

The application of Barry Buzan's Theory of Securitisation creates basis to elucidate the climate-security relation. This research paper utilises the Theory of Securitisation which helps incorporate climate change as a security issue and thus opens new avenues to validate linkages between climate literacy and national security. [...] it examines distinguishing character and undercurrents of security in five sectors: military, political, economic, environmental and societal.¹⁵

The character of theorization process aptly serves the purpose of this research because it constructs linkages between military, environment, politics, and society. The pre-policymaking process does include a public discourse about how to address the implications of climate change. Similarly, utilizing climate literacy as a method will help preventing further erosion of natural resources of the host nations.

Research Design and Methodology

A mixed research design i.e., qualitative and quantitative data gathering was adopted to conduct this research. For data collection and gathering information, a survey was conducted among the UN peacekeepers and by researching relevant books/studies/articles and news reports, therefore, the research is primarily descriptive, exploratory and analytical in nature. As stated earlier, that climate literacy and role of the UN peacekeepers establishes linkages between empirical evidence and the way the peacekeepers adopt 'Knowledge, Attitude, Practice' (KAP) as an analytical method. The implementation of this research design facilitates in assessing how climate literacy helps practicing climate change related knowledge.

¹⁵ Buzan Bary, Weaver Ole and Wild de Jaap, *Security: A New Framework of Analysis* (Lynne Rienner Publishers, Boulder London, 1998, UK).

The knowledge here represents the amount of information regarding societal impact of climate change and the way it is received and practiced by a nation state.

It is also pertinent to explain that the relation between a public discourse and policymaking is direct and thereby knowledge-based capacity building among the UN peacekeepers holds strategic importance to further the cause of climate literacy. The KAP method is applied to deduce sample results. The questionnaire was distributed among the selected group of 120 UN peacekeepers. A sample technique of non-probability was utilised to derive “subject-based” opinion, rather than random selection of views/opinions. Furthermore, this sampling method also provides the opportunity to a larger group of people and thus giving a chance for a wider participation. The respondents approached were all from Pakistan who served on UN Peacekeeping Missions in the last ten years. These respondents have been part of the UN peacekeeping missions in different countries as mentioned in Table No.1. Closed questionnaire based on ‘KAP analysis Model was used for the study since the researcher has served in the UN peacekeeping mission. Most of the respondents were surveyed personally and by email to collect the data.

**Table No.1
Data Sampling**

Sr No.	Conflict Zone	Number of Participants
1.	Republic of Congo/MONUC/ MONUSCO	20
2.	Sierra Leone/ UNAMSIL	20
3.	UN Mission in Western Sahara / MINURSO	20
4.	Sudan / UNMIS	20
5.	Liberia / UNMIL	20
6.	Darfur / UNAMID	20

Literature Review and Analysis

The irregular monsoon, greenhouse emissions, earthquakes, draughts and floods have aggravated the prevailing socio-economic challenges. Climate change has become an existential national security threat especially in the conflict regions. There is a need to change the way to deal with the problems that the host countries are likely to face in the coming years since there is a direct linkage between climate literacy and climate change, peace, and security. Also, it would determine the future successes of UN

peacekeeping missions.¹⁶ Also, a collective response by the UN peacekeeping missions will help combating the complex global security threats and thereby consolidating peace in conflict regions.

The Charter of the UN is the basis for all the UN operations. This document states quite clearly that the UN was created to “save succeeding generations from the scourge of war,” and therefore one of its primary purposes is to preserve and uphold international peace and stability. Although peacekeeping is not explicitly enshrined in the UN Charter, it has transformed as one of the key tools to establish peace and security in conflict regions.¹⁷ The lack of convergence over climate change is a problematic issue between various nation states. It is this context which needs much deserved policymaking attention.

Barry Buzan and the co-authors, in their book, “*Security, A New Framework of Analysis*,” noted the distinctive character and numerous aspects of analytical approach that helps formulate a clear security model to combat complex issues, e.g. climate change. One of the important observations is that the largest deployment of the UN peacekeeping mission is in the countries which are most vulnerable to climate change. The Stockholm International Peace Research Institute (SIPRI) warned that “the efforts of peacekeeping operations are threatened due to the global climate change. Out of ten countries, eight are those which are hosting the biggest multilateral peacekeeping operations. Negative implications of climate change are threatening economic and security development in these countries.”¹⁸

It is also argued that dealing with a conflict only through military responses will not be adequate to stabilise a particular region; therefore, building informed societies should be the key to address challenges of climate change. Some of the literature also reflects that the host countries

¹⁶ Florian Krampe, “Climate Change, Peacebuilding and Sustaining Peace,” *IPI Global Observatory*, September 2019, <https://theglobalobservatory.org/2019/09/climate-change-peacebuilding-and-sustaining-peace/>

¹⁷ B. Freeman, “Navy Releases Roadmap for Global Climate Change,” Office of the Oceanographer of the Navy, May 24, 2010, 5-12.

¹⁸ Lewis Sanders, “Climate Change Threatens Peace Efforts: SIPRI,” *DW News*, June 26, 2019, <http://www.dw.com/en/climate-change-threatens-peace-efforts-sipri/a-49356361>

have a weak system of governance, and thereby vulnerable to high security risks. According to the statement of one of the UN peacekeepers:

“Every time I travel to one of our operations, I witness the effects of climate crisis first-hand. Security-related risks of climate change are greatest where two critical trends intersect: the monstrous impact of climate change coupled with weak governance capacity to manage the growing tensions created by these impacts. These dynamics are not hypothetical. They are the daily reality in many of the countries in which we operate, and it is everyday people who pay the highest price.”¹⁹

The ensuing analysis shows that, due to climate change, the perilous economic consequences for communities are increasing. Under these circumstances, the interaction between local population and the UN peacekeepers is decreased and thus posing the threat of infighting/civil war in conflict zones. The African countries, for instance, depend on agricultural sector. It is assessed that drought and subsequent effects of famine would remarkably cause low-cash flow and virtually nominal revenues both for masses and state. It is this risk factor that further adds to the socioeconomic insecurities among the population.

With less focus on climate literacy and already weakening governance in conflict regions, it is but natural that the UN peacekeeping would also face repercussions of climate change. Subsequently, this leads to further erosion of writ of a state and more security challenges for the UN peacekeepers.²⁰ The experience of the UN peacekeepers in Somalia is one of the important case studies where violent conflict and droughts have led to the displacement of millions of people and degradation of land fertility. It has also resulted in an unstructured and forced migration to urban areas such as Mogadishu. The consequences of such urbanization include human

¹⁹ “Protecting Peace: How UN Peacekeepers are Part of the Climate Solution,” *United Nations*, September 20, 2019, <https://medium.com/we-the-peoples/protecting-peace-how-un-peacekeepers-are-part-of-the-climate-solution-707c7fecba6e>

²⁰ UN Peacekeeping, “Protecting Peace: How UN Peacekeepers Are Part of the Climate Solution,” Medium. We the Peoples, October 7, 2019, <https://medium.com/we-the-peoples/protecting-peace-how-un-peacekeepers-are-part-of-the-climate-solution-707c7fecba6e>. Paul Diehl, “Climate Change and Peace Operations,” *Oxford Research Group*, January 2019.

smuggling, child exploitation and exponential growth of militant organizations and insurgency.

Somalia's al-Shabaab militant terrorist group exploits such condition and it is assessed that the insurgents carry out extensive recruitment of vulnerable and unemployed youth. The question arises: why the UN peacekeeping operations do not have the capacity to combat the root cause of such precarious situation. Lack of capacity in the area of climate literacy is one of the most important reasons behind state's inability to mitigate climate change threats.²¹

The study of Sierra Leone demonstrates that it is probably a less fortunate nation because it faces various climate change related threats. However, it is undermining key economic segments and there is also a risk for extensive ecological degradation. The reliance on agribusiness and natural resources coupled with rising poverty and unemployment, too, have become consistent contributing factors in addition to the climate change. It is projected that there will be a rise in temperature, irregular rain, mudslides, floods, disease spread and raising sea levels.²² These are vital factors due to which Sierra Leone ranks at the lowest level of the UN Human Development Index. The indicators of human and social development of Sierra Leone are in the worst state which encompass factors such as life expectancy rate, malnutrition, number of children enrolled in schools and child mortality rate.²³

According to the National Export Strategy, Sierra Leone has a leeway over other nations regarding its assets and potential in jewels, cocoa, coffee, and fish. The Sierra Leone national economy would be tremendously influenced by an economical decrease occasioned by environmental change.²⁴ However, to mitigate negative effects of climate change, Sierra

²¹ Ministry of Transport and Aviation Sierra Leone, "National Adaptation Programme of Action," *Government of Sierra Leone*, (December 2007).
<http://unfccc.int/resource/docs/napa/sle01.pdf>

²² "Climate Risk Profile: Sierra Leone," *Climate Links*,
<https://www.climatelinks.org/resources/climate-change-risk-profile-sierra-leone>.

²³ "Climate Risk Profile: Sierra Leone," *Climate Links*, August 1, 2016,
<https://www.climatelinks.org/resources/climate-change-risk-profile-sierra-leone>

²⁴ Gabriel Benjamin, "Effects of Climate Change in Sierra Leone," *Concord Times*, February 2, 2015, <http://slconcordtimes.com/effects-of-climate-change-in-sierra-leone/>

Leone has adopted mechanisms and practices such as “Develop and Enact,” the policies that are considered necessary for minimising the effects of climate change. The authorities have also developed regulations for those settled near the coastal region of the country. In order to protect the coastal community, the country has adopted the plans of urban growth development and most importantly they have established a National Sea Level Observing System. Multiple reforms are needed to further enhance the institutional framework of the government.

Following reforms are proposed by the government of Sierra Leone in August 2016:

- a) A full revision of climate policy and implementation of the Climate Act.
- b) Climate change should be part of national security policymaking.
- c) A national climate change strategy coupled with the National Action Plan to counter climate change should be implemented.
- d) Strengthen already existing systems of information in implications of climate change.
- e) Establishment of Sierra Leone Climate Fund which will be the primary financing instrument for priority climate change activities and intercessions as deemed necessary.²⁵

According to the Global Observatory, “addressing climate change is a system-wide priority for the UN Secretary-General António Guterres.”²⁶ However, climate-related security risks have not yet been included in the current UN reforms. One of the main reasons is that the reform structure is highly decentralised and most of the countries do not consider climate change a national security threat. Currently, the UN peacekeeping missions are mainly focused on establishing peace in the conflict regions, but there is a need to adopt practical measures to combat climate change. Despite strategic limitations of the UN Security Council (UNSC), a sustainable

²⁵ Gabriel Benjamin, “Effects of Climate Change in Sierra Leone,” *Concord Times*, February 2, 2015, <http://slconcordtimes.com/effects-of-climate-change-in-sierra-leone/>

²⁶ Jake Sherman et al., “How Can the Security Council Engage on Climate Change, Peace, and Security?,” *IPI Global Observatory*, September 12, 2019, <https://theglobalobservatory.org/2019/06/how-can-security-council-engage-on-climate-change-peace-security/>

national/international policymaking process can directly impact the way implications of climate change is perceived by nation states.²³ The nature of conflict also involves control over natural resources in the conflict-ridden regions. The following data is included to reflect upon the types of natural resources explored in the conflict regions.

Table No. 2
UN Response to Conflicts Linked with Natural Resources
(1948-2011)

SUDAN DARFUR UNAMID	SIERRA LEAONE UNAMSIL	SOUTH SUDAN UNMISS	TIMOR - LESTE UNTAET
❖ Land ❖ Water ❖ Oil ✓ Mandate	❖ Diamonds ✓ Mandate ✓ Sanctions ✓ Expert Panel	✓ Natural Resources (general) ✓ Mandate	✓ Natural Resources (general) ✓ Mandate
LIBERIA / UNMIL	REPUBLIC OF CONGO MONUC/ MONUSCO	SUDAN UNMIS	CAMBODIA UNAMIC/ UNTAC
❖ Diamonds ❖ Logs/ Timber ✓ Mandate ✓ Sanctions ✓ Expert Panel	❖ Minerals ✓ Mandate ✓ Sanction ✓ Expert Panel	❖ Land ❖ Water ❖ Oil ✓ Mandate	❖ Logs/ Timber ❖ Minerals ❖ Gems ✓ Mandate ✓ Sanctions
CÔTE D'IVOIRE UNOCs	ANGOLA UNAVEM I, II, III / MONUA	SUDAN-SOUTH SUDAN BORDER, ABYEI UNISFA	IRAQ / KUWAIT UNIKOM
❖ Diamonds ✓ Mandate ✓ Sanctions ✓ Expert Panels	❖ Diamonds ✓ Sanctions ✓ Expert Panel	❖ Oil ✓ Mandates	❖ Oil ✓ Sanctions ✓ Expert Panel
<u>Legend</u>			
❖ Resources			
✓ Response			

Source: Greening the Blue Helmets – UNEP, 2012.

Patterns of global warming have remarkably changed since mid-twentieth century. It is assessed that the post-industrialisation era has been a source of extreme climate change effects. The empirical data validates that despite technological advances helped modernising

societies, the greenhouse gas emissions and other aspects of environmental pollution has significantly increased.

Importantly, the global effects of climate change suggest that despite the current mitigation policies, global surface temperature will continue to impact regular weather system. The variations in weather pattern will cause climate change related threats including drought, famine, tornados, hurricanes, extreme heat, tsunami and flooding. Tsunamis in Japan in 2011 and in Bali in 2018 are a case in point. Still, the world's under-developed and poor are first and hardest hit by the consequences of climate change. UN peacekeeping missions are also mostly employed in Africa's poor nations. The performance of UN peacekeeping missions in maintaining security and preventing effects of climate change will determine the way respective host nations incorporate climate change in their national security policymaking process.

Research Findings

The research question was answered through a discussion in earlier sections, that is, climate change should be considered a national security threat by host nations. One of the main objectives of this research was to analyse the role of UN peacekeepers to promote climate literacy to combat effects of climate change. The ensuing analysis of data collected demonstrates the following:

- a) First question: when asked the UN peacekeepers if they are aware of the fact that climate change has impact on security environment, 66 per cent of the participants were of the opinion that the security issues emerged due to climate change to a large extent. 30 per cent of them disagreed and only 4 per cent of them were indecisive. The evidence suggests that there is a requirement to build capacity of the UN peacekeepers and interconnect climate change and national security policy making process. The findings also suggest that there is lack of awareness even among the peacekeepers about climate change. The troops working in the field attribute the sudden seasonal changes and increased climatic disaster to natural causes. There is a need to create awareness through climate literacy programme among the UN peacekeepers.

- b) The second question of the survey was: *Do they know that regions more affected by climate change have more security issues?* 90 per cent of the peacekeepers agreed to the statement and thus validated the assessment of this research, that climate change is one of the main causes of potential security challenges faced by the UN peacekeepers in conflict regions. It is, therefore, crucial that the host nations in conflict zones should utilise climate change related data in national security policymaking process. The capacity building of the UN peacekeepers and seriousness of the host nations in creating public discourse about climate change are two of the main components of climate literacy. To some extent, there is realisation of climate impact on security concerns. These climate changes in the form of different disasters affect the operational capabilities and working of the troops.
- c) There is no doubt that weather conditions severely affect the ground operations when the respondents were asked whether *it is possible to manage security issues by managing climate change?* 60 per cent of the peacekeepers agreed that it is possible to overcome this problem by effective management of climate change, provided that the global powers and policymakers consider it as nation security threat and deal the issue at strategic level. The majority of them agreed to the question. Furthermore, there is a need to adopt a comprehensive approach to deal climate change through climate literacy programme. However, 40 per cent of the peacekeepers believed that security issues cannot be resolved through combating climate change.
- d) It was enquired from the peacekeepers *if global powers can help preventing effects of climate change?* 80 per cent of them consented that the practical policy actions by global powers can help in reducing dangerous implications of climate change in conflict regions. There is no doubt that global superpowers being wealthy and causer of climate change are supposed to agree upon long term climate change mitigation policies and actions. Though the damage cannot be reversed but it can substantially be reduced.

- e) The survey also posed a question: *Should the UN peacekeepers be trained to handle the consequences of climate change?* 80 per cent of the peacekeepers said that the formal training modules about the level of climate literacy in respective host nations will be a plus, and thus leading the UN peacekeeping missions in the right direction. 20 per cent of them could not relate to any specific requirement of training to deal with the effects of climate change. The finding demonstrated diversity but also desires climate literacy to be considered as a subject in every aspect of field and academic training. Climate literacy should be a part of every curriculum but troops/police/civilian bureaucrats working in the field are more exposed to the impact of climate change.

- f) The question *whether of any of the peacekeepers ever acquired training in the realm of climate change?* 92 per cent of them responded that “No Training” was given. Only 8 per cent of the peacekeepers affirmed attending a few lectures on implications of climate change. There is a requirement of compact pre-deployment training or course for the UN peacekeepers so that issue of capacity building about climate change is resolved.

- g) The survey posed a question: *if the peacekeepers attended any event/ seminar or workshop on combating the adverse effects of climate change?* 82 percent of them responded negatively. Only 12 per cent of the UN peacekeepers, particularly officers, acknowledged that they attend various seminars and lectures regarding climate change and its negative implications in conflict regions. The officers in command of these peacekeeping troops must be given chance to attend different seminars and workshops so that they could be aware of the latest trends and body of knowledge regarding climate change.

Conclusion

The research question: should climate change be considered a national security threat is answered positively through a discussion and supported by surveyed data. One of the most important conclusions is that there is a serious gap between strategic and operational mandate of the UN peacekeeping missions and thus adopting climate literacy as a method to

create a global response to threats of climate change is crucial. It is also concluded that securitisation of climate change will directly impact the national security policymaking process in host nations. The implementation of climate literacy design is pertinent because negative impact of climate change is posing greater danger to the lives and livelihood of millions of people in conflict regions.

It is ascertained through specific data collection that an efficient and pollution free environment management system would ultimately bring stability, peace and security. One of the deduced evidences of the data collected is related to non-traditional security threats such as natural disasters. The evidence further records two important factors. Firstly, the post-industrialisation regime did not address climate change as a national security threat. Secondly, disproportionate and overstretched utilization of natural resources directly affected the current industrial development.

The significance of this research addresses geo-climatic aspects of the host nations. The study demonstrates how climate change poses grave threats to already conflict-stricken regions of the world and how the UN peacekeeping missions can help promote climate literacy in the host nations. One of the main objectives of this research is to establish links between operational mandate and understanding of climate change. This approach can allow the UN peacekeepers to pave the way to maximise positive contribution to climate literacy and conflict management.

This research recognises that the five permanent UNSC members have varying views on climate change as a national security threat and have yet not developed a comprehensive policy at the strategic level. This is particularly true for the US. Despite the designated strategic, operational and tactical role of the UN peacekeepers, the UN peacekeeping missions need to build capacity regarding climate literacy.

One of the methods is to include climate literacy programme in official training modules of the UN peacekeepers. This approach would not only warrant capacity building but will also ensure proactive participation of the UN peacekeepers along with host nations. The issue of draught for instance and increasing water scarcity has seriously challenged the UN peacekeeping missions. Therefore, the significance of this research also includes the way international climate policies are being formulated. Currently, the capacity

of the UN peacekeepers is based on the degree and extent to which climate change is posing threat to national security. The climate literacy awareness campaign would enable policymakers to assess to implement a sustainable plan to counter climate change.

Furthermore, the host nations in conflict zones should realise that partnering with the UN peacekeepers in creating awareness among public about climate change will help shield against irregular rain, flooding, drought and famine. This approach would help building a critical base for all stakeholders. The research begs the question whether global powers and host nations operate under similar policy and knowledge to combat climate change. A critical discourse analysis of the data collected shows that since most of the UN peacekeeping missions are operating in African countries, the already volatile security, law, and order situation is further increasing conflict over water scarcity and control of natural resources.

The analysis of the surveyed data demonstrates that since no formal training is included in the training module of the UN peacekeepers, it will, therefore, be vital to make it mandatory to study effects of climate change by peacekeepers. The global policymakers should equip the UN peacekeeping missions with kinetic and non-kinetic methods to combat conflict and effects of climate change. Finally, the analysis indicates that while confronting peacekeeping dangers is the main operational/tactical mandate of the UN peacekeeping missions, the impact of climate change can pose serious national security threat to a host nation.