

Global Security, Demographic Transition, and Knowledge-Based Society: A Proposal to The Club of Rome

Ivo Šlaus, member of The Club of Rome, Fellow WAAS
Robert Blinc, associate member of The Club of Rome and
Aleksander Zidanšek, associate member of tt30, The Club of Rome

We discuss three issues that in our view deserve the attention of The Club of Rome. These are:

1. global security, terrorism and cultural diversity,
2. demographic transition and its effects on health, employment and education and
3. knowledge-based society.

All three issues we propose are examples of the interconnectedness in the world problematique demanding discussions, analyses and activities similar to those we dedicated to the limits to growth and to the sustainable development. All three issues are the unique features of the contemporary world and their solutions require novel approaches¹⁾.

1. Global security, terrorism and cultural diversity

Nobody could foresee that after significant successes: the end of the Cold war, spread of democracy, some improvements in the quality of life and apparent robustness of the cultural diversity²⁾, the shock of 9/11 would follow. Of course, terrorism³⁾ is not a new phenomenon, but the present danger and threat are totally different from anything the world experienced before. We will summarise these differences:

- i) Though terrorist acts do not occur daily everywhere, if one represents dangers and threats facing the contemporary world in two dimensions: probability vs. consequences, one has to conclude that currently terrorism has a 100% probability. The consequences of terrorism are terrible and though still smaller than those due to MAD increase approaching those that the world faced at the peak of the Cold war MAD confrontation. Vast majority of terrorist acts are now done with conventional weapons. However, the greatest danger comes from the intersection of terrorist and state stockpiles of nuclear weapons, fissile material, chemical and biological weapons⁴⁾. Terrorists do not need to produce their own WMD, they can steal those available. Moreover, the psychological effect of a mere threat is enormous. Terrorism has global and local consequences.
- ii) The 9/11 attack and most of what followed form a womb wherefrom the spectre of the clash of civilisation⁵⁾ transforms into a reality. Currently it is a clash between radical Islam and Western civilisation, but any conceivable confrontation with a characteristic asymmetry could transform into a conflict with terrorism. Then it ceases to be a classical clash of civilisation, since a fault-line may not be between different civilisations.
- iii) The conflict is asymmetric: citizens of *all* countries are exposed to terrorists' attacks and terrorists' group does not exist as an entity one can either threaten or deal with. Terrorists have dual identity: a cadre and a movement⁶⁾. The movement

generates the cadre and provides a financial support. Terrorism finds financial support in various illegal activities. Terrorism can hardly be described by a term *war* in a classical Clausewitz's sense. Mutually assured destruction approach is impossible with terrorists. This leads to

- iv) Inability of the conventional politics in dealing with the current terrorism. At least it seems so regardless whether it concerns the most powerful country in the world or countries breeding most of the terrorists. However,
- v) Current terrorism appears in the world still structured by the Westphalian principle of sovereign states. However, that structure is superimposed by other non-state structures of comparable importance: transnational companies, regional and international organisations, international conferences and fora, various non-governmental organisations and a web of educational and research institutions. Though all states are sovereign some of them are rogue states, some are failed and some are failing. Some of them do or may provide support to terrorists; some of them are and could be generators of terrorism.
- vi) Though terrorism hurts all humanity, there is a tendency toward isolationism, resentment toward international institutions and international treaties and readiness of acting alone. The answer to terrorism as well as to many issues that we are currently facing requires solidarity. No matter how inadequate are international organisations they should not be ignored but improved in spite of the difficulties.
- vii) Human society and particularly political structures are rarely fully symmetric. This is why Madison spoke about the tyranny of the majority and equally one could speak about a tyranny of the minority. Although most acts of terrorism now are politically motivated, political grievances do not justify terrorism. Terrorism is a crime⁷⁾. Democratic procedures including civil disobedience which is an acceptable democratic expression, and specifically checks and balances overcome these asymmetries. It is when either as a response to the terrorism or by authoritarian inclination society limits freedom that the development stops⁸⁾. This would be the final victory for terrorism. It could mean the end of the human society. "They that can give up essential liberty to obtain a little temporary safety deserve neither liberty nor safety." (Benjamin Franklin, 1759)

An acceptable definition of terrorism is given in the USA Homeland Security Strategy^{9, 10)} and it defines terrorism as «any premeditated, unlawful act dangerous to human life or public welfare that is intended to intimidate or coerce civilian population or governments. » This definition is broad enough to include as terrorist acts those committed by states and nonstate groups. Terrorism is also a manifestation of a lack or a failure of leadership, as well as a lack of cooperation.

Terrorism is one among numerous dangers and threats. A successful attitude demands to take into account all of them simultaneously. This is what The Club of Rome called *problematique*. An example of focusing on one issue and forgetting others led to the worst outbreak of tuberculosis in Seattle in 30 years which occurred because public health resources have been directed toward terrorism¹¹⁾.

Though the present world with only one superpower is less dangerous than the bipolar world of two confrontational superpowers having WMD and being in balance by mutually assured destruction, this situation is neither stable nor desirable since because of various reasons the only existing superpower could be uninterested or unable to interfere in all cases when it is necessary. The military power under the UN is highly desirable. The problem is that the UN and all UN type organisations are inert and hesitant. (Their Breton Woods sisters have also their own characteristic time constants that do not necessarily reflect the need of

those they are supposed to help. All institutions forget that their reason for being is in order to help people. The logic to assure the continuation of an institution is secondary.) The inertia is not caused by the military or economic reasons but exclusively because of their political ineffectiveness. It is necessary to devise mechanisms to assure prompt, rapid and hopefully constant international action without being trigger-happy. It is our duty to interfere, but we should be aware of the peril of interventions.

2. Demographic transition and its effects on health, employment and education

The phenomenon called demographic transition has many features and consequences¹²⁾:

1. Tension among regions and countries as well as within countries due to the difference in the age distributions of their populations. Migrations are superimposed on these tensions.
2. Health and social requirements are profoundly different depending on the age distribution. For instance in Croatia the dependency ratio (ratio of those employed and paying contributions to the pension fund to those receiving pension) has changed from 4.04 in 1980 to 1.36-1.40 in 2000-2004. No economy is able to sustain the enormous retirement expenses and similarly it is unable to assure even modestly adequate health care.
3. There are three groups in a population: young (spanning the period from quite early age - since children due to internet can be quite well informed and most of the actions do not require either physical strength or maturity - to fairly old because of extended segmented education and since particularly male adolescents take longer time to mature), middle (this group typically includes those between the ages of 18 and 60-65) and older (this group is becoming quite large in developed countries. Due to retirement practices this group in some places starts already at 55. This group is by no means homogenous in either their activities or in their demands depending on health care and social cohesion.).
4. The middle age group is assumed to be the producers group. Due to the fact that their size is shrinking this is economically an unstable situation. This phenomenon has to be addressed in light of another feature - less and less person-days are now required to do any given work - witness the current productivity pattern in agriculture but also in manufacturing. However, more and more person-days are necessary to be reasonably educated and informed, and this process is a lifelong process.
5. The middle age group is least inclined to take any risks. They have the largest responsibilities and they could lose by taking risks. This conservative group is a stabilising component, but its size is shrinking. Due to their rejection of risk-taking they might be least creative and an obstacle to any change. Their dominance in most institutions could be a reason for the inertia of these institutions. It would be important to study creativity patterns, not just noting that some persons have been very creative at their old age (Verdi, Goethe, Bethe and Picasso), but taking into account that present age of 75 is equivalent in many ways – is it? – to that of 55 or 60 a century or two ago. Not only that the life expectancy of a 70 year old now is the same as it was of the 55 year old a century ago, but the quality of life is better.
6. Persons older than 65 have contradicting features. While old persons could be inclined to take risk, and therefore stimulate change, they are – as we all are – prisoners of our prejudices. And their prejudices are «old prejudices»; sometimes incompatible with the age they find themselves to live in. Old persons used to have special authority.

Though this is rapidly decreasing, if older person would remain in their jobs they would often be barriers to change. Possibilities are part-time jobs and lifelong education particularly intensive and occupation changing at the age of about 55, resulting in a new activity from the one that a person had earlier. Actually, a general feature of a labour market should be changing occupation several times during a lifetime.

7. It is a truism that human beings are the most valuable resource - human beings that are healthy, well-informed and well-educated, curious and happy. Now, education and health care are mainly given to a person through education and healthcare systems. Currently neither systems function adequately. Considerable improvements are needed, but even their nature should be changed emphasising self-learning and self-healthcare, as well as community education and healthcare. Networking enables both, and the essential feature of the contemporary world is networking.

3. Knowledge-based society

Science is the generator of the basic features of the contemporary world: rapid changes, globalisation and interdependence. It is common to speak about knowledge-based economy and even of a knowledge-based society, but current political decisions and actions are mainly not knowledge-based. Apparently, we are still witnessing the reality of the last sentence of Axel Oxenstijerna, Swedish chancellor from the Thirty years war period «Behold, my son, with how much stupidity the world politics is done.»

R&D and education, which means all researchers and educators as well as all scientific, scholarly and academic institutions, are financed mainly by government and industry. We have witnessed an unacceptable hesitation and tardiness of many of them to express opinions which are not desirable to their “owners”. This ranges from neutrality and avoidance of issues to blatantly incorrect statements just because those are what their governments or industry wants. Climate change¹³⁾ and tobacco issues spanning more than two decades are examples. Such tardiness is more damaging to the society now than before, because of the rapid changes and globalisation.

On the other hand the government not infrequently pressures scientists and scientific organisations to induce a change in their position that the public perceives as being science-based. The example is the pressure on Environmental Protection Agency of the USA to alter its report on environmental health in lower Manhattan in the aftermath of the September 11 attack¹⁴⁾. Some politicians facing complex issues, such as GMO, look for a response of potential voters and take the position based on the following calculation: if voters that can likely be convinced to vote for them prefer a certain position, than these politicians take that position. They always find some researchers or pseudo-researchers willing to support their position.

Knowledge-based society requires changes of the R&D and educational institutions as well as of scientists, but it also requires changes of politicians, political structures and of the society. Solutions of complex problem of the contemporary world such as security and demographic transition – globally and locally, to eliminate the root causes of terrorism, to assure healthy and productive life twice as long as it was barely 70 years ago – can be best achieved within a knowledge-based society by healthy, educated, creative and happy persons.

References and Notes

- 1) The 9/11 report concludes «those attacks showed emphatically that ways of doing business rooted in a different era are just not good enough» (The 9/11 Report, The National Commission on Terrorist Attack Upon the United States, T.H. Kean, Chair and L.H. Hamilton, Vice Chair, St. Martin's Paperback, New York, Aug 2004, p. 570)
- 2) It seems that instead of a melting pot or dominance of one culture we tend toward what is called a salad bar. On the other hand biodiversity is threatened by species that are unusually aggressive in a new surrounding (see e.g. Nature, Vol 431, Sep. 9, 2004, p.177)
- 3) Terrorism appears quite early. J. Flavius wrote about sicars who performed terrorist attacks against Romans but also against Jews. In the 11th century a terrorist group Assassins started with suicide-terrorism (Walter Laqueur, The New Terrorism, Phoenix Press, 1999, pp. 10-19 and 101-103).
According to the US State Department the number of international terrorist acts peaked at 666 in 1987 and declined to 348 in 2001 and 208 in 2003, but the number of significant terrorist acts in 2003 were 175 which represent a 20-year high. Casualties resulting from international terrorist acts during 2001 were the highest, i.e. 3572 persons killed, compared to 652 persons killed in 2003 (see ref 10, page 8).
Minister of defence of Ukraine told in an interview (International Herald Tribune, March 27-28, 2004) that 200 of their S-75 missiles are unaccounted for. Also, the US sold 17.5 tons of enriched uranium and only 2.6 tons will be returned to the US (New Scientists Vol. 181, No. 2435, p.4., 21.2.2004.)
- 4) George Perkovich, Joseph Cirincione, Rose Gottenmoeller, Jon B. Wolfsthal and Jessica T. Matthews, Universal Compliance: A Strategy for Nuclear Security, Washington Carnegie Endowment for International Peace, 2004, p. 6. Spent reactor fuel pools at commercial nuclear power plants are very vulnerable. Similarly, according to the US EPA there are 123 facilities where a release of chemicals could threaten more than one million people, and 750 such facilities that could threaten more than 100,000 people. Food safety represents another particularly sensitive issue.
- 5) S.Huntington, The Clash of Civilisations
- 6) Steven Simon, Update on the War on Terror, RAND Corporation, September 7, 2003. The 19th century Russian terrorists and anarchists so well described by Dostoyevski's *Demons* do not reveal the pattern of cadre and movement. However, the Bolsheviks in the early 20th century are the cadre superimposed on a much broader movement. They did use crime to finance their activities following «end justifies the means».
- 7) The connection between crime, organised crime and strategic crime with terrorism is an issue worth analysing.
- 8) A. Sen, Development as Freedom, also I. Slaus, «Sustainable development requires constant increase of human options», talk at the Chennai conference, 1999
- 9) The General Assembly's Sixth Committee is currently considering a draft of the Comprehensive Convention of International Terrorism, see www.un.org/ga/sixth/index.html
- 10) J. Gersham, A Secure America in a Secure World, FPIF Task force on Terrorism, Sep 9, 2004, Foreign policy in focus, www.fpif.org, p. 7
- 11) V.W. Sidel and B.S. Levy, War, Terrorism and Public Health, Journal of Law, Medicine and Ethics, Vol. 31, Winter 2003, p. 518

- 12) Ivo Slaus and Mario Slaus, Knowledge-based society, *Acque & Terre XIV*, Numero 2/2003, Marzo/Aprile, p. 37-40 /p.61-63 (2003)
- 13) Editorial in *Nature* argues that the Russian Academy of Science is failing to provide either the quality of research or the scientific advice that reformers had been hoping for. Specifically, Russian scientific community is neutral on the issue of global warming (see *Nature*, vol 431, Sep 2, 2004, pp. 1 and12).
- 14) ref 10, p. 10