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GLOBAL SECURITY: TRENDS AND ISSUES

Abstract

The concept of Global Security was viewed during Cold War era as an extension of national security of the Super Powers. But the momentous changes in the post-Cold War era, more so in the post-9/11 period, have made the concept truly global in the sense sources of threats to security have multiple referents originating from multiple sources. The premises and propositions of Realist paradigm have been questioned and the locale of decision making on issues of national security has shifted beyond the borders. Security discourses have also transcended the traditional-non-traditional binaries because often traditional security is challenged by non-traditional sources and vice versa. Newer insecurities are emerging and older insecurities are recurring, at times, with unprecedented scale and intensities. Comprehending these insecurities need global integrative approaches which are visible on the horizon. Global community's capacity of dealing with these insecurities of global proportion will depend on what shape the structure of power relations take in future. For all practical purposes, the global structure of power relations will continue to be a mix of unipolarity and multipolarity but newer sources of rivalry and competition are creeping into the system. Stability of the international system will be contingent on whether the ongoing Great Power understanding and cooperation continues to hold ground.

1. Introduction

In the post-Cold war era, one of the momentous changes in international relations has been the absence of patterned and predictable changes, and difficulty of capturing the changes within individual paradigms like realism, liberalism or historical structuralism. Instead of the historical phases of dominance of these paradigms, perhaps plurality of paradigms or paradoxes of paradigms could be the best way of describing the post-Cold War changes in international politics. The developments have been so dramatic in terms of

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intensity, scope and expanse, that most of the basic premises and propositions of established paradigms began to be questioned. The contemporary realities of the world depart so significantly from the Cold War realities that traditional nation states find them difficult to grapple with. Realism, which has been the dominant paradigm during the Cold War, fails to capture and address many of the dramatic developments taking place both within and across national borders.¹ An era of 'new security challenge' ushered in encompassing the proliferation of weapons of mass destruction, terrorism, ethnic and sectarian conflicts, transnational crimes, transnational and global insecurities like climatic disorder and pandemics.² Cold War discourses of security made a clear demarcation between domestic and international issues. But in the post-Cold War era, domestic issues, whether ethnic or sectarian conflicts, violation of human rights or political instability resulting from power struggles among groups tended to form very substantial agenda of international, to be precise, global, concerns, and at times, global action.

Consequently, what we find today is a series of incongruence between the paradigms or the intellectual framework, on the one hand, and real world developments which mostly transcended national boundaries, on the other³. One may take the case of the role and effectiveness of the nation states in managing global public order today. In realist framework, the concept of sovereign nation states traditionally includes national borders protected by national armies. State was the key actor and sovereignty and security of the state were supreme values. International security in an anarchic order, was a function of bilateral or multilateral inter-state relations governed by international laws, norms and practices and institutions. However, the sacrosanct nature of state sovereignty has been subjected to contradictory pulls and pressures in the post-Cold War era. In one sense, the forces of globalization in terms of free flow of information, transnational linkages and cross-border movements of goods, ideas and people tend to erode state sovereignty - laterally, from below, and from above.⁴ A sizable body of literature has grown on weak state, fragile state, failing or failed state.⁵ But in another sense, taking advantage of the forces of globalization –

¹ Failure of realism to capture the complexity of contemporary world politics is deliberated in James Rosenau, *Turbulence in World Politics: A Theory of Change and Continuity*, Princeton: Princeton University Press, 1990.

² See, V.R. Raghavan, "Challenges to Global Security", *Pakistan Horizon*, 60(3), July 2007, p. 23.

³ See, Seyom Brown, "World Interests and the Changing Dimensions of Security" in Michael T. Klare and Daniel C. Thomas (eds.), *World Security Trends and Challenges at Century's End*, New York: Palgrave MacMillan, 1991, p. 10.

⁴ See, Ngaire Woods (ed.), *The Political Economy of Globalization*, Basingstoke: Macmillan, 2000, p. 5.

⁵ For concise and interesting discourse, see Sonali Huria, "Failing or Failed States: Global Discourse", *IPCS Issue Brief*, No. 75, July 2008.

some scholars called it predatory globalization⁶ - like transportation and communication, resource mobilization and technology including weaponry, some states are becoming strong, centralized, and most often, repressive.⁷

The question is: could the existing system of collective security under the United Nations be salvaged and reinvigorated to address the new insecurities? This is a problematic question but suffice it to say for the moment that the UN collective security system operated only in exceptional constellation of world powers⁸, as happened in the cases of the Korean war of 1950-53, the Gulf war of 1990-91. Compared to that, the scenario in Bosnia-Harzegovina or in Kosovo is a commentary of the inherent weakness of the UN collective security system.⁹

The world economy also has undergone massive textural and structural change. Emergence of new breeds of TNCs and MNCs has led to multinationalization of global production, at least 25 per cent of global trade is constituted by intra-company or intra-industry trade. The world financial and capital market is more integrated with huge number of instruments traded in stock markets.¹⁰ What is more disconcerting, the parallel, at times, more pervasive, power of the underworld economic agents combining informal trade in contraband and human bodies and legal economic power tend to dwarf national clouts of many states.¹¹

The upshot of the discussion is that the concept of 'Global Security' could perhaps address most of the security problematics confronting human society in the present and coming decades. Against this backdrop, the purpose of the present paper is to review trend and issues of global security. The second section of the article attempts at frameworking discourses on global security. Section 3 reviews the state of global power balance and in the process, equations of the global power with regional powers will also be reviewed. Section 4 takes up the issue of terrorism and its future. The subsequent sections take up specific issues of global security, namely, energy security, climate change, and spread of

⁶ See, Richard Falk, *Predatory Globalization: A Critique*, London: Polity Press, 1999.

⁷ See, Alejandro Colas, "Neo-liberalism, Globalization and International Relations" in Alfredo Saad-Filho and Deborah Jonston (eds.), *Neo-Liberalism: A Critical Hand Book*, Pluto Press, 2005.

⁸ Seyom Brown, *op.cit.*, p. 14.

⁹ For an interesting discussion of the comparative performance of collective security system in different cases, see, Chapter 3, "Alternatives to Power Politics" in Joshua S. Goldstein and Jon C. Pevehouse, *International Relations*, New York: Longman (9th Edition), 2009.

¹⁰ See, Ngaire Woods, *op.cit.*

¹¹ See, Kathleen Millar, 2010: "Target the markets!" in Global Organized Crime, World Affairs Blog Network, www.globalorganizedcrime.foreignpolicyblogs.com/tag/mafia.html, accessed on 05 January 2011.

pandemics, in succession. Outlook of Global security and the possible shape of collective security will be taken up in Section 8 before Conclusions in Section 9.

Although the paper looks like to have taken a widened and ambitious canvass, one justification is that not much work has been done in recent times taking an integrative view of the concept of Global Security. We have also indulged into an extended discussion on the theoretical terrain not only for raising debate but also for providing empirical insights alongside the theoretical discussion.

2. Conceptual and Theoretical Frameworks of Global Security

What exactly we mean by ‘Global Security’ in the changed contexts we have just portrayed? How is it different from competing concepts of security as well as global security of the Cold War era? How best to approach ‘Global Security’ in the contemporary era? The present section addresses these questions.

2.1 Concept of Global Security in Perspective

We intend to put the concept of global security (GS) in perspective by bringing in competing concepts like traditional versus non-traditional security and examining where would GS fit into that schema. Similarly concepts of comprehensive security, cooperative security and collective security will also be reviewed. Secondly, we also intend sharpen the concept by imputing recent changes in contents in the post-Cold War era.

2.1.1 Traditional Security

Security has been traditionally viewed in state centric military terms to mean protection of border security, political independence and sovereignty. This view of security, national security, to be precise, has been the hallmark of realist formulation of security. One of the early definitions of traditional security has been: “a nation is secure to the extent to which it is not in danger of having to sacrifice core values, if it wishes to avoid war, and is able, if challenged, to maintain them by victory in such a war”.¹² A more precise definition of traditional security has been offered by Arnold Wolfers: “Security, in an objective sense, measures an absence of threats to acquired values, in subjective sense, the absence of fear that such values will be attacked”.¹³ State, meaning

¹² Walter Lippmann, *US Foreign Policy Shield for the Republic*, Boston: Little Brown, 1943, quoted in Abdur Rob Khan and A K M Abdus Sabur, *Human Security Index for South Asia: Exploring Relevant Issues*, Dhaka: University Press Limited, 2010, p. 14.

¹³ Arnold Wolfers, “National Security as an Ambiguous Symbol” in Arnold Wolfers (ed.) *Discord and Collaboration: Essays on International Politics*, Baltimore: Johns Hopkins University Press, 1962, quoted in Abdur Rob Khan and A K M Abdus sabur, *ibid.* p. 14.

political independence, and borders, meaning territorial integrity remained the hallmark of the realist formulation of national security discourse. Security of the state was considered as a supreme value because it was argued as well as believed that if the territorial integrity was threatened by external enemy and sovereignty and independence was endangered, security of the citizens was also endangered. Moreover, the stakes were so high and strategic that citizens should not hesitate to make material and non-material sacrifices for the homeland, it was argued. Some amount of sublimity and myth was created around the concept of national security within traditional security framework.

However, the linkage between state security and citizens' security was not made explicit and transparent. In real life, as was the experiences of countries of the developing world, in particular, that state security was achieved at the cost of citizens' civil, political and economic rights, and state turned out to be the biggest threat to human security. Not only that, within the boundary of the state, various types of inter-religious, inter-ethnic and inter-sectarian conflicts, often in violent shape ensued, and the majoritarian state took the side of the dominant groups and ruthlessly suppressed dissenting minorities, again in the name of law and order and state security. Freedom of speech and other democratic rights were equally flouted by the state, protests and dissent were dubbed as anti-state activities. It has been estimated that over the past century, 30 million people were killed in international wars, 7 million in civil wars but a staggering 170 million people were killed by their own governments.¹⁴ This role of the state was often critically viewed by citizen groups, civil societies and donor communities but the dominance of the state centric security continued all the same until the end of Cold War.

2.1.2 '*Global Commons*' and *Common Security*

In the late 1970s, however, some widening of the concept of security began to take place at the initiatives of the United Nations and many other global leaders. The concepts of international interdependence, North-South Dialogue, non-power influence became popular, although mainly at rhetorical levels. In 1977, at the initiative of World Bank President Robert MacNamara, former German Chancellor Willy Brandt was made the head of an independent commission to look into the problems of already bogged-down North-South dialogue as well as the common problems faced by planet Earth.

Broadly speaking, the Brandt Commission's reports gave new life to earlier North-South proposals by placing them in a new context, which emphasized a dual relationship: the northern nations dependent on the poor countries for their wealth, and the poor countries dependent on the North for their development. The

¹⁴ See, Ramesh Thakur, "Security in the New Millennium", *Newsletter*, Regional Center for Strategic Studies (RCSS), Colombo, 6(4), 2000.

Brandt Commission's two reports, *North-South* (1980) and *Common Crisis* (1983) give primary emphasis to the international issues of food and agricultural development, aid, energy, trade, international monetary and financial reform, and global negotiations. The Brandt reports also sought solutions to other problems common to both North and South, including the environment, the arms race, population growth, and the uncertain prospects of the global economy. Since these problems ultimately concern the survival of all nations, the Brandt Commission's recommendations were presented as a structural programme to address the world's problems collectively.¹⁵ The Brandt Commission report took on board a series of global problems and viewed them in global perspective and imputed intellectual and moral weight to many of the global problems discussed in various fora. The recommendations, however, were mainly of advocacy type. Nor did the analysis in the report make a dent in security discourse couched in realist paradigm.

Global security, however, was at the stage of another independent (nongovernmental) Commission on Disarmament and Security headed by Swedish Prime Minister Olaf Palme. The Commission made valuable contribution to the emerging concept of universal security in terms of 'common security'. The Palme Commission analyzed the causes and failures of the system of collective security under the United Nations Charter. It emphasized that Cold War rivalry between the East and West actually blocked implementation of Articles 39 through 51 of the UN Charter. The idea of creation of an effective UN armed force contingent and other measures for achieving collective security under the aegis of the UN Security Council has not been put into action. "Instead of actions aimed at maintaining collective security as discussed in 1945, priority was given to other functions of a more limited nature", the Palme Commission analysis held.¹⁶ There was a collective failure in instituting an effective reliable international means for maintaining security through legal and political means, instead, military means got precedence. As pointed out in the Palme report: "States can no longer strive towards strengthening their security at another's expense. It is only possible to achieve it through joint effort."¹⁷ However, while the Palme Commission had analytical insights into the virtues of common security, the world leaders did not seem to heed to the precept of common security. Cold War continued to reach its new height in Afghanistan. Whether, however, the post-1985 Gorbachev era could be cited as an example of planned

¹⁵ See, Centre for Global Negotiations, "The Brandt Equation: 21st Century Blueprint for the New Global Economy" in www.brandt21forum.info/About_BrandtCommission.html accessed on 04 February 2011.

¹⁶ See, Alexander I. Nikitin, "The Concept of Universal Security: A Revolution of Thinking and Policy in the Nuclear Age" in www-ee.stanford.edu/hellman/Breakthrough/book/chapters/nikitin.html, accessed on 04 February 2011.

¹⁷ *Ibid.*

scaling down of the Cold War is difficult to say because the process climaxed in the dismantling of the Soviet Union and ending of Cold war itself.¹⁸

To sum up, attempts at widening of the concept of security in the late 1970s and 1980s did not make much of a dent in the conceptual, theoretical as well as policy domains because of the Cold War ambience. Only when at the end of Cold War in 1989-90, the chances of inter-state wars lessened and the prospects of peace dividend became bright, did attempts at widening and deepening security made intellectual and policy impacts.

2.1.3 *Comprehensive Security*

The concept of 'Comprehensive Security' evolved also in the 1980s out of the need for viewing security – both traditional and non-traditional - in a holistic manner. The term 'comprehensive security' is used in three senses – inclusion of non-military threats to the state, military threats to non-state security referents like groups and individuals, and non-military threats to both state and non-state security referents.¹⁹ The concept remained anchored on state and military security but non-military aspects of insecurity were taken on board. However, scholars tend to keep the concept state-centric but include both military and non-military sources of insecurity. One advantage of the concept is that it found resonance with the statist because military security was included. Secondly, it provides a single umbrella framework to capture the dynamics of evolving and changing threats. Raghavan argues that the concept combines the competing perspectives of the 'narrow' and 'wide' streams of security and that it gives a constructive and interactive security outlook involving needs of the state and the people.²⁰ However, to be precise, the concept received more acceptance with policy making discourse than academic exercises.

2.1.4 *Non-Traditional Security – Widening and Deepening of Traditional Security*

¹⁸ There is an interesting debate as to whether the Western capitalist bloc followed 'begar thy neighbour' policy that led to the collapse of the Soviet Union or some kind of cooperative process between Gorbachev and Regan brought the cataclysm. See, Joseph S. Nye, "Gorbachev and the end of the Cold War", *The New Straits Times*, 5 April 2006 in www.belfercenter.ksg.harvard.edu/publication/1531/gorbachev_and_the_end-of_the_cold_war.html accessed on 04 February 2011.

¹⁹ For an elaborate discussion on the concept, see, Mohammad Humayun Kabir, Neila Husain and Segufta Hossain, "Non-traditional Security of Bangladesh" in Mufleh R Osmany (ed.), *Whither National Security: Bangladesh 2007*, Dhaka: University Press Limited, 2008, pp. 216-19.

²⁰ See, V.R. Raghavan, "Introduction" in V. R. Raghavan (ed.), *Comprehensive Security in South Asia*, New Delhi: Delhi Policy Group, 2001, p. 2 in Humayun Kabir *et al*, *ibid*.

With the end of the Cold War, the ambit of security studies has expanded to include non-military aspects human, environmental, social and economic security. Comprehensive security was one of the responses. But the focus remained on military security. A new concept emerged with emphasis on non-military aspects. Non-traditional security discourse was such an attempt that began in the mid-1980s. The most prominent redefinition is one that remained focused on “threat, use, and management of military force and closely related topics” but recognized the need for incorporating economic, environmental issues, culture, values, non-military instruments of power and influence, new actors and environmental issues”²¹

Military security still perhaps is the dominant paradigm, but it is being increasingly realized that military security cannot respond to some of the mankind’s fundamental needs like freedom from poverty, threats to individuals and groups from multiple sources. Mills takes a comprehensive approach when he identifies five types of threats : *territorial threats* (some in traditional sense but mostly in the sense of sovereign incursions by population groups, resource extractions, fishing, diversion of waters), *economic threats* (economic globalization and the sheer weight of international financial transactions provide opportunities to financial criminals to play fouls that affect developments and macro-economic stability, marginalization of the geographically disadvantaged countries, intellectual property rights, demographic issues, *pandemic threats* of AIDS, malaria and water borne diseases), *political threats* (corruption, piracy, illegal narcotics and small arms, extra-parliamentary agitation and street violence, money laundering), and *environmental threats* (transboundary pollution, global warming and nuclear waste, depleted natural resources including water, prospecting of transboundary mineral and marine resources).²²

There is no doubt that non-military factors account for most of the domestic and regional instabilities, violence, death and deprivation. Endemic political violence, decay in democratic norms and practices, rampant corruption in public offices, ethnic, sectarian and communal violence, terrorist activities, acute water crisis, conflicts over resource depletion, deforestation and river erosion, cross-border population movements and their repercussion on domestic politics and inter-state relations – all in varying degrees of intensity and scale combine to create complex matrix of conflicts, instability and sense of insecurity to states and regions.

Of course, some scholars object to the indiscriminate broadening of the concept of security so as to render it a useless analytical tool and suggest positing

²¹ Ann M. Florini and P.J. Simmons, *The New Security Thinkin : A Review of the North American Literature*, Rockefeller Brothers Fund, Project on World Security, 1998, p. 41.

²² Greg Mills, “A 21st Century Security Agenda: The End of ‘defence’ as We Know It?”, *Strategic Balance*, XX(2), May 1997, p. 181.

the concept in a “subaltern” perspective that is sensitive to the dynamics of state formation. This need not necessarily be the case. On the contrary, one may argue that what we term as non-traditional sources of insecurity, like poverty, hunger, malnutrition, degradation of land, water and habitat, social, ethnic and sectarian violence, dislocation in economic activities, all these do affect the core of human existence – to paraphrase the conventional definition of security – are manifest most often in physical terms, and allow in relatively shorter period of reaction times. The state apparatus, on the other hand, do not have the capacity and willingness to face these challenges in a manner that ameliorate people’s sufferings arising out of them. Moreover, the state machinery displays an easy tendency to employ its coercive force to suppress dissent and discontent.

In recent times, a more coherent concept to capture the non-traditional sources of insecurity has been *human security* defined in terms of freedom from fear and freedom from want. Human security viewed in this sense seems to be a realistic approach because it takes care of both violent and non-violent sources of insecurity. However, for the purpose of the present study, we would prefer a generic term like non-traditional security. The long catalogue of insecurity issue we have identified are non-traditional in two senses: first, in terms of sources, second, in terms of the way the impact on the society and human beings. All issues do not operate at the same level, they operate at different levels of collectivities, starting from the state, through societies down to individuals.

Secondly, it should be pointed out that state still remains the dominant player in international relations, development scene and domestic politics. That means the non-traditional sources of insecurity do not operate in a vacuum, they operate side by side with traditional sources of insecurity. That being the case, what is of interest to us is not separate discourses on traditional and non-traditional security interface between them in an integrated fashion.²³

The review of competing concepts of security makes one thing evident that over time, there has been both broadening and deepening of the concept of security in terms of referents beyond the state and sources of insecurity to both traditional and non-traditional domains. Perhaps the greatest contribution of the reconceptualization exercise has been putting individuals or human beings at the centre stage and attempting to bear all other aspects on human beings. As the role of state is conceived to be central in the schema of human security, perhaps the military dimension also comes in. The present author does not have any problem in imputing adequate weight to human security discourse in overall security discourse.²⁴ However, if we take the Human Development Report 1994 as a

²³ See, Abdur Rob Khan, “Interfacing Traditional and Non-traditional Security : Views from South Asia”, Working Paper, Department of Politics, Torquato Di Tella University, Buenos Aires, 2001.

²⁴ See, Chapter 2 in Abdur Rob Khan and A K M Abdus Sabur, *op. cit.*, pp. 11-42.

benchmark of widening the concept of security that includes seven components such as economic security, food security, health security, environmental security, personal security, community security and political security²⁵, perhaps a better formulation to capture other aspects of security would be ‘Global Security’. The Human Development Report 1994 itself allures to global dimensions of various insecurities:

On a global level, one must also acknowledge that when human security is threatened somewhere, it is under stress everywhere. Threats to human security are thus also to be understood at this macro level, such as unchecked population growth without developmental opportunities, which puts enormous pressure on resources and people. Furthermore most environmental threats are in nature global, with global warming and greenhouse gas effects and threats to biodiversity. Finally transnational organized crime and terrorism constitute another global human security threat with multiple layers of implications and consequences for people everywhere.²⁶

Thus, we propose that an appropriate concept of security that captures all possible referents, sources and dimensions of insecurity will be ‘Global Security’. Given the all pervasive nature of globalization today that integrates internal and external dimensions of states, as well as individuals with different levels of collectivities,²⁷ we are suggesting that all variants of security discussed above are captured by ‘Global Security’.

2.1.5 *What is Global Security?*

The basic premise on which Global Security is based on the interdependent nature of insecurities that is insecurity at one place will create insecurity in other places. That means, insecurity at one place or on one referent has high probability of spreading to all possible referents. Global Security, therefore, admits of multiple sources, multiple referents and global impact. As far as sources of insecurity are concerned, we also include traditional military insecurities but at the same time, we hasten to add a qualifier that the nature of insecurities and the impact it creates for nation states may be somewhat different than in traditional insecurity. Clare and Thomas argue, “given the multiplicity of pressing world hazards, the concept of ‘national security’ must be integrated with that of ‘global security’”²⁸.

²⁵ See, United Nations Development Programme (UNDP), *Human Development Report, 1994*, Chapter II, 1994.

²⁶ *Ibid.*

²⁷ See, Abdur Rob Khan (ed.) *Globalization and Non-traditional Security in South Asia*, Dhaka: Academic Press and Publishers Library, 2001.

²⁸ See, “Introduction” in Michael T. Klare and Daniel C. Thomas (eds.) *World Security: Trends & Challenges at Century’s End*, New York: St Martin’s Press, 1991, p. 3.

Global security consists of the measures taken by nations and international organizations, such as the United Nations, to ensure mutual survival and safety. These measures include military action and diplomatic agreements such as treaties and conventions. Global Security is the efforts taken by the community of nations to protect against threats which are transnational in nature. These threats usually fall under the jurisdiction of one of many UN agencies. For example, the threat of a global pandemic is one which is monitored by the World Health Organization (WHO). The threat of global famine is managed by the World Food Programme (WFP). Then there is war/conflict which is the responsibility of the United Nations Security Council to address. In many cases, governments have similar agencies to address these threats and there are typically non-government organizations (NGO's) which take action on these issues. In every case Global Security is best defined as the means by which any threat to human stability and survival which is or has the potential to become transnational in nature is managed and mitigated.²⁹

Former UN Secretary General Kofi A. Annan, said about global security: "Above all, it spells out the interconnectedness of our age, in which the destinies of peoples and the threats they face are interwoven. Not only is a threat against one nation a threat against all, but failure to deal with one threat can undermine our defense against all the others. A major terrorist attack in the industrial world can devastate the world economy, plunging millions of people back into extreme poverty; and the collapse of a poor state can punch a hole in our common defense against both terrorism and epidemic disease".³⁰

2.3 Approaches to Global Security

This section explores a possible theoretical framework of understanding the trends and issues in global security. Our approach in this exercise will be eclectic because there is no coherent theory of global security unlike national security or system security under Cold War politics. We begin with the question: given the continued existence of the states with their fighting power, is realism still a valid framework of analyzing global security? What all new thinking has emerged in the field? Is this emergent framework good enough to capture the enormous complexities and diversities in global security today?

Since realism has been the dominant paradigm in politics and security during the Cold War, we first examine the continued validity of realism, and for that matter, the alternatives to realism, namely, liberalism and structuralism. An exercise in this regard was made by Richard Falk just at the collapse of the

²⁹The definition was found in, www.answers.yahoo.com/questions/index?qid=20081218091500AA18801.html. accessed on 04 February 2011.

³⁰ See, Kofi A Annan, "A Way Forward on Global Security", *International Herald Tribune*, 3 December 2004.

Soviet Union, and consequent end of Cold War.³¹ Falk tentatively concludes that even without Cold War, the planet remains a dangerous place, statist rivalry and regional tensions may exacerbate in some cases.³² But at the same time, looking at the transnational insecurities like climate change and crimes, a complete reorientation of security paradigm was suggested. Based on this ambiguous position, Falk suggests the possibility of introducing World Order Models Project (WOMP) which has attracted attention of scholars and global leaders for quite some time.³³ WOMP thinking shares some common characteristics like strong sense of unity of human destiny; a belief that security encompasses basic needs for all people; a skepticism about the capacity of war to provide security; and a belief that desirable changes in political life throughout history have largely been caused by popular movements and struggles from below.³⁴ But the arguments betray the author's skepticism about capability of WOMP to replace realism. So, realism is incapable of addressing many of the world's insecurities, particularly of the transnational types, yet an alternative framework could not be evolved.

The end of Cold War witnessed the emergence of a unipolar power. Did unipolarity offer any clue to the likely world order? Does it sit well with the well-known hegemonic stability theory or it replaces the latter? Unipolarity is usually described either as a 'brief moment' requiring period of adjustment³⁵ or as something historically insignificant. Birthe Hansen provided a coherent model of a unipolar world order.³⁶ We have already seen nearly twenty years of virtual unipolarity and this period has been of great significance for world politics. Two issues have been crucial since the end of the Cold War: How to theorize the distinctiveness and exceptional character of a unipolar international system? How does unipolarity works in reality? Until now, a comprehensive model for unipolarity has been lacking. Hansen provides a theoretical framework for analysis of the current world order and identifies the patterns of outcomes and systematic variations to be expected.³⁷ However, one problem with the prevailing concept of unipolarity is its all encompassing nature; it subsumes all facets of power. On the other hand, in real life, unipolarity in military field does not have a correspondence in political sphere of global power. Unipolarity has been challenged on many fronts and not all insecurities of the world could be resolved

³¹ See, Richard A. Falk, "Theory, Realism and World Realism" in Michael T. Clare and Daniel C. Thomas (eds.), *op.cit.*, pp. 6-24

³² *Ibid.* p. 20.

³³ See, R.B.J. Walker, *One World, Many Worlds: Struggle for a Just World Peace*, Boulder, Colo: Lynne Reinner, 1988.

³⁴ See, Falk, *op. cit.*, p. 22.

³⁵ See, Charles Krauthammer, "Unipolar Moment: America and the World", *Foreign Affairs*, 70(1), 1990-91, pp. 23-33.

³⁶ See, Birthe Hansen, *Unipolarity and World Politics: A Theory and Its Implications*, London: Routledge, 2010.

³⁷ Hansen, *ibid.*

by unipolar power. Thus, unipolarity, even if sustainable, will have only limited relevance for global insecurities.

Attempts have been made by scholars to argue that unipolarity is a specific manifestation of hegemony theory and contemporary international system both hegemonic and unipolar. Even some scholars tend to see the system as consensual hegemonic in Gramscian sense.³⁸ This, however, is stretching the point a little far, because even in the height of Cold War, hegemonism was a contested concept. Secondly, both unipolarity and hegemonism provide a partial picture of the reality in view of their focus on traditional structure of power relations. The widened concept of security was not taken on board.

A holistic approach to local, regional and global security has been made by Buzan, Waever and Wilde in their book titled *Security: A New Framework for Analysis*³⁹ The book looks at security dynamics of five sectors: military, political, economic, environmental and societal and brings out their interactions with different levels – local, regional and global. The book takes securitization approach in which security is not an objective reality but a perceptual and subjective reality.⁴⁰ The *general picture shows* that the military, political, and societal sectors are dominated by regional security complexes; economic sector is dominated by the global security complexes. Moreover, both global and local levels are significant for the environmental sector. According to this analysis actors let security concerns from one sector colour their security definitions in other sectors, or they add everything up and make a judgement on the basis of some overarching narrative that structures security as such⁴¹

The main contribution of the book to the literature is that it takes an explicitly social constructivist approach to understanding the process by which issues become securitized. Securitisation is accepted as a successful speech act but it is argued in the book that the security speech act is not defined by saying the word security. For securitisation “the designation of an existential threat requiring emergency action or special measures and the acceptance of that designation by a significant audience” is necessary.⁴² In securitization, an actor tries to move a topic away from politics and into an area of security concerns by talking security. The process of securitization is not a question of an objective threat but a subjective perception of a threat. *Securitization is inter-subjective*

³⁸ See, Peter Van Ness, “Hegemony, Not Anarchy: Why China and Japan Are Not Balancing US Unipolar Power?”, *The International Relations of the Asia-Pacific*, 2(1), 2002, pp. 131-50.

³⁹ See, Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework of Analysis*, Boulder, Colo: Lynne Rienner Publishers, 1998.

⁴⁰ Buzan, Waever and Wilde, *ibid.*

⁴¹ *Ibid.*

⁴² *Ibid.*

which means that securitization of a subject is closely related to its acceptance by an audience.⁴³

Buzan and Waever separately deal with the interface between regional security and global security by combining their securitization model and Buzan's own Regional Security Complex Theory (RSCT).⁴⁴ Buzan and Waever argue that regional security dynamics has certain degree of autonomy beyond the reach of the global powers and this pattern is not adequately captured by unipolarity or multipolarity. They argued that regional threats and insecurities move within short distance forming regional clusters. While global forces theoretically may reach out to regional forces, in practice, the global level forces cannot significantly affect the regional security issues.⁴⁵ More or less similar arguments in favour of regional powers and regional security was made by Ozkan who argued that middle ranking regional powers are a new power category who can play important role in new global order, through what he called 'niche diplomacy' or issue by issue approach.⁴⁶

While both RSCT or middle power approaches provide significant insights into the interplay between global and regional security, particularly in view of the current trend towards a multipolar and multilevel structure of global power. But it looks like Buzan and Waever stop at regional level and the global level forces and global balance of power remain patently absent in their schema.

Finally, we deal with very comprehensive contribution to understanding of global security by Peter Hough.⁴⁷ Hough introduces both the conventional 'hard' security issues which dominated international relations during the Cold War and continue to do so today, and the 'soft' security issues which have emerged in the post-Cold War era within the framework of securitization model popularized by Buzan and Waever.⁴⁸ In recent years, with the emergence of critical security studies, there has been an increased focus on non-military threats to security such as terrorism, the environment, transnational crime, poverty, economic instability and ethnic rivalries. The issues that have been dealt with in this volume include: Military threats to security of states; military threats to security from non-state actors; Economic threats to security; Social identity as threat to security; Environmental threats to security; Health threats to security; Natural threats to security; Accidental threats to security, Criminal threats to security; and finally, it

⁴³ *Ibid.*

⁴⁴ See, Barry Buzan and Ole Waever, *Regions and Power: The Structure of International Security*, Cambridge: Cambridge University Press, 2003.

⁴⁵ *Ibid.*

⁴⁶ Mehmet Ozkan, "A New Approach to Global Security: Pivotal Middle Powers and Global Politics", *Perceptions*, Spring, 2006, pp. 77-95.

⁴⁷ See Peter Hough, *Understanding Global Security*, London: Routledge, 2008.

⁴⁸ Buzan and Waever, 2003, *op. cit.*

presents “Towards a Global Security” approach which is both inclusive and comprehensive.

In this paper, we follow Hough’s integrative model of Global Security. In the first two empirical sections of the paper, we look at the structure of global power relations and military balance. After that we deal with sectoral aspects of global security.

3. Structure of Global Power and Global Security

Ever since the end of Cold War in 1989-90, scholars have been busy tracing the changes in global power structure and efforts continue in the same direction today.⁴⁹ Most of the studies end up providing similar set of conclusions: US continued superiority in a unipolar frame of power structure, decline of US absolute power, trend toward economic, political, cultural and technological multipolarity. There is less likelihood that the existing pecking order will undergo any change in the near future.⁵⁰ What, however, would be of interest to us is the relative power profiles and changes therein that have taken place in the interregnum.

3.1 Power Profile in Comparative Perspective

The most important indicator of power is economic, roughly measured by size of the economy. In 2000, size of US economy was \$10 trillion, compared to China at \$5 trillion, Japan at \$3 trillion, Germany \$2 trillion, Russia, Britain and France \$1 trillion each.⁵¹ The US in 2010 economy has grown to \$14.7 trillion compared to a distant second China at \$5.36 trillion and closely following Japan at \$5.27 trillion.⁵² The Russian economy, which has undergone major reforms since the collapse of the Soviet Union, stood at \$2.2 trillion in 2010 and \$2.1 trillion, as of 2009.⁵³ France with its GDP at \$2.2 trillion in 2010 and \$2.1 trillion in 2009 was slightly smaller than Germany which had a GDP of \$2.9 trillion in both 2010. If we compare the economic prowess of the middle powers, India with its GDP at \$4.2 trillion in 2010 and \$3.7 trillion in 2009 stands out not only among other middle powers like Brazil (\$2.2 trillion in 2010 and \$2.0 trillion in 2009) but also established economies like Italy (\$1.8 trillion in 2010 & 2009).⁵⁴ Of course, the middle powers have not attracted as much attention as Great Powers have in terms of their influence in global affairs. But these powers

⁴⁹ See, M. S. Rajan, “Changing Global Power Structure”, in M. S. Rajan (ed.), *Global Order: Recent Changes and Responses*, 1992, pp. 23-54.

⁵⁰ Available at, www.international-security.org/wp/analysis-3/geopolitics-analysis-2/2010-america-maintains-the-global-balance accessed on 05 January 2011.

⁵¹ See, Clare and Thomas, *op. cit.*, pp. 95-96.

⁵² CIA World Fact Book, 2010.

⁵³ *Ibid.*

⁵⁴ *Ibid.*

like India, for example, play an important role in South Asian regional affairs. We also need to take into cognizance that there are at least three candidates who intend to enhance their influence and power potential by getting a permanent membership of the UN Security Council.⁵⁵

We may compare the military spending and strength of personnel in active military service (Table 1). It turns out that US has the largest defence budget of \$741 billion as of 2007 compared to \$380 billion of China, \$92 billion of India, and \$82 billion of Russia. In terms of active military personnel, however, China has the largest armed forces at 2,225,000 followed by USA at 1,385,122, India at 1,325,000 and Russia at 1,245,000.

Global military spending in 2009 stood at \$1.53 trillion in current US Dollar which is a 6 per cent increase over 2008 and 49 per cent increase over 2000. Of this US share stood at 46.5 per cent and China's 6 per cent.⁵⁶ In the meantime, the global powers have already declared beefing up their defence spending. US defence budget for 2011 has been proposed at \$895 bn compared to \$855 bn in 2010. US spending of Iraq and Afghanistan to the tune of \$11.8 bn in 2009 is outside this budget.⁵⁷ China declared a double digit rise in its defence budget to \$92 bn from 2010 level.⁵⁸ Russia declared an ambitious \$650 bn budget for modernization of its military in the coming 10 years starting 2011 for which its annual budget is \$63 bn.⁵⁸ India, in its turn, boosted the defence budget by 11.6 per cent to \$36.3 bn during 2011-12.⁶⁰

The above, however, gives indicative picture of global power balance. We need to take on board the global strategic power balance. According to Arms Control Association, the following is the latest stockpile⁵⁶: **China:** About 240 warheads; **France:** Fewer than 300 operational warheads; **Russia:** approximately 2,600 operational strategic warheads, approximately 2,000 operational tactical warheads, and approximately 8,000 stockpiled strategic and tactical warheads.

⁵⁵ See, Praful Bidwai, "The Security Council Seat Mirage", *The Daily Star*, 22 November 2010.

⁵⁶ See, www.globalissue.org/article/75/world-military-spending.htm accessed on 05 March 2011.

⁵⁷ See, www.useconomy.about.com/od/usfederal/budget/p/military_budget.html accessed on 05 March 2011

⁵⁸ See, www.news.yahoo.com/s/afp/20110304/wl-asia-afp/chinapeoplescongressnpc_military.html accessed on 05 March 2011.

⁵⁸ See, www.rt.com/news/military-budget-russia-2020 accessed on 05 March 2011.

⁶⁰ See, www.iol.co.za/business/international/india-steps-up-defence-spending accessed on 05 March 2011.

⁵⁶ See, Arms Control Association, www.armscontrol.org/factsheet/Nuclearweapons-who-has-what, accessed on 27 February 2011.

United Kingdom: fewer than 160 deployed strategic warheads, total stockpile of up to 225. **United States:** 5,113 active and inactive, nuclear warheads and approximately 4,500 warheads retired and awaiting dismantlement. The 5,113 active and inactive nuclear warhead stockpile includes 1,968 strategic warheads, approximately 500 operational tactical weapons, and approximately 2,645 inactive warheads.

Table 1: Military Balance among Great Powers

Country	Size of GDP US (\$trillion)		Military Spending (US \$billion, 2007)	Military Spending as per cent of GDP	Strength of Active Military Personnel (2008)
	2010	2009			
USA	14.7	14.3	741	5.2	1,388,122
China	9.8	8.95	380	4.3	2,225,000
Russia	2.2	2.1	82	3.9	1,245,000
India	4.9	3.7	92	2.5	1,325,000
France	2.2	2.1	54.4	2.6	225,000
UK	2.2	2.1	50	2.4	195,000
Germany	2.9	2.9	42.2	1.5	250,000
Japan	4.3	4.2	33.2	0.8	239,000

Source: Columns 2 & 3: CIA Fact Book, 2010, Columns 3-5" US Library of Congress, Central Intelligence Agency, 2010.

3.2 Recent Changes in Global Balance of Power

We briefly assess the recent changes and the likely changes in global power structure in a bid to bring out their impact on global security. On the one hand, some scholars assess that global structure of power remains and is likely to remain cooperative, interdependent of the sort observed in Great Power Concert.⁵⁷ Although Fareed Zakaria introduces significant elements of change in global power structure, he reaches a rather optimistic conclusion that while there would be regeneration of US power to recover any decline, 'rest of the world' will also rise.⁵⁸ Zakaria does not see much of tectonic change in the international power system after the 1990s. Others, however, are not optimistic about the newer power balance. According to American scholar John Mearsheimer, China's rise to challenge America will not be peaceful because China's neighbours like India, Japan, Singapore, South Korea, Russia, Vietnam as well as

⁵⁷ See, Graeme B. Herd, *Great Powers and Strategic Stability in the 21st Century*, Routledge, 2010.

⁵⁸ See, Fareed Zakaria, *The Post-American World*, New York: W W Norton, 2008.

Australia would join the USA to contain China.⁵⁹ According to another prediction, in the first half of the 21st century, China-America relations will shape the world while in the second half it will be US-Russian relations. That means while USA will continue to dominate the 21st century, China will fall behind fast recovering Russia.⁶⁰ Resonance of this prediction is found in the argument that flow of resources is taking from the West to the East Asian countries including China and the Middle East.⁶¹

Subhash Kapila is more blunt about his prediction that the world will witness altered power relations in view of continued economic and military distractions that US faces in Iraq and Afghanistan, and emergence of China and Russia.⁶² What is more interesting, he argues that the world will witness a fresh round of Cold War between USA and resurgent Russia. Moreover, he argues that multipolarity is a political and strategic myth. Russia's edge over China emanates from its energy-self reliance, its long Cold War and Super Power experience.⁶³

China, of course, has its own perspective in this debate. According to a scholar at Shanghai Institute for International Studies, "Currently, there are six forces in the center of international arena: the United States, EU, Japan, Russia, China and the emerging power group, playing an important role at the global level. These six forces fall into two groups: the first three forces are the traditional power group while the latter three are emerging power group. As a basic trend of the six forces, the United States, EU, Japan and Russia are declining helplessly in status to varying degrees, while China and other emerging powers go up continuously, correspondingly, rapidly and unstopably."⁶⁴ Zhengliang visualizes a world with two powers at the apex, which he calls, G2 or Chimerica (China + America).⁶⁵

⁵⁹ See, John Mearsheimer, "The Gathering Storm: China's Challenge to US Power in Asia", transcript of 4th Michael Hintze lecture on International Security at University of Sydney on 05 August 2010. See, University of Sydney, www.usyd.edu.au/news/84.html accessed on 28 January 2011.

⁶⁰ See, Bi Kaiyang, "How can China survive in competition with US?". See, www.watchamerica.com/News/84304/how-can-China-survive-in-competition-with-usa accessed on 28 January 2011.

⁶¹ See, David Crane, "Balance of global power changing before our eyes" in www.thestar.com/columnists/article/288185 accessed on 28 February 2011.

⁶² See, "Global Power Balance 2020: Perspective", *South Asia Analysis Group*, Paper 2914, 04 November 2008.

⁶³ *Ibid.*

⁶⁴ See, YU Zhengliang, "Global Power Structure Shifted and Transitional Multipolarity Emerged", not dated, in www.siis.org.cn/cn/zhuasti_view_cn.aspx?d accessed on 28 February 2011.

⁶⁵ *Ibid.*

There is, however, a veneer of consensus among these predictions that multipolarity is going to be transitional at best, and competition and power rivalry are bound to reemerge. This helps us to come to a tentative conclusion at this stage that while US is likely to retain its power superiority, the structure of power may not be one of hegemonic stability or consensual security. In this context, it will be pertinent to review two of the America's ongoing wars – Iraq and Afghanistan.

3.3 On-going America's Wars in Iraq and Afghanistan

During 2010, USA has been preoccupied with extricating from Iraq and Afghanistan by putting in place working political architectures. Election in March 2010 in Iraq has resulted in a hung parliament and with ethno-sectarian differences so deep that by the end 2010, a rather weak government was set up.⁶⁶ Earlier, President Obama said in February 2009, that combat troops in Iraq would be withdrawn by August 31, 2010 with between 35,000 to 50,000 troops to remain in Iraq, he said. They would be withdrawn gradually until all U.S. forces are out of Iraq by December 31, 2011 -- the deadline set under an agreement the Bush administration signed with the Iraqi government last year.⁶⁷

By October 2011, the US Government would train Iraqi police to take charge of law and order situation, and this task will largely be carried out by private contractors. The US State Department is reportedly planning to more than double the number of its private security guards, up to as many as 7,000. Defending five fortified compounds across the country, the security contractors would operate radars to warn of enemy rocket attacks, search for roadside bombs, fly reconnaissance drones and even staff quick reaction forces to aid civilians in distress. The State Department plans to acquire 60 mine-resistant, ambush-protected vehicles (MRAPs) from the US military to expand its inventory of armored cars to 1,320 and to create a mini-air fleet by buying three planes to add to its lone aircraft. Its helicopter fleet, which will be piloted by contractors, will grow to 29 from 17.⁶⁸

From the above plan, it turns out that although combat troops will have been withdrawn, large scale US physical support, even if through the private security forces, will have to be given. Question is whether there will be also gradual reduction in the number of these private forces and gradual takeover of Iraqi affairs by Iraqi government itself. The test of success of US policy in Iraq will lie there.

⁶⁶ Wikipedia, "Iraqi Parliamentary Election 2010", available at, http://en.wikipedia.org/iraqi_parliamentary_election_2010, accessed on 28 February 2011.

⁶⁷ BBC News, "Obama Confirms Plan for US Troop Withdrawal from Iraq", available at, www.bbc.co.uk/news/10839342 accessed on 28 February 2011.

⁶⁸ *Ibid.*

The case of Afghanistan is much more complex and problematic. In Afghanistan, the US reduced its troops to 50,000. However, it has over 92,000 contractors in the country, conducting Obama's counter intelligence strategy which is yet to show any demonstrable success. The negotiations with the Taliban appear to have stalled even before they began. The election held in 2010 was mired in allegations of fraud and rigging. The United States Institute of Peace (USIP) in a book in January 2009 concludes that the focus of US and the international coalition should be to build us credible Afghanistan security institution to establish rule of law rather than getting bogged down in defeating the Taliban forces.⁶⁹

But the world has also been witnessing other issues of global security. We are turning to review some of them.

4. Terrorism and Global Security

Terrorism has been in practice throughout history and throughout the world. But it is affecting global security in the 21st century more than ever because as a result of modern and sophisticated technology, the world has been reduced to a global village, and hence the impact of terrorism on global security is much more colossal than earlier. A huge amount of lives and properties worth billions of dollars have been destroyed since the devastating Al Qaeda attack on US twin towers on 9/11. Apart from the fear of insecurity terrorism brings about, it also reflects in economic decline, unemployment, inability to pay salaries of workers, debt burden; it brings about poverty and a general sense of frustration amongst the victims. Among the many adverse consequences, terrorist attacks in the West stifled economic growth and investment, as targets of attacks shifted to civilian targets, a Milken Institute research said in 2006.⁷⁰

The terrorist groups operate like international business organizations. Terrorists network utilize the existing global economic, transportation and communication systems to organize and manage far-flung subsidiaries and to move funds, men and material from one location to another. Cell-phones and e-mail keep network in constant, while couriers provide cash advances, air plane tickets and passwords to facilitate operations. Terrorists operations are not restricted to territories or ideologies, or to a particular region. They are instead explicitly global in orientation. Terrorist operations flourish more in weak or failed states. The breakdown of authority, law and order gives them the ability to conduct their operations without significant interference. Weak and failed states

⁶⁹ See, J. Alexander Their, *The Future of Afghanistan*, Washington DC : USIP, 2009.

⁷⁰ See, Milken Institute report available at <http://www.milkeninstitute.org/newsroom/newsroom.taf?cat=press&function=detail&level1=new&ID=86> accessed on 01 February 2011.

hold a lot of attractions for terrorists. Failed states flourish their smuggling and trafficking in order to raise funds.⁷¹

Reference to failed states brings up, in passing, the question of the dangers posed by Somali pirates in the Arabian sea leading the vital passage through the Suez canal. Out of 39 acts of piracy in the first 9 months of 2010, 35 were committed by Somali pirates. Regular patrolling and surveillance by 40 warships from 30 countries are proving inadequate. They were holding, as of late December 2010, 26 ships and 605 hostages and the average ransom which has been doubled in recent months is \$5 million.⁷²

In any case, thanks to global level counter-terrorism measures, the frequency and deadliness of international terrorist attacks continue to drop said a US State Department annual report⁷³ The world witnessed 10,999 terrorist attacks in 2009, down from a high of 14,443 in 2006 and the lowest number in five years. Also last year, the State Department listed 14,971 fatalities from terrorist attacks – down from nearly 23,000 in 2006.⁷⁴ At the same time, however, it notes that attacks have risen in Afghanistan and Pakistan, especially as the Pakistani government has undertaken extremist-routing offensives into Taliban and Al Qaeda strongholds. In 2009, 60 per cent of all terror attacks occurred in Iraq, Afghanistan, and Pakistan – with the latter two countries surpassing Iraq for the first time since the reports began compiling the information in 2004.⁷⁵

4.1 Weapons of Mass Destruction and Terrorism

In the context of terrorism, again in the wake of 9/11, lot of discussion, speculation, alarms and policy initiatives have gone behind terrorists taking hold of and using weapons of mass destruction (WMD) or chemical, biological and nuclear (CBN) or chemical, biological, radiological and nuclear (CBRN) weapons and materials. The spectre of what was known as dirty bomb or a portable device to be carried in brief cases was raised when Soviet Union was dismantled and because of perceived breakdown of command and control, it was speculated that insurgents from the break away states could smuggle out fissile materials or small devices and then sell them in international nuclear black markets including Iran. There has been several cases of reported thefts of fissile

⁷¹ Global Source of Summaries and Reviews, “Terrorism and Global security” available at <http://www.shvoong.com/law-and-politics/1627626-terrorism-global-security/> accessed on 07 February 2011.

⁷² See, “Somali pirates more dangerous than ever”, *The Globe and Mail*, 28 December 2010 available at <http://www.theglobeandmail.com/news/world/africa-mideast/somali-pirates-more-dangerous-than-ever/article1851371/> accessed on 01 February 2011.

⁷³ See, US Department of State, “Country Reports on Terrorism”, *Christian Science Monitor*, 05 August 2010.

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

materials.⁷⁶ However, interestingly in most cases experts later come to the conclusion that the smuggled materials were not that lethal. That means the black marketers intend to cash on the high value of the material at times by blackmailing and bluffing. And to date there has not been a single case of dirty bombs being detected.

What about CBN or CBRN or what we call WMD, particularly poison gas, germs or radioactive materials? Again, there has been much of speculations in US administration and its security outfits. However, so far there have been only four cases in last about two decades. The first one was in Oregon in 1984 when a religious cult group contaminated salad with salmonella bacteria in a restaurant in order to prevent voters from turning out for a local election. From the contamination, 751 got sick.⁷⁷ The second incident took place in 1990 in Sri Lanka when LTTE attacked an army base in Jaffna with chlorine gas injuring 60 military personnel and overrunning the base.⁷⁸ The third incident took place in Tokyo subway in 1995 when an extremist cult group Aum Shinrikyo, released liquid Sarin killing and injuring many and creating widespread panic. The fourth one was in USA in 2001 with the anthrax attack.⁷⁹ It may be mentioned that Aum Shinrikyo made as many as 10 abortive attempts before 1995 with biological weapons. The conclusion that one reaches from rather scant evidence of WMD terrorism is that WMD's do not have much military use or there are practical difficulties. Hamas has reportedly explained use of poison is unethical and unacceptable in Islam.⁸⁰

4.2 *Cyber Crimes and Cyber War*

What about cyber crime and cyber wars? Is it also more or myth than of reality? Richard Clarke, cyber expert for both Clinton and Bush administrations authored a sensational volume in which the hypothetical scenario he drew read like this:

⁷⁶ "Slovak Uranium Arrest Reveal Shadowy Market", 29 November 2007 available at, http://www.msnbc.msn.com/id/22022256/ns/world_news-europe/ accessed on 05 February 2011. See, also James A Russell and James J. Wirtz, *Globalization and WMD Proliferation: Terrorism, Transnational Networks and International Security*, London: Routledge, 2008.

⁷⁷ See, John Parachini, "Putting WMD Terrorism in Perspective", *Washington Quarterly*, 26(4), Autumn, 2003, pp. 37-50.

⁷⁸ *Ibid.*

⁷⁹ *Ibid.*

⁸⁰ One can raise thousand questions with Hamas, of course. See, *ibid.* On the practical difficulties and hesitations on the part of terrorists to use, for example, nuclear weapons, see, also Anna M. Pluta and Peter D. Zimmerman, "Nuclear Terrorism: A Disheartening Dissent", *Survival*, 48(2), Summer 2006, P. 66.

Chinese hackers take down the Pentagon's classified and unclassified networks, trigger explosions at oil refineries, release chlorine gas from chemical plants, disable air traffic control, cause trains to crash into each other, delete all data — including offsite backups - held by the federal reserve and major banks, then plunge the country into darkness by taking down the power grid from coast-to-coast. Thousands die immediately. Cities run out of food, ATMs shut down, looters take to the streets.⁸¹

But in real life, such incidents happened. In September 2007, Israeli cyber warriors "blinded" Syrian anti-aircraft installations, allowing Israeli planes to bomb a suspected nuclear weapons manufacturing facility (Syrian computers were hacked and reprogrammed to display an empty sky). One of the first known cyber attacks against an independent nation was a Russian DDOS (Deliberate Denial of Service) on Estonia. Since it can rarely be traced directly back to the source, the DDOS has become a common form of attack, with Russia, China, North Korea, the U.S., and virtually every other country in possession of a formidable military having launched low-level DDOS assaults. Analysts across the globe are well aware that any future large-scale conflict will include cyber warfare as part of a combined arms effort. The 2008 cyber attack on Georgia by Russia to knock out its government computers before an actual attack on that nation, and North Korea's actions in 2009 after a nuclear missile test to launch botnets to disrupt government computer systems in the U.S. and South Korea may also be mentioned. Cyber warriors often use programmes to crash Web sites and computers to cover other, more aggressive actions in the real world. In this chilling and eye-opening book, Clarke and Knake provide a highly detailed yet accessible look at how cyber warfare is being waged and the need to rethink our national security to face this new threat.⁸²

Despite those real life evidence, many took cyber wars only to be read in thrillers. However, in the wake of recent leakage of enormous volume of sensitive documents by Wikileaks headed by Julian Assange, the Wikileaks website in Amazon and EveryDNS, bank accounts and other supports were closed under tremendous pressure and then started what was thought to be a real run of cyber wars. Undisclosed individuals in support of Wikileaks started massive denial-of-service attacks against servers which denied services to Wikileaks. Visa website was flooded with traffic, US Presidential candidate Sara

⁸¹ See, Richard Clarke and Robert Knake, *Cyber War: The Next Threat to National Security and What to Do About It*, ECCO, 2010.

⁸² See book review of Clarke and Knake in <http://www.amazon.com/Cyber-War-Threat-National-Security/dp/0061962236> accessed on 28 February 2011.

Paulin's credit card account was hacked because she observed that Assange had 'blood in his hand.'⁸³

Apart from cyber wars which may occur few and far between, cyber crimes take place too often and costing business enormous amount money. In September 2009, construction company Patko Construction Co. in Maine lost over \$500,000 to hackers and sued the bank for not regularly monitoring the money flow.⁸⁴ Governments and corporate houses, therefore, spend huge amount of money to ensure network security, data security, identity and access management. Cost of cybercrime to USA in 2008 was \$8 billion, to UK, cost of online credit card fraud cost £223 million.⁸⁵

5. Energy and Global Security

Energy security assumes strategic importance in global security on its own merit because without energy civilization would plunge in darkness. Its importance is also derived from its direct relations with climate disorder and food security. More importantly, there is always a probability that energy resources would be militarized.⁸⁶ What is the state of energy security at present and in the coming decades?

A recent projection said, global energy demand will jump by 35 per cent by 2030 vis-a-vis 2005 levels amid rapid economic growth and an improvement in living standards in developing nations. The growth in energy demand will come primarily from developing nations like China, India, Russia and Brazil, where the booming economies are raising living standards.⁸⁷

However, the environmental impact of the enhanced consumption of energy will be lessened by efficiency gains and a shift toward less-polluting fuels, the Texas oil giant said in its "Outlook for Energy : A View to 2030". The latest report is in line with previous annual forecasts by Exxon Mobil and by other energy companies and analysts. But it does find Exxon Mobil making a more aggressive prediction than it did a year ago about the role of natural gas in the global energy mix over the next two decades. Technological breakthroughs have

⁸³ Joshua Norman of CBS news wrote on December 3, 2010: "Is the International Cyber War over Wikileaks a sign of the future?", *World Watch*. See, www.cbsnews.com/8301-505543_162-20024973.htm accessed on 28 February 2011.

⁸⁴ See, www.gadgetell.com/tech/comment/construction-firm-loses-over-50000-to-hackers-and-blames-bank accessed on 25 February 2011.

⁸⁵ See, Janeen Chupa and Simon Schneider, "Innovation Trends in Cyber Security", *Global Security Challenge*, Accenture, November 2009.

⁸⁶ See, Daniel Moran and James A. Russel (eds.), *Energy Security and Global Politics: The Militarization of Resource Management*, London: Routledge, 2010.

⁸⁷ Project by Exon-Mobil. See, <http://www.deccanherald.com/content/133436/energy-demand-rise-35-2030.html> accessed on 25 February 2011.

allowed oil and gas companies to extract vast quantities of natural gas from dense shale and other rock formations once thought too costly to explore.⁸⁸

With global supplies also abundant, demand for natural gas for electricity generation purposes will rise by 85 per cent by 2030, compared to 2005 levels, and will chip away at coal's share in such activities, the report said. Fueled by such gains, natural gas will meet 26 per cent of global energy demand by 2030, up from 21 per cent in 2005, the company predicts. Wind, solar and biofuel energy generation will also grow sharply, but even with the increase, they will still account for just about 2.5 per cent of total global energy demand by 2030, the report said.⁸⁹

If such is the rather rosy picture of energy security, why is that there is so much of scary news about gloomy energy resources? The first problem concerns the huge investment needed for extraction of the energy. An estimate said, total requirement in such investment will be \$16 trillion during 2002-2030, that is \$568 billion per year. The developing world will find it extremely difficult to arrange such funding. In contrast to the above reasonably bright picture, the energy poverty profile may also be put in perspective. By 2030, only 1.4 billion people will have access to electricity with more than as many remaining without electricity. Moreover, because of predominant dependence of the poor in Asia and Africa on biofuel, particularly firewood, continued exploitation of fragile forest land will lead to rapid denuding of forestry, climate change and food insecurity. Thus, the poor in the countries of Asia and Africa are heading for a vicious triangle of climate change, food insecurity and energy insecurity.

For the global oil market, the sources of insecurity for the market emanate from nature of the market itself and price and supply structure. It has been argued that energy is likely to constitute an important component of national security. Possibilities of militarizing the sources and flow cannot be ruled out.⁹⁰ The possibility of terrorist attacks also cannot be ruled out. Over the period 1990-2005, terrorist mounted 330 attacks on oil pipelines and installations.⁹¹

6. Climate Change and Global Security

As far as security and wellbeing of the Planet earth is concerned, chaotic climate changes are not a distant future to all countries of the world irrespective of their level of development and irrespective their share in this mismatch between ecology and polity. Traditional war provoking disputes connected with environmental disorder and climate change are: rights to navigate or fish,

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

⁹⁰ See, Moran and Russell, *op. cit.*

⁹¹ *Ibid.*

diversion of river waters of rivers and lakes commonly used by others, pouring farm and industrial effluents to rivers and seas that degrades the quality of waters. To these has been added the release of industrial by-products like CFC and greenhouse gas in the highly mobile and sensitive medium of the planet, e.g. the atmosphere.⁹²

Scientists and experts are predicting that global warming, if continuing unchecked, is likely to cause unpredictable imbalance in balance of power worldwide and exacerbate the risks of war.⁹³ However, global leaders' response to this alarm signal is only lukewarm, although the physical consequences of climate change in terms of melting of arctic and mountain snows, increase in the frequency, intensity, duration and geographic coverage of extreme weather events like droughts, storms, cyclones, tidal upsurge, even simple rainfall are evident.⁹⁴ Mention may be made of Hurricane Katrina in New Orleans, 2005⁹⁵, Cyclone Sidr in Bangladesh⁹⁶, 2007, flash floods in southern France, 2010⁹⁷, floods in Pakistan⁹⁸ and Australia.

Other consequences are also being discussed in official Climate meets, seminars and conferences. Sea level rise is likely to cause dislocations, loss of agricultural productivity, shortening of crop year, internal displacement, cross-border population movements and the like.⁹⁹ Famine caused by green house induced crop failure may increase regional tensions and conflicts. Climate change already claims more lives than does terrorism: according to the World Health Organization, global climate change now accounts for more than 160,000 deaths annually. By the time the world experiences the climate equivalent of 9/11, or the 2004 Madrid bombings, it could be too late to respond.¹⁰⁰ How far is such a possible dooms day? Recent studies have revealed that mountain glaciers are melting at ever-faster rates, threatening water supplies for millions of people

⁹² See, Seyom Brown, *op. cit.*, p. 17.

⁹³ See, David A. Writh, "Catastrophic Climate Change" in Clare and Thomas (eds.), 1991, *op. cit.*, p. 388.

⁹⁴ See, ?

⁹⁵ See, Wikipedia, "Hurricane Katrina, 2005", in en.wikipedia.org/wiki/Hurricane_Katrina accessed on 25 February 2011.

⁹⁶ See, Wikipedia, "Cyclone Sidr in Bangladesh", 2007, in en.wikipedia.org/wiki/Cyclone_Sidr accessed on 25 February 2011.

⁹⁷ See, BBC, "Deadly flash floods hits southern France", www.bbc.co.uk/news/10327034 accessed on 25 February 2011.

⁹⁸ See, "Pakistan Floods – disaster is the worst in UN history", *Daily Telegraph*, 09 August 2010, in www.telegraph.co.uk/.../Pakistan-floods-disaster-is-worst-in-UN-history accessed on 25 February 2011.

⁹⁹ David Writh, *op. cit.*

¹⁰⁰ See, Janet L. Sawin, "Climate Change poses greater security threats than terrorism", *Global security Brief 3*, Worldwatch Institute, 05 April 2005.

and plant and animal species. Average global sea level has risen 20-25 centimeters (8-10 inches) since 1901, due mainly to thermal expansion; more than 2.5 centimeters (one inch) of this rise occurred over the past decade.¹⁰¹

7. Pandemic and Global security

Infectious diseases like AIDS/HIV, Avian flue, Severe and Acute Respiratory Syndrome (SARS), malaria and other strains of influenza which have increased in their transborder spread may turn out to be threat to national security as well as global security.

Glaring examples of how pervasive spread of diseases like AIDS/HIV lead to serious instability and state collapse has been no where evident so rampantly as in Africa. Population depletion, collapse of social institutions, severe resource competition among different interests groups lead to instability and state collapse.¹⁰² No less significant is the impact of HIV/AIDS on international security, given that about 90,000 peacekeepers are engaged in different parts of the world. Armed forces, although a small segment of the total population of a country, are particularly susceptible to contacting the disease. Extending this point, it has been found that a significant proportion of peace keepers, whether from Africa, Asia or Europe, and whether they are deployed in Africa, or Asia or Europe, are susceptible to this disease. In 1992-93, about 20,000 peacekeepers came to Cambodia, and in 1999, total number of Cambodians in AID was estimated to be 2,20,000, the insinuation being foreign soldiers brought the disease to Cambodia.¹⁰³ In 1997, 10,000 Nigerian soldiers were posted in Siera Leon and at the end of deployment, 11 per cent of them got the diseases. European soldiers posted in Namibia, Bosnia were reported to have contacted the disease. In 1999, a test conducted on 4500 troops participating in an exercise in South Africa found that 50 per cent of them were HIV infected and 30 per cent of them were not medically fit for deployment. These figures raise an important point on international security: the high degree of prevalence of HIV/AIDS may make it difficult for deployment of negatively tested troops to peacekeeping operations because of high prevalence and high turnover.¹⁰⁴

Early 2002, a new type of pneumonia was detected in Guangdong in China and by July 2003, the disease spread to 30 countries, total number of infected

¹⁰¹ *Ibid.*

¹⁰² For detailed discussion, see, Stefan Elbe, "HIV/AIDS: The International Security Dimensions", available at www.stefanelbe.com/resources/ElkeBook.doc accessed on 25 February 2011.

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

being 8,445 and total deaths 812.¹⁰⁵ Total number of infected individuals in 2005 spread of Avian flu was 121 but the economic loss in the poultry sector was devastating.¹⁰⁶

On the basis of the review of global insecurity, we may make an effort at depicting outlooks for Global Security in the coming decades.

8. Outlooks for Global Security in the Coming Decades

We begin presentation of outlooks for global security in the coming decades by highlighting the gist of the projections of “Global Trends 2025” made by US National Intelligence Council (NIC).¹⁰⁷ The key projections of NIC are the following¹⁰⁸:

8.1 International System

- The international system – as constructed in the post-World War II – will be almost unrecognizable by 2025 owing to the rise of emerging powers, a globalizing economy, historic transfer of relative wealth and economic powers from West to East, and the growing influence of non-state actors like business, tribes, religious organizations, and criminal networks;
- By 2025, the international system will be a global multipolar one with gaps between the developed and developing worlds significantly narrowed down. However, to what extent, multipolarity will be accompanied by multilateralism remains unclear;
- Multiplicity of new actors in the international system may add strength to address global issues but at the same time, fragmentation and incapacitation of the international system may also take place. The post-War global institutions including the United Nations may undergo reforms. Whether that will increase the present scale of global governance deficit is appoint.

¹⁰⁵ See, Elizabeth M. Precott, “SARS: A Warning”, *Survival*, 45(3), Autumn, 2003, pp. 207-226.

¹⁰⁶ See, World Bank, “Spread of Avian Flu Could Affect Next Year’s Economic Outlook”, November 2005 available at www.worldbank.org/eapupdate accessed on 28 February 2011.

¹⁰⁷ See, US National Intelligence Council, *Global Trends 2025: A Transformed World*, Washington DC, 2010

¹⁰⁸ Excerpted from BBC News, “Global trends report: key points”, in www.newsvote.bbc.co.uk/mpapps/pagetools/print/news.bbc.co.uk/2/hi/americas/7741241.s... 7/18/2010 accessed on February 2011.

- The continuing age of prosperity will be somewhat slowed down by slowing global economic growth, aging populations in the developed world, growing energy, food and water shortages and adverse consequences of climate change;
- Regional power centres including BRIC may not challenge outrightly global system but these powers may customise policies in and around their neighbourhood and on issues of immediate concerns like energy, terrorism, climate change and the like.
- Strategic rivalries are more likely to revolve round trade, investments and technological innovations and acquisition, but 19th century like arms race, traditional conflicts around territorial expansion, and military rivalry cannot be ruled out in many parts of the world.

8.2 USA and Global Leadership

- Although the United States is likely to remain the single most powerful actor, relative strength of USA – even in military realm – will decline and US leverage in global affairs will be constrained. Scientific and technological advances, use of ‘irregular warfare tactics’ by others, proliferation of long range precision weapons and the growing use of cyber warfare and attacks will increasingly constrict US freedom of action;
- Still US will be expected to play the much needed role of regional balance in the Middle East, despite growing anti-Americanism. Similarly, it will remain a key player in war on terrorism and in solution to problems of climate change;
- To what extent, there will be a corresponding increase in willingness to burden share on the part of other actors like EU, China and other non-state actors remains unclear.

8.3 Nuclear Weapons

- The risk of nuclear weapon use over the next 20 years, although remaining very low, is likely to be greater than today;
- Ongoing low intensity conflicts between India and Pakistan may lead to a broader conflict. The possibility of regime change or collapse in a nuclear weapons state such as in North Korea raises questions regarding ability of weak states to control secure their nuclear arsenals;
- It is not inevitable that Iran will acquire nuclear weapons but ‘other countries’ worries” about a nuclear armed Iran may lead them to develop

new security arrangements, including getting nuclear weapons themselves’

- Chances of miscalculation and unintended escalation in the use of nuclear weapons remain as present as ever.

8.4 Terrorism

- Terrorism will not disappear in 10-15 years but its appeal could diminish if economic growth continues and youth unemployment is mitigated in the Middle East;
- Terrorist groups in 2025 are likely to be a combination of descendants of long established groups and newly emergent collections of ‘the angry and disenfranchised that become self-radicalised’.
- Terrorists may use biological agents but less likely nuclear devices, to cause mass casualties;
- Al-Qaeda could decay, sooner than people think because of its unpopularity in the Middle East. Likewise, because of its harsh ideology, unachievable strategy and inability to become a mass movement, it may not survive a generational transition.

8.5 Global Pandemic

- Likelihood of newer pandemic from novel and highly transmissible virulent human respiratory illness will increase;
- Internal and cross-border tensions from breakout of such pandemic may increase because of pressure to cross-border to escape such diseases or access resource;
- Highly pathogenic avian influenza (HPA1) strains, such as H5N1 and other pathogens such as SAARS, could emerge;
- Likely places of outbreak of pathogenic virus could be high population concentration places with higher contacts with cattle and poultry, like China, India and South East Asia;
- Estimated about one-third of global population would be susceptible to such breakout.

8.6 New Transnational Agenda

- Demand for hydrocarbon will multiply. The world is likely to be in the midst of an energy transition from oil towards natural gas and coal and other alternatives. But it should be pointed out that new technology has taken about 25 years to become widely adopted. Thus energy transition to clean coal or biofuel will longer time range. Highly likely sources of

transition may be relatively inexpensive renewable energy like photovoltaic and wind energy and improvement in battery technology.

- The World bank estimates that demand for food will rise by 50% by 2030 because of rising population, rising affluence and change in dietary pattern in the Western countries. Lack of access to fresh stable sources of water will reach critical proportion because will increased use in agriculture, rapid urbanization and population growth;
- Overall climate change is likely to worsen but regional variations will be observed. A number of regions will suffer from resource scarcities, particularly loss of agricultural output. Sub-Saharan Africa may turn out to be worst victim.

9. Conclusions

As a broad sweep, possibly most of the projections made above seem plausible and there is not much to disagree with these. One can also agree with the general conclusion that major discontinuities, shocks and surprises will dominate the future. However, on many counts, possibly there have been understatements and missing details. In the light of the discussion in the preceding sections and projections made above, we may attempt at outlining some of the major trends in future security scenario.

Firstly, tendency of securitization, that is imputing security or high stake value to an otherwise political problem, is becoming a global tendency. Issues beyond the capacity of individuals or groups to be resolved within ordinary means are considered security problem. The present author, however, does not agree with the necessary condition, that is, securitization is to be initiated through speech act. It may be initiated through other actions or indications. Whatever it is, this tendency of securitization fits well with global security discourse.

Secondly, 'global security' provides an overarching concept to capture most of the problems of insecurities occurring at different levels of collectivities and different levels of analysis. We have tended to argue that, given the overarching and pervasive nature of globalization, insecurities in different sectors and different levels including human security could better be captured by the expression global security. As a kind of secondary deduction, we would tend to propose that perhaps a better expression for the discipline of International Relations could also be Global Studies, because the domestic-international binary tends to disappear in most of our common discourses.

Thirdly, we have argued that global system, as is observed today, will display multiple structure: unipolarity at the military level, oligarchic power structure at the political level, while truly multipolarity will be observed at the economic level. However, qualification needs to be added to the political power structure because some kind of competition and rivalry will remain in Sino-US relations.

However, important power centres like EU, Japan, India, will follow policy of greater concordance with USA. How Russia will translate its military and political power vis-à-vis USA and other European powers remains to be seen. In all likelihood, Russia would like to retain its autonomy in regional affairs and avoid confronting USA on global strategic and tactical issues.

Fourthly, global arms build up – nuclear including WMD as well as conventional – will continue unabated. Newer regional powers will increase their level of defence spending.

Fifthly, a synergic relation will be observed between arms build up and regional conflict spots like Israeli-Palestine conflict, Kashmir, Iraq and Afghanistan. Alongside, ethnic conflicts in different countries will emerge, reemerge or continue.

Sixthly, the menace of terrorism is not likely to go as there will be no dearth of external ideological stimuli, finance, weapons and training. Possibly today's Al-Qaeda centric terrorism will give way to multiple types of violent and extremist activities. Terrorist organizations might be decentralized and terrorism will derive ideological sustenance beyond. More importantly, terrorism will be one among many global problems and will lose its current salience. Moreover, through learning, state's capacity of countering terrorism will increase.

Seventhly, climate disorder and natural disasters are likely to be more devastating not only for the developing parts of the world but also for the developed world. Moreover, climate disorder, energy insecurity and food insecurity will emerge as a triangular vicious circle one feeding the other and this is likely to be particularly acute in the developing parts of the world.

On the whole, therefore, we cannot expect complete peace and stability in the world in the coming decades. Disasters, shocks, surprises, pandemics and cyber crimes may be more frequent and intense. However, global capacity to deal with the unexpected and devastating insecurities will also increase.