50th Pugwash Conference On Science and World Affairs:
"Eliminating the Causes of War"
Queens' College, Cambridge, UK, 3-8 August 2000

DRAFT Background Paper for Working Group 4:

POVERTY AS A CAUSE OF WARS?

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"If through our wisdom we could make secure elementary human needs, there would be no need for weapons and wars." -- Mahatma Gandhi, quoted in J.C.Kapur, "Towards a New Human Order," *Man & Development*, (New Delhi), 12/98

"It seems to be cause enough to commence a 'just and necessary' war that a neighboring land is more prosperous or freer than our own." -- Desiderius Erasmus, *The Complaint of Peace*

THE APPROACH

OVER the 5000 years of recorded history there have been wars, the phenomenon of men being organized to kill in groups on a scale that is *significant* in terms of combatants, casualties and destruction.[1] Over that span of time it has been a common view that it is the desperation of poverty that has driven men to organized violence, to resort to arms.[2] The chorus of voices echoing this view includes such eminent public figures as Mahatma Gandhi and the U.N. Secretary-General, Kofi Annan. It has now even entered the domain of hit-parade songs, the most popular of which,*When*, opens with the refrain:[3]

When money grows on trees/ People live in peace.

The motivation to identify poverty as a causal factor of armed conflict is not difficult to surmise: if the causal relationship is *from* poverty *to* war, then efforts to reduce the prevalence and depth of poverty would be another step towards the elimination – or, at least, a significant reduction - of major wars both between nations and within nation-states. But, as we shall see, the poverty-to-war linkage is more difficult to establish than would appear at first sight; in fact, one could interpret the historical evidence to show that there is little or no causal linkage of poverty leading to war. (There is, however, a very strong linkage of war leading to poverty, but that correlation is not what is at issue when the causes of war is being

considered.) The somber implication of a weak or non-existent linkage of poverty-to-war is that any hope of eliminating or radically reducing the possibilities for war over the next century should not rely too heavily on eliminating or radical reducing poverty with its severe deprivations. War, after all, has other significant pro-active causes and, in this regard, many of them would appear to be more critically important than poverty.

We are understandably concerned about the future when, in this past century, we have recorded more deaths and damage in warfare than in all previous centuries put together: about 37 million, of which about 30 million are attributable to inter-state wars – and in the last decade alone there have been 103 armed conflicts of which 97 have been intra-state wars that have cumulatively taken a toll of nearly 100 million persons in 40 countries. We have, thus, just come through a period that has been justifiably characterized as "the age of barbarism" by the historian, Eric Hobsbawn, in his recent book, *Age of Extremes: the Short 20th Century, 1914-91*. He noted that

without doubt (this has been) the most murderous century of which we have record by the scale, frequency and length of the warfare which filled it.

And the century ended with the most murderous year since World War II. It may thus appear to be overly ambitious to imagine that a truly "civil society" *sans* armed conflict and the barbaric acts that are perpetrated under its cover can be realized in the one we are just entering. We must try nonetheless and the logical place to begin is to focus first on the factors that are the primary pro-active causes of war and accord their elimination the highest priority.

We must identify the causal factors, the better to know how to deal with this tragic state of affairs. In making this diagnosis it is important to highlight two points:

i. there is no need on grounds of morality to link poverty and war: social, economic and political systems that sanction the extremes of poverty in the midst of plenty are to be condemned on moral grounds – and war is to be condemned on the same basis; and
ii. it is important that this linkage not be assumed but demonstrated on the basis of*a priori* logic and reference to the historic record since misdiagnosis of the cause-and-effect relationship will lead to misguided policies.

The hypothesis that poverty acts as a significant pro-active factor leading poor people to resort to armed conflict on the scale of war needs to be validated or disproved by reference to the historical record. The difficulty of achieving validation for poverty as a pro-active factor is simply that, on *a priori* grounds, desperately poor people in poor nations, would not appear to have the ability to organize, launch and sustain major wars because they are very costly. There are, however, exceptional circumstances when finances are not a severe constraint:

when the political leaders and their associated elite group find special financial sources and, through control of the media, to seduce the populace to support that course of action on chauvinistic and other grounds and/or, through repression, to compel that support.

This leads to the question: does poverty play a significant role as an aspect of the circumstances that enable such leadership to attain and maintain their power – especially their power to lead their nation (or their group within a nation) to war? Answering this and related questions calls for two different approaches:

- *an anecdotal approach* that relies on a sampling of cases of armed conflicts to determine what factors, *if any*, they have in common - and, at the same time - cases of situations where no wars have occurred though the key factors evident in both war and no-war cases happen to be similar in key respects, and
- *a modeling approach* that has pretensions to greater rigor in identifying the role of poverty midst the constellation of other factors that can be identified as possible causes of war.

We should consider both approaches before turning to consider what can be done to reduce or eliminate the scourge of war.

POVERTY AS A CONTRIBUTOR TO A VICIOUS CYCLE LEADING TO WAR

A) The anecdotal approach: identifying the possible roles of poverty as a causal factor leading to war

i) Do wars spring from poverty-induced desperation and/or from awareness of wide and growing disparities in wealth and incomes?

OVER the course of the last few decades there has not only been an increase in the number of the desperately poor but, as well, a widening gap between the rich and the poor. Despite achievements that have lengthened the average span of life of all people on the planet, reduced morbidity rates and, in many other ways, improved other qualitative indicators, about half of the world's population still struggle to exist on a daily income of less than $2 with all the deprivations in terms of access to educational, sanitation and health facilities and other vital services that that very low level of income implies.

The issue is whether - and, if so, how - this deplorable phenomenon of widespread deep poverty and the widening wealth and income gap has increased the probability of armed violence on a scale that could qualify as "war."

Poverty and war have co-existed for eons. There were innumerable armed conflicts during these years that took up that challenge in the form of armed revolts, but, except for uprisings such as that led by Spartacus in the era of Rome's dominance and the Peasants' Wars in the Middle Ages, the conflicts were almost all inspired by dynastic ambitions underlayed by religious, tribal or ethnic differences. The condition of poverty was not then and is not now as significant a factor as one would imagine due in large part to the psychological/sociological attributes of the poor who tend to tolerate their suffering in silence and/or to be deterred by the force of repressive regimes that impose acceptance of whatever fate the political leadership decides to mete out. Characterizing the condition of poverty *"as perceived by the poor"*, the authors of a recent World Bank document, *World Development Report 2000 : Attacking Poverty*, ventured the astute observation:

(Deep poverty) is multidimensional going well beyond monetary income and consumption to include education and health, and beyond these, to include risk and vulnerability and a sense of voicelessness and powerlessness.

This sense of voicelessness and powerlessness translates into passivity. It is a state of mind reinforced by religious beliefs typified by the much repeated statement attributed to Jesus: *"the poor ye shall always have with thee."* This is a view common to all religions, a view that tends to encourage passivity, that is, an acceptance of the prevailing state of affairs as an arrangement that is ordained by some higher power. But beyond that, in as much as the concomitants of poverty are illiteracy and ignorance of worldly affairs, the poor become very susceptible to the messages of war-bent demagogues and often willing, even eager, to be the fodder that risks being ground down in the bloody mills of war. And if this seduction process under the rubric of jingoism and chauvinism does not succeed, there is also the fear factor that can be relied upon to mobilize combatants and supporters for the war machine. The common attributes of those situations conducive to acts of war are, thus, one or more of the following: political repression of dissidents, tight control of a media that stirs up chauvinism, racial and ethnic prejudices, religious fervor and sentiments of *revanchism* or revenge. The poor are led to succumb to the siren-song of leaders who, when bent on travelling down the paths to war, have at their command the power to create conditions supportive of their own self-serving purposes, including war.

When the political leaders of poor countries engage in war and thereby divert scarce financial and other resources to armed conflict, they are almost always placing a lower level of priority on the well-being of the people they lead than they do on achieving military-related objectives.[4] This is evident whether they divert budgetary funds and/or resort to securing special sources to finance war by engaging in drug dealing, diamond smuggling, and/or brigandry in general; and/or by gaining the support of the governments of those neighboring countries whose leaders are motivated to help with money and troops on the basis of geo-political reasons or of religious, tribal or ethnic sympathy. The reliance on these sources

greatly influences not only the character and scale of the armed conflict but, as well, the objectives that are being sought by the political leaders and their associated elites. These objectives are invariably to gain or maintain (by diversion of attention) their power with the perks and riches that come with that power. Thus, these armed conflicts can hardly be said to be caused by poverty as a principal factor when the greed and envy of leaders and their hegemonic ambitions provide sufficient cause. The poor would appear to be more the victims than the perpetrators of armed conflict.

It might be alleged that some *dramatic* event or rapid sequence of those types of events that lead to the exacerbation of poverty might be the catalyst for a violent reaction on the part of the people or on the part of the political leadership who might be tempted to seek a diversion by finding/fabricating an enemy and going to war. According to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace, there would not appear to be any merit in this hypothesis. After studying 93 episodes of economic crisis in 22 countries in Latin America and Asia in the years since World War II they concluded that

Much of the conventional wisdom about the political impact of economic crises may be wrong... The severity of economic crisis - as measured in terms of inflation and negative growth - bore no relationship to the collapse of regimes. A more direct role was played by political variables such as ideological polarization, labor radicalism, guerilla insurgencies and an anti-Communist military... (In democratic states) such changes seldom lead to an outbreak of violence (while) in the cases of dictatorships and semi-democracies, the ruling elites responded to crises by increasing repression (thereby using one form of violence to abort another.[5]

If armed violence is not correlated or caused by economic crisis and the ensuing exacerbation of poverty, the explanation might be found in the fact that the challenged leaders suffered a loss of ability in an economic crisis to find the financial resources to make war and/or to persuade the populace that making war is an acceptable option, and/or to face down an opposition that may be too numerous and well organized to be humbled by the fear of repression. By contrast, a condition of affluence provides the political leadership more options including the choice of preparing for war by amassing weaponry even when this course of action is inimical to the interests of the population-at-large. Thus, we find that the antagonists in the major wars of the century were relatively wealthy in the sense that the leaders had at their command the very considerable resources necessary both to build up their armaments and their armies and to propagandize and repress to gain acceptance for policies that would use those weapons.

The role of the affluence factor is typified by the accounts in the Millennium edition of *The Economist* of the major wars that occurred over the span of the last millennium. Commenting on the war of 1914-18, *The Economist* wrote:[6]

the summer of 1914, the rulers of Europe, after a century of huge economic progress and a decade of rising tensions, marched their peoples, the boss-eyed leading the blind, to the brink of collective suicide. The 'great war' was to kill over 8 million combatants… Worse was to spring from the war: the Soviet and Nazi regimes, and a second war, greater still, in which civilians too were routinely slaughtered, in horror exceeded only the mass murder of the Holocaust. And none of it need have happened.

In the same issue (page 20) the commentary noted that almost three decades before, in 1887 on the occasion of Queen Victoria's jubilee celebrations, they reported that there had been *"fifty years of national progress and prosperity such as England has never known before."* And a popular ditty went like this:

We don't want to fight, but by jingo if we do,
We've got the men, we've got the ships, we've got the money too.

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There is a popular view that it is not poverty *per se* that is the powerful factor in this process but the *awareness* of the poor of the great divergence of incomes, a divergence that has now reached a stage where the poorer half of the planet's population are struggling to exist on less than 1/20th of the world's income. And that income gap between the average person who lives in a poor developing country and the average person who lives in the rich industrialized countries has been widening steadily over the past few decades; the same can be said about the gap between the poor and the rich within both types of countries. That gap has reached a point where it has reached Grand Canyon dimensions. The bald statistics are eloquent: in 1960 there was a 30:1 gap in average per capita incomes between the fifth of the world's people who live in the rich industrialized countries and the fifth who live in the poorer countries, but by 1990 the gap was 60:1, and as we enter the new millenium, it is 74+:1. The contrast is now between $30,000 annual average income per person and less than $400.[7] This troubling dynamic has given rise to tensions and, in turn, to protestations that take the form of violent riots and insurgencies. It has also given rise to warnings by commentators of impending armed conflicts on the scale of war.

Thus, to cite a very recent example, we read in an informative book, *Bread, not Bombs: A Political Agenda for Social Justice*, written by a prominent Pugwashite, Senator Douglas Roche, that *"modern wars do not just happen: they spring from the terrible disparities in the possession of wealth and resources..."*[8] In this assessment he joins good company: in a speech given last October by the U.N/ Secretary-General, Koffi Anan recently observed that

the fact that political violence occurs more frequently in poor countries has more to do with failures of governance, and particularly with failure to redress 'horizontal

inequalities', than with poverty as such... One highlyexplosive structural factor is the unequal distribution of power and resources between groups that are also differentiated by race, religion, or language... Grievances by groups with uneven access to power can providea trigger, as can greed poised to take advantage of the chaos of war.

Then there is Sir Shridath Ramphal of the *Commonwealth Secretariat*:

Every child born in the North consumes over a lifetime, 20 to 30 times the resources and accounts for 20 to 30 times the waste of their counterparts in developing countries - (and) 95 percent of world population growth will take place in the South. So where is the bomb ticking? The truth is that there are many explosions in the making.

It is not difficult to find other examples of commentators pointing to the factor of extreme inequality and adding drama to their commentary with the concepts of "triggers" and/or "explosions" as the apocalyptic denouement.[9]

While an analysis of the process leading to the pulling of the metaphoric trigger is sometimes attempted, the description is almost always couched in general terms. The commentators who address this issue are understandably cautious about the timing and the nature and intensity of the breaking point, the triggers. In looking back to the history of war to provide a test of the hypothesis about the role of poverty in the process by which nations - or groups within nations - are led along the path to war, it is essential to differentiate the pre-conditions and the events that act as sparks to precipitate war. The events that are often characterized as causus belli are invariably pretexts that are of little significance in themselves as, for example, the murder of Archduke Ferdinand in Sarajevo in 1914 that provided the spark for the onset of the first World War. We know, however, that the political leaders who were bent on going to war for reasons related to the gaining of hegemonic power and the prestige and spoils that come with that power had plentiful arms and detailed battle plans at the ready, waiting only for some pretext to spring into action.[10]

In an effort to explain those cases where extreme poverty and excruciating hardship exist but no war has ensued, some analysts have been prompted to explain the "no-war" scenario by noting the absence of a trigger event. Others, digging deeper for their explanations of the absence of war-precipitating factors go beyond the poverty factor to identify the roles of such mediating factors as i) culture, when through religion and other means it has been inculcating passivity and fatalism, ii) repression, when through the instrumentality of an overpowering authoritarian government it instills fear of dissent, and iii) comparative weakness of civil society in relation to government and of the government in relation to other governments, when the unequal power relationships deters challenge without reference to rights

or fairness and the*only* realistic course of action open to the injured and weaker party is to talk, not fight.[11]

The issue of inequality in all its forms is central to the maintenance of "civil society" in its broadest sense and to a global state of affairs characterized by the absence of large-scale armed conflict and its threat. When inequality becomes very pronounced both within nations and between nations one would have to be figuratively deaf not to hear the warning bells ringing loudly, ringing to disturb our conscience and to add disconcerting uncertainty to our future. It would, however, be rash to assume that the denouement of the trends associated with these disparities in income must lead to violent outcomes of the nature of international or intra-state armed conflicts on the scale of war. The historic record reveals that there has not been – and there is not now - a significant correlation of countries with high inequality being more often engaged in war and, to look at this issue from the other side, a significant correlation of developing countries with low degrees of inequality escaping the scourge of war.

We can identify a few developing countries that are characterized by an exceptionally high degree of inequality of wealth and incomes as ones that are, or have recently been, wracked by civil war: Sierra Leone and Columbia are the prime examples. In both these countries half the population have about 5 percent of their country's total income. But there are others with extreme degrees of inequality that have not experienced such tragedies. And, if we look at all those poor countries with a much fairer distribution of wealth and income, we find some that have undergone the same civil war traumas as Sierra Leone and Colombia, as, for example, to take the most dramatic recent case, Rwanda where 1/5th of the population possesses about 40 percent of total income.[12] Such divergent roles played by the factors of extreme poverty and inequality suggest that we need to search for factors at play other than poverty and/or the widespread perception by the poor of a gross lack of fairness in the distribution of wealth and income.

True, the somber scenario of growing inequality clouding the future contains a conundrum: if the poorest half of humanity living in the developing countries were to aspire to close the income gap from 1:74 to, say, 1:10 - and aspiring to one-tenth of the income of those in the industrialized countries would not seem to be a presumptuous target - the extra resources required and the additional waste and emissions would put extraordinary pressures on the planetary system in physical environmental and economic, financial and social terms. To deny those aspirations on the grounds of the planet's limited capacity to absorb the resultant pollutants or the limited availability of such basic resources as clean water and fertile soil would be not only unconscionable but also very destabilizing, especially as modern communications have made those in the developing countries aware of the quality of life on the other side of the proverbial tracks. But, is the metaphor of a ticking bomb an apt one to apply in this case?

There is no denying the somber outlook for our global future if the prevailing global trends of polarization and accompanying stress continue on their present trajectory. Tensions will build to a point of "crisis", defining crisis as one dictionary does, *"in political, international or economic affairs, an unstable condition in which an abrupt or decisive change is impending."* However, the denouement of the crisis may not, need not, and most likely will not be taking the form of major wars, nor even of intra-state armed conflicts on a large scale. Small-scale armed conflicts in the form of riots, civil conflict and other manifestations of societal breakdown will likely continue to be frequent, but their scope is likely to be limited to those countries that are both poor *and* undemocratic or with weak democratic institutions. Given the relative power balance between the rich and the poor countries and given the dire consequences of war on the lives of the poor, the denouement would not likely be armed conflicts instigated by the poor seeking to better their lives at the expense of the rich, but rather the reverse. Tragically, the most probable scenario of violence erupting under intense pressure will be the poor fighting the poor, mostly within their own nation states as ethnic, tribal and religious differences are exploited by political leaders and their elites for their own ends.

It should, thus, not be surprising to learn that the major armed conflicts of the last decade - and still being waged today - are characterized by their overwhelmingly religious, tribal and ethnic nature, their localized scope (mainly in African nations), their relatively low combat casualties and very high cumulative damage to life and property.[13] There are, however, some relatively new features: i) the nations afflicted are generally very very poor and very very weak in terms of the governmental organizational structure and operations and, in particular, democratic processes in both the selection of political leaders and the respect for human rights; and ii) the combatants are generally ill-trained and illiterate conscripts, including an estimated 300,000 child soldiers (about 2 million of whom have been killed over the course of the past decade).

The social fabric - never strong in new ex-colonial regions carved into countries with borders established without much reference to tribal, ethnic, and religious groupings - has been further shredded by the armed conflict.

Many analysts, including Senator Roche in his book, *Bread Not Bombs*, and Michael Renner, in his recently published book, *Ending Violent Conflict*, make a great deal of this change in the nature of warfare, Renner referring to the shift of warfare from inter-state to intra-state as *"a paradox of the 20th century."*[14] It would be too simplistic and unhelpful to let this phenomenon remain a paradox, a concept that suggests it is beyond rational explanation. In a speech delivered a few years ago,[15] a helpful answer has been offered by a person very much involved with these wars, Jan Eliasson, the former and first U.N. Under-Secretary for Human Affairs, former Swedish Under-Secretary of State for Foreign Affairs and now Swedish Ambassador to the U.S.; his explanation centers on *"the increasing*

importance of internal factors in conflicts - ethnic, religious and cultural." In a recent talk he went on to explain:

The explosion of civil wars has been caused by a release of pent-up internal forces... We have now factors (at play) which for too long were suppressed, exploding in our face... This has led to a tendency towards fragmentation, a tendency towards micro-nationalism. Nations are being divided along ethnic lines.

And an anonymous author writing in *The Encyclopedia Britannica* on the theme of the causes of war characterized the current type of war as *"an instrument for gain or to maintain dominance, a weapon for greed and lust for power."*

To the question, why the sudden upsurge of these localized wars in the recent past? the answer given is the cessation of the "cold war" and with the symbolic significance of the fall of the Berlin Wall in 1990, the repressive forces motivated by great power rivalry ceased to operate. But the legacy was a world where arms were in abundant supply and governments previously sustained on the support systems of the cold war were left weakened. Furthermore, technological change in communications has only recently enabled dissident groups to gain easy contact for trade and, thereby, to obtain the financing for arms purchases whether through seizing resource-rich areas or trafficking in drugs or through other clandestine operations. Suddenly ethnic, racial, religious and cultural differences could be exploited by demagogic leaders for the cause of secession and/or sheer brigandry. In this period, the extent and degree of poverty may well have changed – the former U.S.S.R. being the most dramatic example – but in most countries that became afflicted by internal armed conflict, the change in the extent and depth of poverty would not have been sufficient to be a significant factor to explain the upsurge of armed conflict.

However, it should be noted that no commentator dismisses the role of poverty as inconsequential. In fact, Mr. Eliasson in his speech makes a rather typical allusion to this factor in observing that *"often, one can see the risks of conflicts coming from the social and economic situation."* The belief of every commentator writing or speaking on this issue is that poverty-related economic, social and political conditions should be characterized metaphorically as "dry tinder" waiting for a match. What is not clear, however, is how, in their view, the process of increasing economic, social and political stress leads to armed conflict. There is undoubtedly a*vicious* cycle within which poverty has played a role but it is never demonstrated that this role is a pro-actively causal rather than passive and, therefore, facilitating *once other factors come into play*. Reference to the historical record – as I read it - indicates that assigning the passive/facilitating role to poverty is the realistic one.

This would suggest that the place to find the root causes of war is in the realm of governance: when the institutions and policies of the war-afflicted nations are not

reflective of the will of its citizens, when the citizenry is unable to enjoy uncensored discourse or freedom from fear of repression, that is, when there is neither transparency nor accountability to the people by their elected political leaders – and, as well, their unelected ones, that is, the corporate power brokers who operate behind the political curtains, the probability of war is greater. Greater poverty does not increase the probability of war except to the extent that it is correlated with illiteracy and parochialism and, therefore, greater susceptibility to the siren song of political leaders, but this is a very tenuous connection as demonstrated by the fact that the overwhelming percentage of impoverished nations have not in the past and do not now suffer the pangs of war to add to the other miseries associated with poverty.

ii) Has deprivation in the form of limited and decreasing access of a populace to basic resources played a major role in the war-making process?

THERE is a school of thought that believes that wars emerge as a consequence of "poverty" when poverty is conceived as a form of deprivation that goes beyond income to include serious degrees of inaccessibility to vital resources with resultant severe societal stress. This resource-deficiency thesis runs along the following lines: war is one of the outcomes of the juxtaposition of several trends among which the critical ones are the rate of growth of population and their consumption, the growing scarcity of fertile land and potable water to adequately support this increase in population, the rapid depletion of watershed-protecting forests, the deterioration in the quality of the environment and similar phenomena. This scenario has a distinctly Malthusian flavor.[16]

There are many analysts who link poverty and related resource deprivation with the intra-nation armed conflicts that are considered to be "civil wars." In recent history these conflicts have become the dominant form of warfare. Senator Roche joins this group in asserting in his book, *Bread, Not Bombs*, that

(whereas) the hot and cold wars of the 20th century were mainly fought over the great ideological divides.. the armed conflicts of the 1990s have been fought over the access to natural resources and the inability of weak States to mediate between the competing demands of various ethnic, racial and religious groups. These conflicts have largely dealt with disputes within States over land ownership, environmental change, water scarcity and food shortages, and illustrate the link between armed conflict and social and economic development.

And *The Economist* in its March 25th issue titled, "A soluble problem", sets the stage for a similar thesis in focusing on water availability:

What could be more basic to life than a drink of water?" they ask. "Yet more than a billion people have no access to safe water, three times as many lack adequate

sanitation. To disease is added the prospect of drought... On present trends, world demand for fresh water will grow sharply, by 70% for household use by 2025. Shortages seem inevitable -*and even war*.

Michael Renner, Peter Gleick and Professor Thomas Homer-Dixon are prominent among the group of analysts who make this linkage between deprivation and war.[17]In his recent book, *Ending Violent Conflict*, Renner writes,

These conflicts are typically driven by a multitude of pressures and instabilities that threaten to shred the social fabric of societies... (They are) a toxic brew of growing disparities in wealth, increasing unemployment and job insecurity, population growth and environmental degradation (that) is provoking social discontent and polarization, leading to political strife in many countries with developing countries most affected.

Peter Glieck, director of an environmental think-tank in California that specializes in research on water, has written about this linkage issue at great length,[18] the latest version of which declares that

History shows that access to resources has been a proximate cause of war, (with) resources both tools and targets of war... While many of the past, present and future causes of conflict and war may seem to be little or no direct connection with the environment or with resources, a strong argument can be made for linking certain resource and environmental problems with the prospects for political frictions and tensions, or even war and peace.

Professor Thomas Homer-Dixon of the University of Toronto has pointed to *"the significant links between environmental and demographic pressure and violence in the developing world."*[19] In support of his views about the relationship between "stress and violence" he cites the work of others such as that of Professor Nazli Choucri who has written a book called *Nations in Conflict: National Growth and International Violence*, wherein he points to

the grim effects of land scarcity, fuelwood scarcity, depletion of water supplies and fish stocks, etc., resource scarcities that increase the chances of resource wars among countries.

It is interesting to note that none of the case studies they cite contain an elaboration of the steps or stages of rising tension due to resource deprivation that have erupted in armed conflict on the scale of war. This assessment is shared by Professor Goldstone who, in discussing the arguments in the Environmental Security and Violent Conflict debate, concludes that

neither Homer-Dixon nor any of the scholars associated with his projects have been able to demonstrate that large-scale regional conflicts, either wars or major

rebellions or revolutions directly result from the depletion or degradation of environmental resources.[20]

Renner's allusion to "social discontent and polarization" leading to "political strife" may be true. Gleick's reference to "political frictions and tensions" also appears to be reasonable. These are strife-laden situations, but not necessarily warfare. Professor Homer-Dixon goes further and writes of "resource *wars* among countries" resulting from resource scarcities and, thereby, goes too far. The pertinent question not answered by any of them is: how does tension and the resultant stress become transmuted into armed violence in the form of large-scale conflict? This transmutation cannot be assumed. The context needs to be specified. and the linkage between poverty and war needs to be traced to reveal how the many cited pressures associated with deprivation lead to the violence of large-scale armed conflict. The attempt to be more rigorous in tracing the relationship of the key factors and their impact on war-making and war-prevention raises the methodological issue and this, in turn, leads some to suggest an approach involving modeling.

B) The rigorous approach: does modeling the process leading to war help illuminate the role of poverty in the constellation of causal factors?

AN anecdotal approach as the basis for an interpretation of historical experience is believed by many to lack rigor. They suggest a modeling exercise to achieve an understanding of the process that relates poverty to war. Tracing the impact of all the key factors in their complexity would then illuminate the dynamic relationship between poverty and war. The modeling proceeds along the following lines:

- a societal condition of widespread and deep poverty is essentially deprivation suffered by a large segment of society of some important basics essential for sustaining life such as sufficient income to provide for housing, clothes, food, education and health services and adequate opportunities for productive employment, and that degree of deprivation - and of hope - leads to societal stress;
- that stress, in turn, leads to increasing the anger and frustration of the poor suffering these deprivations who are then receptive to being exploited by violence-promoting war-bent demagoguery,
- then it only takes a spark...

We can even schematically set out under what circumstances deprivation-induced grievances might turn towards armed large-scale violence by postulating the necessary conditions such as the following:

i. an increasing degree of deprivation,
ii. an increasing intensity of grievance,

iii. a decreasing accessibility of the channels to vent the grievances and/or of hope of achieving some success,
iv. the opening of opportunity for an improvement and a growing sense that the chances for success are enhanced,
v. the spread of the grievances on a large enough scale so that mass mobilization becomes possible, thereby, enabling a sharing of the risks among a large number.

Logical as that modeling approach might sound, there are insurmountable difficulties in applying it to the real world with all its complexities. This is especially so as the critical concepts of poverty, stress and armed violence are slippery, varying in form and degree from case to case so that their meaning and relevance are neither clear nor consistent in each case nor across the many cases involving different cultures and histories.

One of the most comprehensive of such modeling exercises is that undertaken at the University of Toronto under the direction of Professor Homer-Dixon, *The Environment, Population, and Security Project* and *The Project on Environmental Scarcities, State Capacity and Civil Violence*. The gist of their main conclusion can be summarized in the words of Professor Homer-Dixon:[21]

international theorists have usually focused on the possibility of interstate conflict over resources.. We are claiming that because environmental scarcities are worsening we can expect an increase in the frequency of conflicts with an environmental component…Factors raising the general level of grievance within the population change the political opportunities for violent collective action, increasing the probability of violence among groups. Scarcities can contribute to heightened grievances and alter the opportunity structure in three ways: first, scarcities can cause social segmentation – group formation and strengthened group identity; second, scarcities damage the relations between state and society; and/or third, scarcities debilitate the strength of institutions, in particular the state.

The practical utility for policy-making of the sequential impacts of the various factors that has been generated by these modeling exercises is negligible. The reasons for this pessimistic assessment can be appreciated when three of the key concepts – poverty/ income scarcity, stress/grievance level and violent collective action - are examined:

- ***Poverty / income deprivation***: at one level this is unambiguously a condition characterized by deprivation of the basic necessities of food, housing, clothing, educational and health services and, above all, dignity. Squalor, fatigue and fatalism are its hallmark. But at another level poverty is an ambiguous concept including as it does "felt needs" that go beyond the availability of sufficient basic necessities of life in physical terms to include the intangibles of dignity and hope, that is, the cultural/psychological aspect

that is impossible to measure.[22] A researcher well-versed in exploring this issue of where and how poverty fits into a modeling exercise, Valerie Percival, observed that the difficulty of incorporating the role of the poverty factor in relation to violent conflict has led to this aspect being neglected in the modeling exercises with which she had been associated:[23]

(We) need to investigate (among other things) the impact poverty has on grievance and opportunity structure. (But) poverty is a slippery concept with both an objective and subjective dimensions... Scarcities manifest themselves differently in the various case studies (and the question arises) how do we incorporate these contextual factors into our theoretic and methodological framework? Under what political, social and economic circumstances can we expect scarcities to lead to civil strife? Where does poverty fit into this research? How does poverty contribute to heightened grievances or changes in the opportunity structure? Is equity critical for social stability, and if so, when and how is it important?

- ***Stress /grievance level***: on a societal nature this phenomenon has many mothers and takes many forms so that, as it increases, the timing and scale of its denouement as collective action of a violent nature - as in riots, demonstrations, guerrilla actions and such - is impossible to predict. It is not possible to specify the impact of poverty on the form and intensity of stress at either an individual or a societal level, especially if the institutional means for expressing stress - and thereby relieving it to some degree - is not specified. The most that can be said is that reducing poverty on a significant scale - and on a continuing basis - is likely to be more conducive to achieving a "civil society", but, at the same time, the nature and speed of the economic growth that could be expected to contribute to this outcome would need to have the following three characteristics:
    i. rapid enough to make a noticeable difference in the quality of life of the poor within a generation or the light at the end of the tunnel of their despair would be too dim or too far out of sight to impact on the prevailing "culture of poverty" that is characterized by alienation, passivity and fatalism about the prospects for change and thus helps perpetuate their poverty;
    ii. much more equitably shared than is the prevailing norm in both the rich industrialized countries and the poor developing ones where the rich/poor divide is very wide and growing wider;
    iii. greater sensitivity to environmental and other qualitative attributes of life, that is, greater concern for the longer-term non-financial consequences of how the growth is generated and shared.

  Given these necessary conditions, it would be rash to envisage a global future that is free of the degree of societal stress that breeds crime and other

forms of societal violence, but it is conjectural whether that stress factor is likely to lead to organized protest in the form of armed conflict.

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- ***Violent collective action***: this also takes many forms from crime waves, riots, terrorism, civil insurgencies, political repression to its ultimate form: war as the organized acts of armed conflict by groups and/or by governments. One could include under the concept of "violence" those acts that impact adversely and dramatically on the environment, on health, on educational opportunities, on the culture of civility and on other social, cultural, economic, financial and political conditions that, in their weakened state, often provide the opportunity for sporadic societal violence involving arms.

All this to say that if we were to regard poverty as the independent variable and violence in all its forms as the dependent one, it is doubtful if a model could be designed to reflect how changes in poverty affects stress and through stress affects violence, particularly when we need to know the following:

i. the different political cultures and institutional structures and processes that have divergent effects on how dissent is expressed and how it is handled;
ii. the host of tribal, ethnic, religious and class variables;
iii. the mechanisms and processes that have led to war and whether the processes have differed as between the rich industrialized nations and the developing ones and between democratic and dictatorial countries - and, if so, in what ways;
iv. the roles that have been played by such factors as corruption, drug-trafficking, large-scale immigration, managerial inexperience and/or incompetence, religious fanaticism, racism, greed and other ambitions of ruling elites, and of the culture context;
v. the roles that has been played by geographic and related resource endowment factors as, for example, where governments, by virtue of being deprived of key resources and/or access to the sea or for other related reasons, have initiated wars to gain access to such resources as oil, gold, water and to seaports.

The task of making sense of the models for use by policymakers is difficult enough without taking into consideration the fact that in a dynamic context these relationships are not a uni-directional process: the violence also impacts on poverty and so a vicious cycle begins, but at what speed and scope and to what end? There is not much to be gained in describing the typical sequence of the process in general terms when in the real world a great deal depends not only on the nature of the grievances but also on the remedial options. When poverty is a product of

systemic institutional arrangements and there is likely to be little scope or hope of remediation, the vicious cycle repeats itself.

If we are to identify the underlying causal connection between poverty and war, we need to track and assess the process from its roots. The closest we might come to untangling the web might be along the lines of Michael Brown's thesis who, in analyzing intra-state conflicts, distinguishes between underlying and proximate causes of such conflict:[24]

...the proximate causes of internal conflict are poorly understood by most observers. Most major internal conflicts are triggered by internal, elite-level actors – to put it bluntly, bad leaders – contrary to what policy-makers, popular commentary and the scholarly literature on the subject generally suggest. Mass-level forces are important, but mainly in terms of creating the underlying conditions that make conflict possible. Bad leaders are usually the catalysts that turn potentially volatile situations into open warfare.

Given these conceptual ambiguities and operational difficulties, it would be rash to draw firm conclusions from modeling exercises about the link between widespread deeply-felt grievances and armed violence and the way that that link works. Even when similar conditions prevail, the outcomes differ greatly indicating the dangers of generalizations. Skepticism is warranted, but the modeling efforts go on. This approach merits critical analysis if only because so much faith is based on their conclusions. It would seem more prudent to rely on the anecdotal approach that indicates where, when, and how we might succeed in getting into the curative phase, the path of the virtuous cycle.

THE VIRTUOUS CYCLE: HOW CAN THE WAR-MAKING PROCESS BE INACTIVATED?

THERE is a school of thought that believe that the root cause of war is to be found in the nature of man, a culture of violence that has been developed and honed over the course of tens of thousands of years.[25] They can point out that five of the proverbial "seven deadly sins" - pride, greed, lust, anger and envy - seem to have been operative in almost all cases of war-making since these "sins" seem to have been the attributes of almost all the political leaders and their associated elites who have led their nations or groups to engage in armed conflict.[26] There would seem to be no need to give serious consideration to the thesis that the roots of war lie in human nature, but a realistic objective of policy, nonetheless, would seem to be to achieve a less-than-ideal solution, that is, to find an effective means of reducing the probability of armed conflict as much as is *humanly* possible. This objective could be framed along the lines set out by two foreign ministers, Lloyd

Axworthy of Canada and Knut Vollebaek of Norway, who, in an op-ed piece in the *International Herald Tribune* of October 21, 1998 wrote:[27]

One of the most fundamental challenges we face is the realization of a humane world (as) a moral imperative... Our goal (must be) to work with other like-minded countries and partners from civil society to (assure) respect for human rights and humanitarian law.

We start with the premise that the struggle to prevent wars starts with the establishment or the strengthening of democratic institutions. The policies designed to serve the people-at-large and especially the very poor, would need to be arrived at and implemented through a process characterized by the attributes of transparency and accountability and respect for human rights of *all* citizens. That would make it more difficult for war-bent leaders to attain power, or having attained power, to use that power to make war. And that, in turn, calls for democratic institutions and processes that have imbedded in their formal and operational constitution the protection of human rights. Identifying and implementing these policies - along with the institutional changes they would call for - can best be tackled on the basis of differentiating what should/could be done at both the national and the international levels of governance.

On the plane of national governance

IN his book, *Bread Not Bombs*, Senator Douglas Roche has noted that *"democratic regimes are spreading with world-wide electronic communications infusing peoples with the energy of self-determination."*[28] This "energy" in the form of a struggle for self-determination poses dangers when the objective of the struggle is seccession. The thrust of the weight of historical experience, however, suggests that there are often peaceful ways available to address this aspiration and that this calls for democratic institutions and processes that are working without discrimination for the demos, the common people in all their ethnic, racial and religious diversity. If the path of armed conflict is chosen it may well be that the defenders of the *status quo*have stonewalled proposals for changes that would be costly to them by reducing the scope of their jurisdictional powers and/or by involving losses in financial and status terms.

Professor. Metta Spencer, founder and editor of *Peace Magazine*, has articulated this view succintly in terms of the secessionist issue:[29]

In a search for political solutions that would forestall secession (of ethnic groups that constitute a minority in a nation state) and outbreak of civil war..minorities would need protection from being totally overwhelmed by the majority groupings..so as to ensure that their aspirations are not totally overridden... The

only solution to secessionist wars is prevention, and the only practical preventive is a stuctural innovation that can solve the problems that cause them.

Professor Carl Jacobsen in his essay, "Reflections on Myths and Politics: The Not-So-New World Order", articulates a similar message:[30]

In older world orders the security of the state took precedence. If the New World Order is to be different, the precedence must shift to the security of groups and individuals, minorities of mind and circumstance. Democracy of majority rule does not suffice; democracy must be minority protective. Rights must be inclusive and universal, not parochial.

This *a priori* hypothesis about the correlation of democratic governance and processes for peaceful resolutions of problems seems to be confirmed by historical experience. Some students of the subject of war and peace, such as Professor Emeritus of Political Science at the University of Hawaii, R. J. Rummel, believe that the political institutional factor is the most decisive one in determining whether wars are initiated at all and by whom.[31] Rummel claims his research shows that *"as far back as classical Greece, democracies rarely, if at all, made war on each other."*He finds the theoretic basis for this in Immanuel Kant's *Perpetual Peace* published in 1785 and cites some interesting statistics on this matter:

if one defines an international war as any military engagement in which 1,000 or more were killed, then 353 pairs of nations engaged in such wars between 1816 and 1991. None were between two democracies while 155 pairs involved a democracy and a non-democracy and 198 involved two non-democracies fighting each other... The odds of this absence of war between two democracies being by chance is virtually 100 to 1.

The reasoning he offers for this phenomenon is that

freedom produces a diversity of groups and interests that inhibit violence and foster a culture of discussion, negotiation, compromise and tolerance. Where each democracy perceives the other as democratic they expect their differences to be resolved by peaceful means... The struggle for human rights is (therefore) not only justified for its own sake but for its importance for global peace and security.

The view that the forces of democracy in strengthening transparency and accountability by government leaders are likely to have the effect of weakening the irresponsible war-bent leadership is further supported by a correlation pointed out in*The Economist* of April 8th, 2000 (page 51). Their analysis reveals a trend of the number of countries with democratic governments increasing from about 20 in 1950 to over 80 today while over the same period the population living on less than

$1 per day has held steady in the vicinity of 1.2 and 1.3 billion. As they put it, the trends show *"democracy mounting and poverty persisting."*

There is another hopeful trend with regard to the democracy aspect, namely, the shift in aid allocations towards strengthening the various facets of democratic governance. Thus, the United Nations, multilateral agencies, and many bilateral agencis of the donor community are now devoting more funds and specialized talent to programs and projects that support the establishment and strengthening of the institutions essential to the democratic process. These pertain to the justice system to assure the rule of law and to other measures that would strengthen civil society such as providing support for human rights institutions, media development and programs to raise awareness of violations of human rights. If these, as yet, modest initiatives are to expand and be effective there must be the underpinning of a foundation of an educated electorate. This calls for policies that tackle the challenge of easing and, in time, eradicating the severe educational deprivations of the poor, especially the rural poor who constitute the overwhelming proportion of the population of the developing countries. Among other things, they usually suffer from illiteracy and the related lack of understanding of the world beyond their local horizons, both of which are attributes that make meaningful democratic governance impossible to achieve and, where some semblance of democratic institutions and procedures do exist in formal terms, ineffective in operational terms to resist the machinations of political leadership and their supportive elites.

Among the many measures that merit priority we should, therefore, place at the top of the list those that strengthen the democratic process, and among them, first priority might be given to policies pertaining to education, especially, if we take the long-term view, at the primary level in rural areas where most of those in the developing countries happened to live and who will be the generation migrating to urban centers like a figurative avalanche.[32] It is estimated that over 130 million children have no access to education of any sort and most of them are now living in rural communities. Their migration to the cities poses enough of a formidable challenge in terms of providing enough opportunities for productive employment and providing the sanitation and other essential infrastructure that is very capital-intensive: how much more difficult would it be if the rural young people came to the cities very poorly educated? Perhaps an even more dangerous implication of all this is that the resultant inability to participate as citizens will be providing fertile ground for demagogues and, thus, for war. The process of this seduction is familiar: war is portrayed as a glamorous exercise with beneficial ends. Democratic governance would enable dissenters to refute this message by sensitizing the populace about the certain costs in money and lives as contrasted with that policy's dubious benefits for all but the ruling elites who profit from war and who thus tend to favor policies of massive expenditures for amassing weaponry in the name of defence.[33] Essentially, what is being proposed are policies that have the effect of moving the populace that is poor from passivity to

involvement and, thereby, to an awareness of how that involvement as citizens could put a brake on war-making policies of their political leadership.[34]

On the international level of governance

The challenge of making the necessary change at this broader global level of governance is just as formidable, perhaps more so. The last half century is regarded by many as one marked by failure in light of the persistence of poverty and of warfare, and this sense of failure is accentuated by the contrast with the high hopes at the end of World War II when the United Nations was founded and the global institutions of the World Bank and the IMF were conceived at the Bretton Woods conference in New Hampshire. Over the next half century the system of international agencies has expanded, but the objectives of prosperity for all and war for none has hardly been realized, though without them it is undoubtedly true that matters would likely have been much worse. This is hardly satisfactory enough – and especially so with regard to the issue of actual armed conflict and the threat of a major war that could obliterate civilization.

With regard to the peace and war issue, the roles of the system of multilateral agencies has been especially weak. If democratic governance is a key to lessening the probability of civil wars, it can be said that not enough priority has been given to this aspect of the development process. Though progress has been made with respect to the establishment of democratic governance so that today the majority of members of the United Nations have some semblance of democratic institutions – a rise from 20 countries to over 80 over the span of the half century – there is a need to increase the numbers of countries with democratic governance and to strengthening those institutions and process where they already are in place through capacity-building programs and projects related to democratic governance. The sad fact is that the agencies of the UN system which have this responsibility within their mandate have not given this aspect of their development programs enough support. Nor has the system of international agencies been structured to enable the Secretary-General of the U.N. to take an overarching responsibility for doing what is required to make the necessary systemic changes at the global level so as to:

i. preempt armed conflict before it reaches a stage when the intensity and scope make it extremely difficult to stop, and
ii. once started, to have the authority and the resources to play an effective role in peace-making rather than just peace-keeping that involves policing difficult truces when the bitterness of war's aftermath is still simmering.

The responsibility for making the necessary changes in the policies and practices of the international agencies with respect to the poverty and the war/peace issues

rests, however, with the politicians, and especially with those of the economically powerful nations. When it is noted that arm sales globally are running at a rate of about $32 billion annually and that the U.S. accounts for about half of that total and subsidizes these exports to the tune of $7 billion, there should be no surprise that hypocrisy rules the day. Nor are the other four permanent members of the UN Security Council off the hook since, together, about 85 percent of conventional arms sold in world markets are sourced from these five countries[35] and the source of funds to buy these arms is often known to be groups of brigands in the developing countries. Yet little or nothing is being done to curtail the arms merchants and the buyers of looted resources, such as, for example, the diamond buyers in the rich industrialized countries and their suppliers who, like the notorious Foday Sankoh in Sierra Leone, command small armies to secure areas with easily salable resources such as the diamonds from the mines of Sierra Leone. As *The Economist* in a piece titled, "War and money: the business of conflict" observed in its March 4th, 2000 issue,

making money and making war have long been related activities. That soldiers loot and arms manufacturers turn a profit is hardly new... Where tribal violence, independence struggles or cold war rivalry were once blamed for wars, now bandits, traders and some businesses are being fingered, especially in developing countries... Is competition for wealth and resources becoming the major cause of new wars around the world?

That the political will to make the changes required is not evident is also demonstrated by the reluctance of the richer nations to sacrifice some key elements of that elusive concept, "sovereignty." The most dramatic examples of this attitude as they affect both the poverty and the war/peace issues is the following:

- the unwillingness of almost all of the donor nations to consider the feasibility of such measures is the Tobin tax that presents a means of stabilizing financial fluctuations and of securing substantial capital to transfer to the developing countries without the need to gain the approval on an annual basis from the governments of the donor nations, an especially important advantage in the case of the U.S.,[36]
- the unwillingness of many countries to approve international agreements with respect to the protection of human rights (again with the U.S. being the most important holdout) and other related measures pertaining to the prevention of war and the denial or abuse of human rights, all of which could benefit greatly if sufficient funds (as from the Tobin tax and other such sources) and related talent were available for this purpose.

Even before the second World War ended, the Bretton Woods conference was convened to get those things done in international affairs that seemed appropriate for the new post-war era, namely, setting in place some key elements of the institutional framework of global governance in which sovereignty would be

constrained by agreement on international rules pertaining to trade and investment. Those pertaining to the war/peace issue were addressed in a very weak manner given the Cold War tensions. There are now frequent calls for change with regard to reducing the number and ferocity of the current armed conflicts. In line with this, there is a demand for broader participation than the G-8 nations in the global leadership role so as to both include the larger developing countries such as Brazil, China and India and to constrain sovereignty in key aspects of governance for the common good. This change in participation and in process would be tantamount to achieving greater democracy in the sphere of global governance.

With regard to the substantive aspect, the agenda of those meetings would have to be bold enough to address the underlying causes of armed conflict related to greed and lust for power by ruling elites and by tribal, ethnic and religious antagonisms that tribal, ethnic and religious leaders usually exploit for their own ends and only too rarely for the benefit of their own followers. There is, of course, an important distinction to be made between armed conflict motivated by sheer brigandry and armed conflict that is motivated by a popular desire for secession and/or for a revolutionary change that have humanitarian objectives. But in all such cases, it is clearly desirable to achieve the change by peaceful means if the process for effecting change can be made open to that resolution. It is this process that should be encouraged and supported by every means, and this implies that the agenda of both bilateral and multilateral donor agencies should focus as a matter of priority on capacity-building for democratic governance in all it facets. There should be a twin-track approach to prevent wars and to eliminate or substantially reduce global poverty and inequality, that is, the campaign to eradicate poverty needs to be pursued in its own right and not as an adjunct to a campaign to reduce the chances of war and the campaign to eradicate or significantly lessen the probability of war needs to be pursued in its own right and not as an adjunct to a campaign to reduce poverty. The twin but separate approaches would be mutually reinforcing and advance the day when the two shameful blights on the conscience of humanity - unnecessary poverty and inexcusable war - become distant memories to be remembered as morality tales of times that should not be repeated and against which we must ever be on guard.

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NOTES:

1. “Significant” is a rather arbitrary magnitude . We are here characterizing “war” as those armed conflicts - whether inter-state or intra-state - that are of a scale and character involving heavy casualties of, say, of over 1000 and the deployment of heavy weaponry. This would exclude sporadic acts of terrorism, armed

insurgencies and localized riot and, as well, activities that could be characterized as "revolutionary civil wars." The conflict takes different forms with the violent war-like phase usually short-lived and very intense; but most often the violence is at a low level of intensity over a long period. Even when there is a surface calm the social fabric could be seen to be shredding and the intense violent phase portending at a date uncertain. This type of armed conflict a special case and should be classified as "revolution", not "war".

2. The conference agenda includes a brief description on the themes of the various workshops that are intended to be related to the overarching theme of the conference, "Eliminating the Causes of War." The agenda commentary for the workshop on the theme of poverty refers to *"the (increasing) income gap both within and between nations (as) a strong correlate of violence."* Correlation does not necessarily imply causation: poverty could be regarded as a consequence of war, not necessarily a cause. The focus seems to be on the causal aspect when the agenda suggests that *"the main focus(of the workshop) should be on how these processes can be inactivated."* Other workshops are supposed to deal with the economic, environmental, religious, tribal and ethnic aspects. Treating the factor of poverty as a separate issue that is distinguishable from these other related aspects implies a belief that there is, or might be, a very strong causal linkage between poverty and war that goes beyond merely being a correlate.

3. In *When*, the popular song by Shania Twain, the Canadian pop-singer. The reference to the lyrics of the song is a contribution of my 9-year old granddaughter, Alyse, when she overheard me discussing the theme of this paper.

4. As I write a news clipping from The Globe & Mail of April 24, 2000 makes that point. It is headlined,"War depletes resources as hunger stalks millions: Concern over money going to Eritrean battle." The commentary begins, *"while eight million of its people struggle through their worst food shortage in nearly two decades, the Ethiopian government is waging a hugely expensive war, estimated to cost at least $700,000 a day in salaries alone…One diplomat estimates that salaries for 350,000 soldiers cost between $20 million and $30 million a month (and) that does not count perhaps hundereds of millions spent on ammunition and armsNor does it count the large number of dead – estimated at a minimum of 20,000 soldiers killed - over small stakes…The overt reason for the war is a strip of land with no particular value along the border of the two nations which split amicably in 1991…The Ethiopian Prime Minister, contends that this war is an issue of national sovereignty. "We do not believe that sovereignty is a luxury for the rich'."*

5. "Democracies Grow More Resilient to Economic Crisis", *International Herald Tribune*, March 4, 2000. The authors ascribe the democracies' resilience to "their institutional capacity to enforce political accountability via elections or confidence votes. Governments fall but democracy survives as a system of government

(whereas) dictatorships and semidemocracies facing a crisis situation have little capacity to adjust."

6. Issue of December 31st, 1999, page 31 (Millenium Special Issue: Reporting on a thousand years). Under the heading, "Attempted Suicide" the authors comment on the impact of war on poverty as an outcome: *"Death, anguish, starvation and despair are written over Western Europe. Hell has been let loose..The longer the war lasts, the more acute will be the economic distress and the longer the processs of recovery. In the opinion of many shrewd judges, a social upheaval, a tremendous revolution, is the certain consequence."* This was written in 1914!

7. For the most comprehensive statistics covering a wide range of social indicators, see the annual series of the UNDP's *Human Development Report* and the annual series of the World Bank's *World Development Report*.

8. *Bread, not Bombs: A Politucal Agenda for Social Justice*, University of Alberta Press, Edmonton, Alberta, 1999 (p.21). He goes on to list other "seeds of conflict:" *"the bursting of an oppressed people seeking self-determination, racial hatreds and cultural hostilities."*

9. A typical example that is both succint and dramatic is provided by an eminent Indian, J. C. Kapur: *"Globalization and greed will be explosively irreconcilable in the twenty-first century.."*. From "Towards a New Human Order Within an 'Indispensible Power'", *Man & Development*, (New Delhi), Dec. 1998.

10. For a clear and concise analysis of this case, see Max Forsythe's *A Course of Study on the Great War* for the Insirador Ruinae Insitute.

11. The last factor of unequal power relationships manifests itself most often in cases of water conflicts in river basins, when the downstream riparians recognize their relative powerlessness against any abusive practices of the upstream riparians.

12. *The Economist*, June 12th, 1999 presented tables of the ten countries with high inequality and ten with low inequality, with Sierra Leone and Columbia in the first group and Rwanda and Laos in the second.

13. For a fuller treatment of this phenomenon, see Michael Renner, *Ending Violent Conflict*, Worldwatch Paper #146, Worldwatch Institute,Washington, D.C.,April 1999. He goes on to cite disturbing statistics about the spread of arms in both quantity and quality {as measured by deadly impact} and about the expenditure on arms throughout the world: Since 1960 the global arms trade amounted to at least $1.5 trillion of which it is estimated as much as two-thirds went to developing countries during which period the total of all development assistance (ODA) amounted to about $1 trillion, so that ODA has been roughly equivalent to the foreign exchange outlays by these countries..(pp 16-19).

14. Worldwatch Paper #146, Worldwatch Institute, Washington, S.C., April 1999. He goes on to assert "Governments cling to the belief that there can be simple military solutions to complex social, economic and environmental challenges. Altering these perceptions and assumptions will be a critical task in the twenty-first century." (pp. 18 & 19). He fails to cite a single instance of this resort to military action to address such challenges."

15. "The World in Turmoil: The Imperative of Prevention", *The Open Door - Health and Foreign Policy*. And in "Responding to Crises", *Security Dialogue*, Volume 26(4), Sage Publications, 1995.

16. This is essentially the Malthusian thesis where the model depicts a divergent rate of increase of population and of food supplies that can only be brought back into equilibrium by periodic occurrences of "pestilence, famines and wars" that have the effect of decimating the population. For an elaboration on this theme, see M. Miller,*The Chicken-Little Syndrome and its Implications*, University of Ottawa Working Paper #95-37, 1995 (ISSN 0701-3086).

17. An interesting discussion covering most issues involved in this controversy was held with Professor Thomas Homer-Dixon, Director of the Peace and Conflict Studies Program at the University of Toronto, Marc Levy, Instructor of Politics and International Affairs at Princeton University, Gareth Porter, International Program Director at the Environmental and Energy Study Institute in Washington, and Jack Goldstone, Professor of Sociology and International Relations at the University of California at Davis where he is also the Director of the Center for Comparative Research on History, Societies and Culture.

18. "Environment and security: the clear connection", *Bulletin of the Atomic Scientists*, April, 1991; "Water and conflict: fresh water resources and international security," *International Security*, Vol.1m 1993; "Water, war, and peace in the Middle East." *Environment*, Vol.36, 1994; "Conflict and cooperation over fresh water," *Pugwash Conference Papers*, Rustenberg, South Africa, 1999; & *The World's Waters* 1998-1999, Island Press, Washington, D.C., 1998.

19. *Environmental Scarcity and Violent Conflict: A Debate*. He goes on to assert that "international theorists have usually focused on the possibility of interstate conflict over resources..We are claiming that because envitronmental scarcities are worsening we can expect an increase in the frequency of conflicts with an environmental component."

20. The debate is cited in a previous footnote.

21. "Environmental Security and Violent Conflict: A Debate", page 17.

22. In the article, "Poverty Ain't What It Used to Be" (*Challenge: The Magazine of Economic Affairs*, March-April, 2000, p. 100) the authors, G. Mangum, A. Sum and N. Fogg, tackle the issue of defining and measuring poverty: *"Difficult as measuring poverty may be, it is even more problematic. Poverty, from an economic standpoint, can be defined as experiencing economic deprivation - to be deprived of an adequate level of consumption of goods and services. However, because standards of adequacy vary with societal wealth and public attitudes toward deprivation, there is no universally accepted definition of basic needs. The annual amount of income necessary to provide for an agreed-upon set of basic needs is equally difficult to determine."*

23. "Environmental Scarcity, Poverty and Conflict: Future Avenues for Research", Chapter 2 of a book prepared by the International Peace Research Institute of Oslo, Norway (http://www.prio.no/html/EPC-2.htm). Ms. Percival worked for under the direction of Thomas Homer-Dixon at the University of Toronto. She cites the case of the Aral Sea that symbolizes one of the worst environmental disasters and the fact that the scarcities stemming from this disaster has not led to armed conflict on the part of the people of that region. She then raises the question as to how useful the modeling exercises could be when many critical variables are not included and, by their nature, cannot be included so as to arrive at useful generalizations about the impact of "environmental scarcities."

24. *The International Dimensions of Internal Conflict: An International Security Reader*, Carnegie Commission on Preventing Deadly Conflict Series #10, N.Y.,1996 (p.571).

25. See, for example, Barabara Ehrenreich whose book, *Blood Rites: Origins and History of the Passions of War*, (Metropolitan Books. Henry Holt, N.Y. 1996) For critiques of her thesis, see Thomas Powers, "The Roots of War", *The Atlantic Monthly*, August 1997 and Michael Ignatieff, "The Gods of War", *The New York Review of Books*, September 10th, 1997.

26. An exception would be made for "the good war", the armed conflict that is motivated by the desire to overthrow corrupt despotic leaders who seek to perpetuate exploitative regimes and where the struggle is a last resort, that is, the circumstances would seem to preclude any other course of action. See the earlier footnote citing the comments of Raymond Aaron.

27. They recently signed the Lysoen Declaration (named after the Norwegian island where it was negotiated) that sets out specific proposals for action on a range of issues including human rights, humanitarian law and child soldiers. "We need to make every effort to secure full respect of all human rights and fundamental freedoms, as well as the provision s of international organizations whose aim is to ensure respect for human rights in all circumstances and all countries." Jan Eliasson, in his talk, speaks of "the development of a new and

promising form of diplomacy, humanitarian diplomacy which could open up crisis-ridden countries to humanitarian corridors and other arrangements" (p.409).

28. Chapter 1 of *World Security: the New Challenge*, Canadian Pugwash Group, Dundurn Press, 1994 (p.1).

29. "How to Enhance Democracy and Discourage Seccession." Chapter 9 of World Security: the New Challenge, Canadian Pugwash Group, Dundurn Press, 1994 (p.161).

30. Chapter 9 of *World Security: the New Challenge*, Canadian Pugwash Group, Dundurn Press, 1994 (p.51).

31. See the interview with R. J. Runnel's, "Democracies Don't Fight Democracies" in the June 1999 issue of *Peace Magazine* (Toronto), and the replies and counter-replies in the Fall 1999 issue.

32. On this theme, see M. Miller, High-Technology to the Rescue? The Role H-T Could Play Involving the Rural Poor in the Knowledge Economy, University of Ottawa Discussion Paper #97-25, July 1997 (ISSN 0701-3086).

33. This is not to assert that preparedness for war is always a mistaken policy. As Raymond Aron noted with the Nazi tindifference to the internal regimes of enemy states…War has not always been meaningless or criminal; it has had meaning and function." - *Peace and War: A Theory of International Relations*, 1966.

34. The opposition to war when applied through democratic peaceful means needs enough force to overcome the formidable obstacles of i) inertia that rationalizes itself as fatalism, skepticism and cynicism, ii) vested interests that conjures up the power of "the military-industrial complex," and iii) aversion to the risks of what the unknown future holds and of the possible retribution by those in positions of power. These are the three categories of institutional obstacles to change that are elaborated in my paper, *Sustainability and the Energy/Environment Connection: Overcoming Institutional Obstacles to 'Doing the Right Thing'"*, Economic Development Institute Working Paper, Energy Series, World Bank, Washington, D.C., 1991.

35. Cited by John Kenneth Galbraith in comments he submitted at an ECAAR meeting on January 8, 2000.

36. As testimony to the opposition to a measure such as the Tobin tax, Senators Helm and Dole once sponsored a resolution to prohibit any discussion of the idea in the U.N. on pain of the U.S. taking some punitive measures against the U.N. The Tobin tax would impose a charge of a very tiny fraction of 1% on international

financial transaction that amount to over 1.5 trillion per day and the overwhelming part of such transactions are speculative.