

## **Report and Discussion Paper on Recent, On-going and Future WAAS Programs**

*The purpose of this report is to provide essential background information to the Program Committee and the Board for an assessment of past programming efforts and to present issues for discussion regarding the formulation of effective strategies for future programming. Those acquainted with the facts presented in the narrative are requested to supplement and correct it and share their own insights and conclusions. The last section of the document contains a discussion of the program framework presented at the Delhi General Assembly as well as an important additional section incorporated in the Strategic Plan but not previously presented or taken up for discussion.*

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### **I. Introduction**

The report is a review of WAAS programs approved and implemented to varying degrees over the past several years under the supervision of the Standing Committee on Peace & Development (SCPD) and the e-Project Coordinating Committee (ECC) established in mid-2009 as part of the Strategic Planning Process. In some cases the programs have been traced back in time to highlight lines of continuity and the development of thought which have taken place within the Academy. This report includes review of the Academy's work on abolition of nuclear weapons since 2004, five new pilot project generated by the strategic planning process in 2009-10 and a more recent initiative on new economic theory. This report needs to be supplemented by a review of other programs and activities, such as the Climate Management initiative and other discussions focused on the Anthropocene, which are not covered here.

### **II. Abolition of Nuclear Weapons**

*Project leaders: Jasjit Singh & Garry Jacobs*

#### **A. Background**

1. The devastating consequences of nuclear war and the potential destructive applications of science and technology were paramount concerns among Einstein, Russell, Oppenheimer, Rotblat and others who supported the founding of the World Academy. Over the past seven years, the Academy has revived the focus on this original concern of our founders.
2. In November 2004, the WAAS jointly organized a one-day workshop in New Delhi in collaboration with the International Commission on Peace & Food (ICPF) and the Mother's Service Society (MSS) to examine issues related to nuclear weapons and international security, employment and economic development. Participants included senior Indian military experts, Fellows and other international participants, including a senior NATO expert from the Netherlands. After the meeting, Fellows Harlan Cleveland, Walt Anderson, Ivo Šlaus, Garry Jacobs and Jasjit Singh who was elected to the Academy four months later, proposed to initiate a new Academy program on the abolition of nuclear weapons.

## B. Steps Taken

1. In September 2005 a workshop was conducted in Washington DC with former Defense Secretary Robert McNamara focusing on the urgent need to outlaw and abolish nuclear weapons.
2. In October 2005 Ivo Šlaus organized a NATO-sponsored two-day workshop on nuclear abolition, terrorism and international security issues at Zagreb prior to the WAAS General Assembly.
3. Following the Zagreb GA, the Board of Trustees established the Standing Committee on Peace & Development (SCPD) to continue work on these issues and explore the linkages between peace and development. Garry Jacobs was appointed chair.
4. At the Board of Trustees meeting in July 2006, a resolution was passed to the effect that the World Academy formally supports and will take steps to bring about the total eradication of nuclear weapons. In addition, a decision was taken to make a special contribution of \$200,000 to the Global Security Institute (GSI), led by Fellow Jonathan Granoff, to support a special high level initiative for total nuclear disarmament.
5. Immediately following the Board meeting, the Academy organized a session on nuclear disarmament at the World Futures Society annual conference in Toronto. Walt Anderson, Jasjit Singh and Garry Jacobs participated on behalf of the Academy. Discussions were also held with Jonathan, who subsequently was elected to WAAS, concerning the possibility that India could take a leadership role in calling for nuclear disarmament.
6. Several members of the SCPD also represented the Academy at meetings of the Nobel Peace laureates in Rome in 2005 and at a high level meeting organized by the Middle Powers Initiative and hosted by the Government of Canada with representatives from 25 nations and many leading international NGOs held in Ottawa in September 2006. Shortly after the Ottawa meeting, North Korea detonated a nuclear weapons test, openly declaring itself a nuclear weapons power for the first time. This was followed by reports that Iran was also developing nuclear weapons.
7. In October 2006 a "[Workshop on Nuclear Disarmament](#)" was organized at the UN in New York by the SCPD in collaboration with GSI and MSS. Walt Anderson, Robert Berg, Lincoln Bloomfield, Harlan Cleveland, John Cox, Robert van Harten, Garry Jacobs, and Ashok Natarajan participated.
8. WAAS also participated in another meeting of the Middle Powers Initiative in Vienna in March 2007 addressed by Hans Blix, the former head of IAEA and Chairman of the International Commission on Weapons of Mass Destruction, and other leading disarmament experts.
9. A meeting on nuclear abolition was also organized by SEED-WAAS in Zagreb in April 2007.
10. In May 2007 *Futures Journal* published an article by Jasjit Singh, Manpreet Sethi and Garry Jacobs on "[Abolishing Nuclear Weapons](#)", which was based on their presentation at WFS annual conference in Toronto.
11. In February 2008, another meeting was organized in collaboration with GSI in New York on "Weaponization of Outer Space".
12. In Spring 2008, WAAS collaborated with the World Federation of UN Associations (WFUNA) on a global student essay contest to promote the goal of nuclear abolition. WAAS/WFUNA organized a week-long event in Geneva, initiated and sponsored by WAAS and co-chaired by Hans Blix. WAAS was represented by Robert Berg and John Cox.
13. In June 2008, Jasjit Singh organized a major international conference "[Towards a Nuclear Weapons Free World](#)" in New Delhi sponsored by the Government of India on the issue of nuclear weapons. Dr. Manmohan Singh, Prime Minister of India, inaugurated the conference pledging India's full support for complete eradication of nuclear weapons, the first of the declared nuclear weapons powers to make such a pledge. India's Foreign Minister, Vice President and other senior diplomatic and military personnel participated together with a cross section of distinguished international security

experts. [Jonathan Granoff](#), [Garry Jacobs](#) and Ivo Šlaus made presentations and interventions on behalf of the Academy.

14. A full day session on [nuclear weapons](#) and [space weaponization](#) was organized at the Hyderabad GA in October 2008.
15. Throughout this period, Ivo Šlaus has been actively representing WAAS on this issue in numerous meetings of Pugwash and the European Leadership Forum, a high level group of former European diplomats working for abolition of nuclear weapons.
16. In February 2011, Jasjit Singh's CAPS sponsored a two day meeting of the Academy on nuclear weapons in New Delhi, in which Robert Berg, Pushpa Bhargava, Jonathan Granoff, Garry Jacobs, Winston Nagan, Ashok Natarajan and Ivo Šlaus interacted with Jasjit Singh and a range of senior Indian military personnel and diplomats on strategies to enhance international security, including the dangers of nuclear proliferation and nuclear accidents.
17. An article entitled "[Universal Nuclear Disarmament](#)" by Manpreet Sethi was published in *Cadmus* Issue 2 in April 2011.
18. A paper on "[Law, Nuclear Weapons and Nuclear Energy](#)" was presented by Winston Nagan at the Delhi GA in November 2011.

### C. [Assessment and Next Steps](#)

1. Abolition of nuclear weapons is the most contentious issue being debated at the highest levels of public policy globally, so it is natural to wonder whether an organization such as WAAS can make a meaningful contribution. While it is not possible to document concrete achievements, the personal experience of those involved has been that our efforts have made an impact and served to support the initiatives of others in the field.
2. One undeniable result of this project has been to re-engage the Academy in addressing front line issues and to refocus our programming on initiatives that can impact on public policy.
3. It is unlikely that the nuclear weapons states will take initiative on their own to completely eliminate nuclear weapons in the near future. Those in power rarely renounce it unilaterally. Therefore, a breakthrough will require sufficient pressure to be generated by global public opinion.
4. A nascent informal organization, Club of Rome, generated that level of awareness regarding environmental threats with a single report forty years ago. Al Gore almost single-handedly reawakened attention to climate change earlier in this decade.
5. WAAS is well networked to promote an umbrella of like-minded organizations (ELF, GSI, MPI, IPPNW, Pugwash, national academies, Global Zero, Abolition 2000, etc.) which in combination may be able to generate sufficient awareness and exert sufficient influence to mobilize international public opinion to act decisively for the total abolition of nuclear weapons.
6. At the Delhi GA, Robert Berg proposed possible collaboration between civil society groups engaged in peace-building and those working for nuclear abolition and he offered to formulate a proposal for exploration.
7. The project team is presently examining strategies to achieve this objective.

## III. [Global Employment Challenge Project](#)

*Project Leaders: Garry Jacobs & Ivo Šlaus*

### A. [Background](#)

Research on theory and policies for achieving full employment was conducted by ICPF in the earlier 1990s and published as a report to the UN entitled [Uncommon Opportunities: Agenda for Peace &](#)

[Equitable Development](#). Harlan Cleveland was associated with the last phase of ICPF's work and judged the best of the commission reports thus far published. He particularly appreciated the Commission's original work on employment, including the first sketchy outlines of a social theory of employment and a project in India coordinated by Garry Jacobs, which formulated a strategy to generate 100 million jobs in 10 years to achieve full employment, which was officially adopted by the Indian Government for implementation in 1992.

On Harlan Cleveland's initiative, ICPF's report was released for the first time at the WAAS GA in Minneapolis in 1994 and distributed to all Fellows. During 1995-6, Harlan Cleveland and Magda McHale organized an Academy workshop on the Future of Work in Buffalo and another in Minneapolis.

On a separate line of development, Club of Rome published a report by WAAS Fellows Orio Giarini and Patrick Liedtke in 1996 entitled "The Employment Dilemma and the Future of Work", exploring important social dimensions of work in economically advanced nations and the potentials generated by evolution of the service sector. WAAS conducted a plenary session on employment at the Zagreb GA in 2005 in which Orio Giarini and Garry Jacobs discussed complementary aspects of this issue. A workshop was also organized by Ivo Šlaus at Zagreb in 2007 in which emphasis was placed on the critical importance of addressing the employment challenge.

## B. GEC conference

The GEC project began with an [e-conference](#) from Oct 2009 through February 2010. This was a new experience for WAAS, an experiment to assess the potential of the electronic media for bringing people together across time zones for meaningful exploratory discussions. About 40 people participated by contributing papers, presentations, and comments, including an important paper by Winston Nagan on the legal basis for the right to employment and several papers by Ashok Natarajan. Five two-hour webcasts were conducted with eminent speakers on different aspects of the issue: Randall Wray of Kansas on public job work programs in industrialized countries which coincided with the US stimulus package; Fellow Gunter Pauli on entrepreneurial opportunities to create 100 million jobs; Fellow Bernard Lietaer on a financial strategy to augment employment; Rania Antonopoulos on employment guarantee policies in developing countries; and Jesus Felipe of Asian Development Bank on inclusive growth strategies. Three of these participants were drawn from outside the Academy, illustrating how this format can be used to attract and interact with external resources and explore the potential for future collaborations.

There was a consensus of the conference participants that the issue of employment transcends the disciplinary bounds of economics and necessitates a multidisciplinary approach that also takes into account political, legal, social, technological, ecological and psychological factors. Specific emphasis was placed on the essential role of employment in modern economic democracy and the need for recognition of employment as a fundamental human right.

## C. Further Steps Taken:

1. A year after the conference, employment emerged as one of the most pressing and contentious issues facing humanity today. Formal work on this project was suspended in May 2010 due to paralysis of the old Board and impeded in 2011 by pressing work on the governance of WAAS. Jacky Foo, who co-chaired the first phase of the GEC with Garry Jacobs, fell ill and passed away at that time. Ivo Šlaus then took over as co-chair and played a key role in further development of the project.
2. In May 2010, Ivo Šlaus and Garry Jacobs met with WAAS Fellow Ivo Josipovic, President of Croatia and others in Zagreb, to explore the possibility of taking Croatia as a pilot project for creating full employment.
3. In October 2010, an article by Winston "[Human Rights and Employment](#)" and a summary of the findings of the GEC "[Theory and Strategies for Full Employment](#)" by Ashok Natarajan were published in *Cadmus* issue 1.
4. In November 2010, Ivo Šlaus and Garry Jacobs were invited to present a paper on "Prospects for Full Employment" at a Club of Rome conference in Bern.

5. With the help of current Board member Maria da Graça Carvalho, in January 2011, Ivo Šlaus, Ian Johnson (Sec. Gen. of Club of Rome) and Garry Jacobs met with European Commission President Jose Manuel Barroso to discuss the possible collaboration between WAAS and the EU on this issue.
6. On arrangements by President Barroso, the three of them met in late February with Jean-Claude Thebault, Director General of the Bureau of European Policy Advisors (BEPA).
7. A few days later Ivo Šlaus and Garry Jacobs also met with Jose M. Salazar-Xirinachs, Director General of Employment at ILO in Geneva, who enthusiastically appreciated the approach and expressed interest in collaboration.
8. Between meetings, Garry Jacobs and Ivo Šlaus met several times and exchanged emails with Ian Johnson, Orio Giarini and Fellow Patrick Liedtke regarding refinement of our approach to the employment issue. Ian Johnson was enthusiastic and proposed placing this issue on the Club of Rome agenda so that WAAS and CoR could formally collaborate on it. The project leaders were unable to pursue any of these discussions from March through August due to the demands of the constitutional crisis at WAAS, the referendum, elections, board and lawsuit.
9. An article by Garry Jacobs and Ivo Šlaus on "[Prospects for Full Employment](#)", another by Patrick Liedtke on "[Capital Needs Labour](#)" and an editorial on "[Full Employment Policy](#)" were included in the May 2011 issue of Cadmus. Following that in October 2011, Club of Rome published a shorter version of the paper by Garry Jacobs and Ivo Šlaus as the second in its new series of discussion papers. An article, "[Global Employment Challenge](#)", was published by Patrick Liedtke in the Sept 2011 issue of *Four Pillars* newsletter brought out by the Geneva Association.
10. From these discussions emerged the realization that research on employment has been primarily confined to national level projects and models. There is presently no valid theory or model for employment at the global level. Ivo Šlaus proposed the idea of collaborating with CoR to prepare a report on this subject. In late September 2011, Ivo Šlaus, Ian Johnson, Orio Giarini and Garry Jacobs met in Dubrovnik and spent one and a half days discussing a collaborative project to develop a Global Employment Model – a parallel to the Club's original work developing a first rough model relating economy and environment.
11. As a follow-up to Dubrovnik, a session on employment was included in the Club of Rome Delhi conference in which Ivo Šlaus and Orio Giarini chaired a session and Garry Jacobs presented an overview of [Potential for Full Employment](#).
12. In his presentation at the WAAS GA at Delhi, [Roberto Peccei](#) also raised important issues related to the central role of employment in economics, which must form an integral part of a wider approach to this issue. Garry Jacobs presented an overview of the proposal to develop a [global employment model](#).

#### D. Next Steps:

The project team considers this subject to be of immense importance and intends to seriously pursue opportunities to make it a full Academy program. Immediate possibilities include --

1. Global Employment Model
  - a) The scope of the project is outlined in a comprehensive [list of parameters for the model](#), which is based on discussions between Ian, Garry Jacobs, Orio Giarini and Ivo Šlaus. Subsequently a more detailed 32 page preliminary chapter outline was also prepared. The project could consist of two phases: a qualitative formulation in the form of a book and a quantitative model similar to the work done by Jay Forrester for Club of Rome on limits to growth.
  - b) The current intention is to explore the scope for on-going collaboration with Club of Rome, ILO or others for preparation of a report on the Global Employment Challenge that examines the potential and strategies for promoting full employment globally. Ian Johnson fully supports the proposal, but is concerned about raising sufficient funds to support it, since the Club has no internal research capabilities. MSS, which conducted the research for ICPF and subsequent work of the Academy on this issue, has offered to fund its own research for the project. We have discussed the possibility of collaborating with Barry Hughes of

University of Denver, who is working on quantitative models of the global economy (his model does not presently include employment).

- c) This proposal has the potential for propelling WAAS and/or the Club to the forefront of public recognition internationally. Our assessment is that the first phase of work could be completed in one year.

## 2. Country Pilot Studies

- a) As Robert Berg suggested during the Delhi GA, country studies would constitute a perfect complement to a global model. WAAS could pursue the effort attempted in Croatia to identify a country, state or district of one country interested in a case study to evolve a practical strategy for full employment. ILO did raise the possibility of collaborating with them on a study of one or more African countries.

## 3. Social Theory of Employment

- a) Apart from model building, there is need for original thinking and concept formation on the relationship between economy, employment and social development. This project would include all the factors identified in 1a above.
- b) Over the past 12 years WAAS has conducted numerous conferences and workshops on the need to evolve a comprehensive theory of social development, in conferences/assemblies Vancouver 1998, Washington DC and Chennai 1999, Zagreb 2005 and Hyderabad 2008.
- c) The objective would be to integrate our work on social development and employment to frame a theory of employment as one dimension and result of the wider process of social development.

## 4. Blue Economy

- a) Gunter Pauli has invited WAAS to conduct a study of employment prospects related to the blue economy projects he has been working on in connection with a conference in Sept. 2012. This proposal was received on November 16, 2011 and in the process of being evaluated.

## E. Assessment

1. *Theory and Application:* Robert Berg's message of November 18 rightly stresses the importance of initiatives that can have policy impact. All four of the potential next steps qualify under that heading. The global model has the potential of an impact akin to that which Club of Rome's *Limits to Growth* has evoked over the past four decades. The pilot country study, an approach ICPF already successfully demonstrated in India 18 years ago, can lead directly to changes on the ground. Gunter Pauli's *Blue Economy* can lead potentially to the validation and propagation of viable sustainable strategies combining growth, job creation and sustainability. At the same time original theoretical work is urgently needed to undermine support for existing policies based on a flawed conception of employment. As Peter Drucker said, nothing is as practical as a good theory. Theoretical work on Quantum Mechanics and Relativity Theory led to immense practical consequences. The problem today is that there is no serious theory that relates employment to the profound changes impacting development of global society.
2. Long before employment became the critical concern it is today, the Academy had been exploring important dimensions of this issue from a multidisciplinary perspective and projecting original concepts and approaches to addressing it. Currently there is no comprehensive theory of employment that incorporates both economic and non-economic factors such as demography, law, security, democracy, immigration, technological change, business strategy, education, skills development, changing social attitudes and values (women, aging), psychological factors, etc. The Academy's multidisciplinary resources are ideally suited to contribute meaningfully to this issue.
3. *WAAS as Umbrella Organization:* Robert Berg also rightly points out that the Academy lacks both the depth of human and financial resources to conduct serious research. Yet the same was true of the Club of Rome when it tied up with Jay Forrester to develop an environmental model 40 years ago, as Orio Giarini narrates in his fascinating autobiographical chapter on his earlier days at CoR. Either we must moderate the depth and scope of our projects to what can be managed by one or two committed individuals combined with an occasional conference (the primary model WAAS has followed until recently) or we must explore the possibilities of forging closer collaboration with organizations whose capabilities complement those of our own. The strategy that emerged out of the SPC is to view

WAAS as an umbrella organization or a leader which can promote the formation of umbrella organizations of like-minded complementary organizations focused on a common issue. On a minor and modest scale, this is the model ICPF used to develop its strategy on employment in collaboration with MSS, and which Ivo Šlaus and Garry Jacobs have also been applying for several projects over the past two years. Our collaboration with ICPF in 2004 and CAPS in 2011 and potential collaboration with Club of Rome are other examples. A similar approach of allying on each project with one or more organizations with a greater depth or wider range of expertise is worth exploring and attempting where feasible. Otherwise we may confine the Academy to its traditional role hosting one-off seminars.

4. *Focus and Methodology:* It took several years for our internal discussions to generate a focal point for original work which is now emerging. In our experience, e-conferencing, plenary sessions such as the one in Zagreb (2005) and Delhi (2011), and even dedicated conferences (the Club of Rome conference at Bern in 2010 incorporated four themes under the conference title of employment) are sufficient to generate interest. But serious work on this issue will require a different mode of working.
5. The project team which presently includes Winston, Orio Giarini, Ivo Šlaus, Garry Jacobs, and Ashok Natarajan needs to be expanded by bringing in others with complementary expertise and willingness to commit time and effort to the project.
6. The team welcomes ideas and involvement of the Program Committee to help formulate a project strategy.

#### IV. Revolution in Human Affairs

*Project leader: Jasjit Singh*

##### A. Background

1. This project typifies the unique approach that WAAS can bring to the examination of global issues. It is rooted in the original thinking of two WAAS Fellows. In the early 1950s Harlan Cleveland observed the powerful impact of rising aspirations on the pace of social and economic development in East Asia, which prompted him to coin the original phrase “revolution of rising expectations.”
2. In the early 1990s Jasjit Singh formulated his perception of the destabilizing potential of rapidly changing expectations when the gap between economic expectations and social reality becomes too great. He perceived the fact that the spread of modern mass communications combined with growing inequality was becoming a major source of social unrest and a basis for violence and terrorism. This important thesis was set forth in the second chapter of ICPF’s report [Uncommon Opportunities](#).
3. The Government of India’s major emphasis on rural employment in recent years arises, at least in part, from its acceptance of advice given by Jasjit Singh that rising social unrest resulting from rapid development represents the greatest threat to India’s national security.
4. The linkage between social development, social unrest and terrorism was explored at the Academy’s NATO workshop in Zagreb in 2005.

##### B. Steps Taken

1. This [project](#) focuses on the linkage between economic development, rising levels of inequality, unemployment, social unrest and terrorism. It directly links the Academy’s on-going focus on social development theory with its focus on security issues – which was the rationale leading to the establishment of the SCPD in 2005.
2. The project was approved by the BoT in August 2009 but implementation was suspended after the modest budget allocation was withdrawn in May 2010.

3. In February 2011, a one day seminar was organized by Jasjit Singh and financed by CAPS in Delhi to launch the project. The discussion examined themes related to security, governance, law, economy, social development and the role of civil society.
4. An article by Jasjit Singh "[Revolution in Human Affairs: The Root of Societal Violence](#)" was published in *Cadmus* issue 2 in April 2011.
5. A background paper by Ashok Natarajan "[Rising Expectations, Social Unrest & Development](#)" prepared for the February 2011 meeting was published in *Cadmus* issue 3 in October 2011.
6. The reasons for the dramatic decline in violent conflict within and between nations since 1990 are examined in another *Cadmus* issue 3 article by Robert Berg Berg et al., "[Mediation of Conflicts by Civil Society](#)".
7. Jasjit Singh also presented an overview of the project at the Delhi GA on November 11<sup>th</sup>, 2011.

#### C. Next Steps

1. Participants in these events agree that the theme is of great significance and should be developed into an on-going project.
2. One result of these efforts is that Jasjit Singh has confirmed plans to write a book on this subject.
3. A viable next step would be to clearly frame the range of issues encompassed by the project
4. An immediate possibility is to conduct an e-conference and one or more webcasts to project the theme to a wider audience of Fellows and then to survey them to elicit ideas and find out who might be interested in participating.

#### D. Assessment

1. This project has the potential to make an original contribution of global significance.
2. Sooner or later Jasjit Singh is likely to write his book. The question is whether and how the Academy can broaden and enrich the research base and promote this theme in a manner that will project his original thesis to a far wider audience.

### V. Evolution of Individuality

*Project leaders: Garry Jacobs & Eleonora Masini*

#### A. Background

1. The theme of social development has been on the Academy's agenda for more than a decade. A special session chaired by Harlan Cleveland was conducted at the Vancouver GA in 1998 and a monograph entitled [Human Choice: The Genetic Code for Social Development](#) was published co-authored by Harlan Cleveland, Garry Jacobs, Ashok Natarajan and others. In 1999 a one day workshop in Washington and a three day conference in Chennai were organized in collaboration with MSS on the same theme. Workshops were also conducted on this theme at Zagreb in 2005 and Hyderabad in 2008.
2. The focus of these sessions was primarily on the development of social capital and social organization. It was also recognized that the relationship and interaction between the individual and the collective constitute a central dynamic of the process, but attention was focused on the organization of the collective rather than the development of its individual members.

#### B. Scope

1. The concept of self-actualization or individuation is found as a common thread in the writings of pre-eminent psychologists such as [Carl Jung](#), [Abraham Maslow](#) and [Carl Rogers](#). All of them characterize

the self-actualized individual as one with the capacity to contribute to the overall welfare of the society in contrast with the egoistic self-centeredness and pursuit of self-interest commonly associated with the term 'individualism'. Thus, individuation has to be distinguished from egoistic individualism.

2. The objective of this project is to examine the relationship between the individualized person and the society, the role of actualized individuals in different fields in furthering the evolution of the society, and the characteristics and attributes of the social collective that are most conducive to the emergence of self-actualized individuals. It also proposes to examine whether in recent centuries societies are developing toward greater freedom and greater support of individuation of their members.
3. The project is also intended to explore the central role of human resourcefulness and creativity in the development process, with emphasis on the contribution of creative individuals – pioneers, business and social entrepreneurs, inventors, original thinkers, artists, writers, etc.
4. This project focuses on the interface between social development, the evolution of law and human rights, social, cultural and psychological development. It encompasses perspectives drawn from the political, economic and cultural history, biography, education, literature and the arts.
5. This project is one of only two projects proposed in the initial round of planning that provides a field for linkage between the arts and science.

### C. Steps Taken

1. A survey of Fellows in January 2010 indicated considerable interest in this topic, but when the project was launched as an e-conference in February 2010 the chair was fully occupied with the final intensive phase of work on the SPC's second report and could not give this project the attention it required.
2. The [e-conference](#), which ran for two months, generated 40 topics and discussion papers and 64 comments. Eleonora, who was actively involved in framing the issues, Augusto Forti, Goran Hyden, Robert van Harten and Ashok Natarajan were among the most active contributors. Janani Harish, who has just been elected as Associate Fellow, contributed several papers exploring the relationship between individuality and social development in literature.
3. The initial plan was to include a series of webcasts, but after controversy broke out at the May 2010 Board meeting at Florence, the plan for webcasts was suspended.
4. After the Florence meeting, Ivo Šlaus and Garry Jacobs met with Augusto Forti, who spoke of the possibility of organizing a conference on this theme in Venice, but it could not be pursued because of paralysis on the Board.
5. In continuation of this theme, last year Garry Jacobs and Ivo Šlaus conducted a research project on the [role of human capital in social development](#) which was published in *Sustainability* journal in January 2011.

### D. Next Steps

1. As Winston and Alberto have proposed, the project scope should be expanded to examine the interrelationship between personality, decision-making, power and culture.
2. One proposal is to initiate a series of webcasts to explore the views of psychologists, writers, artists, philosophers, scientists and entrepreneurs on this theme.
3. Another proposal under consideration is the possibility of convening a conference in Montenegro on this theme at the invitation of Momir Durovic in September 2012.

### E. Assessment

1. The project team believes that this project offers considerable scope for an original and important contribution to thought on social development which spans all fields of knowledge and creative

expression, thus offering a unique opportunity to engage large numbers of the Academy's members in dialogue on an issue of relevance to all of us.

## VI. From Crisis to Prosperity

*Project Leader: Ivo Šlaus*

### A. Scope

1. The world confronts multiple crises, each of which resists current efforts at resolution and appears intractable. The environmental crisis of climate change occupied the center stage in the mid-2000s. Fears of nuclear weapons proliferation, which had subsided into complacency in the years following the end of the Cold War, suddenly surfaced with renewed intensity when Korea tested nuclear weapons and long range missiles and news surfaced of Iran's secret nuclear weapons program in 2007. Then the subprime mortgage crisis exploded in late 2008, spreading havoc through financial markets across the world. It was followed quickly by a sudden and substantial slowing of economic growth in OECD countries, rising levels of unemployment and most recently a crisis of excessive government debt. In spite of the enormous attention being given to each of these issues by specialists nationally and internationally, progress on all fronts appears to be nearly at a standstill or at least far too slow to meet pressing human concerns.
2. The times we live in are a Wild West of globalization and the unbridled, unregulated expansion of international activities threatens to destabilize and undermine the remarkable progress of the previous five decades. This project is predicated on the assumption that each of these problems defies solution because they all represent problems that transcend the sovereign powers of the nation-state. None of them can be fully and satisfactorily addressed by nation-states acting individually. All are symptoms of the evolution of world society to a stage where concerted and coordinated global action is required to meet the collective needs of humanity for peace, security, financial stability, economic welfare and sustainable development.
3. This project has been conceived to address the underlying and interrelated issues that all these challenges pose to global governance.

### B. Steps Taken

1. A workshop was conducted on the then emerging international financial crisis at the [Hyderabad GA](#) in Fall 2008.
2. This [project](#) was proposed by Ivo Šlaus in the SPC forum in Spring 2009, approved by the Board for pilot development in August 2009, and scheduled to be launched as an e-conference in mid-2010. Subsequent events led to an indefinite postponement.
3. An article by Ian Johnson most appropriately entitled "[The Perfect Storm: Economic, Financial and Socio-Ecology](#)" was published in *Cadmus* issue 2 in April 2011.
4. The project was publically inaugurated at a UNESCO conference in Dubrovnik in September 2011 honoring Ivo Šlaus on his 80th birthday.
5. A paper presented at Dubrovnik, "[Turn Toward Unity: Converting Crises into Opportunities](#)", by Garry Jacobs exploring these themes and possible remedies was published in *Cadmus* issue 3 in October 2011 together with another article by Ian Johnson, "[The World in 2052](#)".

### C. Further Steps

1. Conduct a webcast with a panel of speakers including Jasjit Singh, Robert Berg, Winston Nagan, Garry Jacobs and Ian Johnson to discuss the confluence of issues and possible strategies to advance the cause of global governance.

### A. Scope

Rationality is an essential instrument in humanity's quest for knowledge, yet the practical pursuit of knowledge often ignores or violates fundamental principles of rational inquiry or overlooks the inherent limitations in the use of rationality as an instrument of knowledge.

This project explores the philosophy and practice of rationality as it applies in various fields of knowledge to identify common deviations and limitations and propose ways to compensate for the limits to rationality.

The World Academy is pre-eminently qualified to examine this issue in its broadest and most profound terms and to evolve guidelines that may be relevant to all fields of knowledge. A study of the *limits to rationality* can be approached at two levels:

- *Identification of the most common ways in which the pursuit of knowledge fails to meet the minimum criteria for rationality:* In his recent book *The Trouble with Physics*, Lee Smolin examines some of the ways in which the practice of physics deviates from the theory of a rational science. Apart from logical fallacies, the tendency toward social conformity, egoistic subjectivity and excessive reliance on data rather than theory are serious impediments. Similar conditions are so commonplace in other fields that we tend to accept them as natural or inevitable, rather than imperfections to be eliminated.
- *Identification of the inherent limits of rationality as an instrument of knowledge:* Philosopher Karl Popper pointed out that most significant scientific discoveries are the result of an intuitive, non-rational processes, yet little attention is focused by scientists on understanding those processes and discovering ways to enhance creativity and originality of thought in education and the pursuit of knowledge. Here Science may have much to learn from the experience of Art. The mind's tendency toward linearity, viewing reality in terms of mutually exclusive opposites and artificial abstractions derived from life are among the characteristics often overlooked.

For further elaboration on the scope of this project see the [original project concept note](#).

### B. Steps Taken

1. During a WAAS-ICPF conference in New Delhi in November 2004, Harlan Cleveland, Walt Anderson, Ivo Šlaus and Garry Jacobs identified this theme as an important issue for future WAAS programming.
2. During the strategic planning process in 2009, Ivo Šlaus submitted a project proposal which was approved by the Board with an allocation of \$2000 for a pilot e-conference project. The project was postponed when funding was subsequently withdrawn in May 2010.
3. At the Hyderabad General Assembly in October 2008, the Academy conducted a preliminary [workshop](#) on this subject which demonstrated the importance of addressing this issue as well as its varied implications when applied to different fields of physical and biological science, mathematics, social science, politics, business and the arts. The significant interest expressed by participants in this workshop indicates the wider interest this topic is likely to attract both within and outside the Academy.

### C. Next Steps

1. Survey Fellows to assess interest in the project.
2. Conduct an e-conference in early 2012.
3. Conduct a conference on this theme.

## VIII. New Economic Theory

Project leaders: Orio Giarini, Ivo Šlaus, & Garry Jacobs

### A. Background

1. In December 2009 Ivo Šlaus convened a small group of Fellows consisting of Orio Giarini, Garry Jacobs and later Bernard Lietaer to discuss the need for new economic theory and feasibility of formulating a broad approach outlining the issues and perspectives that it should include.
2. Over the following three months there was an intensive exchange of questions and ideas, which gradually evolved into the outlines of an article. The group drew extensively on original theoretical work done by Orio Giarini and published in two reports to the Club of Rome, *Dialogue on Wealth and Welfare (1980)* and *Limits to Rationality (1991)*, which at the time had not received the full attention they merited.
3. In May 2010 the group met in Trieste to sketch the outlines of a project on new economic theory and also agreed to establish *Cadmus* journal as an organ to project new thought related to the fields of economics and governance.
4. The group agreed that new economic theory requires the parallel development of new economic measures. Therefore, side by side with the theoretical discussions, Garry Jacobs and Ivo Šlaus evolved the framework for a new measure of economic progress, the Human Economic Welfare Index, incorporating measures for real household consumption and savings, inequality, unemployment, health, education and energy sustainability.
5. The first issue of *Cadmus* which came out in October 2010 carried an article entitled "[Introductory Paper for a Programme on The Wealth of Nations Revisited](#)" and a companion article "[Indicators of Economic Progress: The Power of Measurement and Human Welfare](#)" by Garry Jacobs and Ivo Šlaus.
6. A special SEED-WAAS website for [New Economic Theory](#) was created to become a focal point for this project.
7. Meanwhile, Ian Johnson, the recently appointed new Secretary General of Club of Rome, wrote expressing appreciation for the article and requesting the authors to present a summary of their findings at the Club's annual conference in Winterthur in October 2010.
8. Numerous meetings between Ivo Šlaus, Ian Johnson, Orio Giarini and Garry Jacobs took place in January, February and September 2011.
9. An article by Orio Giarini "[Science and Economics: The Case of Uncertainty and Disequilibrium](#)" appeared in *Cadmus* issue 2 in April 2011 together with an article by Winston Nagan on "[Human Rights, Liberty and Socio-Economic Justice](#)", an article by Hazel Henderson "[Grossly Distorted Picture: GDP Still Misleading](#)" and an editorial on "[The Great Divorce: Economics & Philosophy](#)".
10. *Cadmus* Issue 3 (October 2011) includes articles by Roberto Peccei on "[Rethinking Growth: The Need for New Economics](#)", by Hazel Henderson on "[Real Economics and the Illusions of Abstraction](#)" and an extensive study by Orio Giarini and Garry Jacobs on the significance of the evolution of agrarian and industrial economy to the modern service economy and the implications for measurement of economic value, "[The Evolution of Wealth & Human Security: The Paradox of Value and Uncertainty](#)".
11. [Roberto Peccei](#), Orio Giarini, Ivo Šlaus and Garry Jacobs participated in presentations and discussions on new economic theory as part of the Club of Rome-WAAS conference in Delhi in November 2011.

### B. Next Steps

While the group is pleased by the attention and interest the initiative has generated within and outside the Academy, it is now time to develop a plan for systematic development of the project. The addition of Robert Peccei and Ian Johnson, who has just been recommended by the Board for election, will considerably strengthen the project team. In addition a means should be found to involve a number of

other Club of Rome members, such as Hazel Henderson and David Korten, who are working on parallel lines. Thus, development of a project plan is the next essential step.

## IX. Conclusions drawn from Recent Experience

This review is intended to help the Program Committee evolve more effective strategies for future program development and implementation. A few overall observations can be made in conclusion regarding the management, organizing, financing and programmatic content of projects.

### A. Leadership & Participation

1. The active commitment, involvement and support of the Academy's leadership, which was largely absent for several years, are essential for successful project development and implementation. The Academy's leaders need to be active examples of involvement and participation.
2. An active Program Committee to support the programs is also essential. That too is only now possible and being established.
3. Committed individuals, champions, are vitally important for WAAS projects, since most Fellows have other full or part-time responsibilities and the Academy lacks full-time paid staff to provide in-depth project support. In other words, institutional programming needs to focus on themes and projects in which Fellows are individually interested and committed, which can be enhanced by co-opting external resources and new Fellows with special interest and expertise in program areas, such as Jonathan Granoff who was elected four years ago and Ian Johnson who has been recently nominated. This also implies that project teams need to be given extensive freedom of action backed by organizational support, a philosophy opposite to that advocated by the previous leadership.
4. One notable deficiency in recent programming has been the inability to involve larger numbers of Fellows in these programs. Only about 20 individuals are mentioned by name in this document because of their active involvement over time. That is far too few. Whether the Academy was more successful in engaging larger numbers of Fellows during earlier periods except on the occasion of GAs is not clear, but it is evident that a continuation of this trend would impose severe limits on our capacity to energize the Academy to fulfill its mission. The more obvious reasons for this poor performance include:
  - a) A history of top down program development and implementation in which most Fellows remained passive and uninvolved except at the time of periodic major events.
  - b) A lack of involvement by senior leaders in recent years combined with an authoritarian and bureaucratic mode of management which stifled rather than encouraged initiative.
  - c) Inadequate communication with our members regarding on-going activities, partly as a result of constraints imposed by management on communications with Fellows by the project leaders.
  - d) A change of generations in which many of the most active Fellows of the last two decades became too old or passed away combined with a failure to identify and elect a sufficient number of younger Fellows into the Academy.
  - e) Resistance of many of our existing members to adopt to the new electronic modes of interaction made possible in the information age.
  - f) Paucity of funds to support larger gatherings at physical conferences and seminars.
  - g) Failure of the project leaders in creating a more aggressive campaign for wider participation of members.

While similar conditions pertain in many other organizations similar to WAAS, high priority should be placed by the Program Committee and Membership Committee in devising ways to increase participation. If we succeed in doubling the number of Fellows actively involved in programs, it would substantially enhance our capabilities and performance. Experience shows that even a single committed individual can make a significant contribution, so depth and quality of participation rather than mere numbers will always be the ultimate criteria for the Academy's success.

5. While in the past, WAAS spent lavishly on infrequent large General Assemblies that generated momentary interest but relatively little program momentum, recent experience shows that modest seed funding for electronic conferences and smaller meetings of people interested in specific issues can generate significant results. Total WAAS expenditure on the GEC to date has been less than \$15,000, a substantial portion of which was met by the involved individual participants.
6. Recent experience with Club of Rome suggests there is great potential to leverage the Academy's huge network of relationships with other organizations to design programs which draw on the complementary strengths of different organizations. The Academy can bring a breadth of perspective to any issue which complements the greater depth of specialized issue- based focus that others can provide.

## B. Program Delivery

1. Electronic interactions through webcasts, conference calls, forums and email can be very useful, but they cannot replace physical meetings, which are essential to generate focused attention and lively real-time interactions.
2. The initial reluctance of many Fellows to invest significant time in preparing papers and presentations for e-conferences may be partially offset by the fact that some of the papers have subsequently been published in *Cadmus*. Thus, investing in expansion of the Academy's publication activities may enhance participation in e-conferences.
3. The five GEC webcasts did demonstrate that live real-time interactions across the world are technically, organizationally and financially feasible and can be intellectually stimulating and effective. A regular series of two hour webcasts in which one or two speakers present and a panel of participants respond on a specific problem or issue may be an effective and inexpensive way to activate program participation and engage more Fellows in WAAS activities.
4. Administrative support for e-conferencing, webcasts and email communication with participants can be provided. However, both the e-conferences and the webcasts still require a significant commitment by the project teams for program design and forum preparation, as well as supervision of communication and response to participants. Based on our limited experience to date, the efforts to prepare for and organize an electronic event and a physical event may be more or less the same.
5. The Academy's overall effectiveness in utilizing electronic media will depend largely on how successful we are in shifting the general mode of our interactions from one to many email to many to many web-based contributions that creates a visible track record, organized presentation and permanent archive of member contributions. In this respect, forum-based communications differ from individual email exchanges, which are like successive waves coming to shore one on top of the other, so that earlier links in the chain are progressively buried and lost sight of. This will necessitate a crafted strategy for judiciously managing use of our mailing lists.

## X. Future Programming

### A. Program Framework

1. While each of the projects reviewed in this report appears to constitute an independent center of inquiry, virtually all of the projects are interrelated with one another and draw upon a common intellectual perspective, which has yet to be explicitly articulated. In other words, the real "WAAS project" seems to be a comprehensive approach and integrated perspective applicable to social problems and opportunities.
  - a) *Reliable Knowing*: The integrated perspective arises from a broader conception of what constitutes complete and effective knowledge, as depicted in the SPC's conception of reliable knowing which forms part of the WAAS Program Framework.



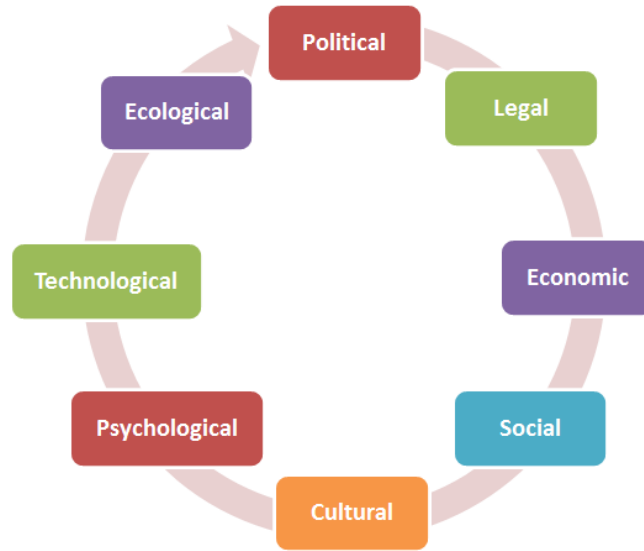
For instance, in recent work on new economic theory Orio Giarini and Ian have repeatedly emphasized a human-centered perspective based on the premise that the primary function of financial markets and economic systems is to promote human welfare, an apparently obvious fact often overlooked in debating the merits of efficient market theory and financial deregulation. The work of Garry Jacobs and Ivo Šlaus to evolve new measures of economic welfare was based on the same premise. So too, Winston made a strong case for a value-based perspective in the GEC recognizing employment as a fundamental right. According to this view, a theory of employment that is unable to harness the abundant human and financial resources now available to actively engage all willing individuals in productive work and provide for the basic needs of all citizens lacks the power and effectiveness to qualify as valid social theory.

- b) *Comprehensive Approach:* The program framework has also given rise to a comprehensive approach to what are often perceived as distinct and separate problems.



Jasjit Singh's project on Revolution in Human Affairs focuses on the linkage between peace, security, democratic freedom, justice, equality, economic prosperity, crime, and terrorism, including historical factors and the impact of advances in communication technology on public awareness and expectations. Similarly, discussions of new economic theory encompass issues related to ecology, human rights, innovation and social organization.

- c) *Multi- and Trans-disciplinarity:* Furthermore, the recognition that social reality is an integral and organic whole composed of multiple dimensions or aspects has naturally led us to examine each issue from a wide range of different disciplinary frameworks in an effort to capture insights into the total reality of which each is a vital component, as the systems of the human body form essential and indispensable aspects of an indivisible organic whole. Intuitively, our approach to comprehending and solving problems has led to multidisciplinary approaches. Thus, the study of employment has incorporated legal, economic, social, political, psychological, demographic, technological, ecological and cultural factors.



- d) *Program Framework:* This ultimately led the SPC to arrive at what first appeared as an oversimplified program framework, but one that seems to capture the contribution of intellectual, political, economic, social and ecological dimensions. It is now evident that global governance is a common motive running through all the problems confronting humanity today – the threat of nuclear weapons, financial instability, unsustainable economic growth, ecological imbalances, unemployed youth, income inequality, social unrest and terrorism.



PROGRAM THRUST AREAS

- Effective Democracy
- Global Security
- Sustainable Ecology
- Educational Advancement
- Equitable Prosperity
- Cultural Enrichment

- e) *WAAS Mission:* This brings us back to the real “WAAS Project” as reflected in the Mission statement.

The World Academy of Art & Science is an association of committed individuals drawn from diverse cultures, nationalities, occupations & intellectual pursuits spanning the arts, humanities & sciences, conscious of the profound social consequences & policy implications of knowledge, & united by a common aspiration to address the urgent challenges & emerging opportunities confronting humanity today. Our mission is to promote cross-disciplinary dialogue generative of original ideas & integrated perspectives that comprehend the root causes & effective remedies for our common problems, while furthering those currents of thought & social movement that affirm the value of human dignity & equitable development. The Academy dedicates itself to the pursuit of creative, catalytic ideas that can provide to present & future generations enlightened leadership in thought that leads to effective action.

In our understandable quest to formulate practical strategies and directly influence policy makers, we should not underestimate the value of formulating and publically projecting original ideas that can influence the thinking – not only of policy makers – of scientists, business and social leaders, artists and the public-at-large.

The Academy’s mission encompasses both research and policy formation, but its essential aim is based on the power of ideas to provide *Leadership in Thought that Leads to Action*.

## B. Real Ideas Framework

1. The Program Framework provides guidelines regarding the type of knowledge and the types of issues that the Academy should seek to address. It does not identify any specific issues on which WAAS can make a significant original contribution to global human development.
2. The identification of a specific message to project – one or more positions the organization stands for -- has been one of the factors distinguishing organizations such as Club of Rome and Pugwash, whose programs have had visible, global impact.
3. The decision of the Board in 2007 to adopt the Abolition of Nuclear Weapons as a specific objective of the Academy marked a significant step in identifying WAAS as an organization that stands for an idealistic position on an issue of paramount concern to our founders. This decision activated the participation of some Fellows, generated a series of events, and collaboration with GSI, Middle Powers Initiative and CAPS. The limitation we have faced on this issue has been our inability to define a unique position or contribution that we could make to distinguish the Academy from Pugwash, IPPNW, Global Security Institute and countless other organizations dedicated to a similar goal.
4. As a complement to the Program Framework described above, the SPC recommended that the Academy also adopt an approach designed to identify specific issues on which WAAS can make a significant, original contribution. *Real Ideas can be defined as ideas with self-effectuating power. The acceptance of the idea carries with it the capacity to change our perceptions, attitudes and actions.*
5. *From Problems to Solutions:* The program framework identifies global issues of importance. The emphasis is on a problem that needs to be recognized and addressed. Here the focus is on advocacy of original ideas, bold strategies and essential actions that are needed to resolve challenges and tap opportunities. We do not just discuss an issue. We take a position on what should be done to address it. Over the next two years, the Academy could seek to identify 3-5 Real-Ideas that can change the world, ideas akin in their originality, scope and broad appeal to the Club of Rome’s conception of “limits to growth.” Whatever controversy may be associated with the idea, the fact remains that it raised the issue of sustainability to the top of the world’s intellectual agenda and has prompted constructive research and discussion of this crucial issue throughout the world.
6. WAAS can consider posing the following question to its entire membership: “Can you identify an original idea that, if widely publicized, accepted and implemented today, can have the most profound positive impact on the future welfare and well-being of humanity.” The very act of asking this

question will help energize and generate greater involvement among our Fellows and communicate to them the Academy's intention of making a real difference in world affairs.

7. Once identified, the Academy could utilize its vast network of relationships with leading thinkers and organizations to project these seminal ideas and partner with other organizations to create an umbrella agency to bring these ideas into public awareness and promote their actual implementation.
8. Strategic Partnerships have a crucial role to play in this strategy. Once the Academy has identified, developed and endorsed a powerful idea for dissemination, it can act as an umbrella or magnet for other organizations with similar or complementary views, so that the idea acquires the characteristics of a social movement.
9. Some issues that could lead to the formulation of Real Ideas are discussed below to illustrate the approach.
  - a) **Full and Guaranteed Employment:** Full and guaranteed employment is global in significance and essential for achieving equitable and sustainable human security, yet even ILO has not had the courage to take a clear position on this issue for political reasons. The proceedings of the Academy's Global Employment Challenge include compelling arguments for the adoption of full and guaranteed employment as a fundamental human right and policy of every government. In view of the widespread concern today with high and rising levels of unemployment, effective advocacy of this view could propel this issue to greater international visibility. Through the GEC, WAAS is already associated with a number of organizations committed to this goal. The Academy can partner with organizations such as ILO, Asian Development Bank, Centre of Full Employment and Equity, University of Newcastle (Australia); the Cambridge Centre for Economic & Public Policy, University of Cambridge; Levy Economics Institute of Bard College (USA) and the Center for Full Employment and Price Stability (CFEPS), and University of Missouri-Kansas City.
  - b) **Integration of education with employment:** The GEC has documented that a major reason for inadequate job growth is the widening gap between the skills required by modern economies and the actual prevalence of skills in the work force of both economically advanced and developing countries. This is one manifestation of the disconnect between the present system of education and the evolving needs of society. A restructuring of educational methods and content to align them with emerging social needs will dramatically speed job creation and reduce unemployment. WAAS could partner with organizations such as UNESCO, UNDP and UNIDO on this issue.
  - c) **Employment and Social Stability:** The Academy's e-project on Global Social Revolution focuses on the linkage between poverty, unemployment, widening economic inequality, social unrest and terrorism. Greater awareness of the relationship between employment and terrorism could focus attention on constructive strategies to address the root causes of social violence.
  - d) **Global Governance:** The Academy's e-project on "From Crisis to Prosperity" is based on the premise that the proliferation of nuclear weapons and other armaments, the spread of terrorism, the international financial crisis, rising economic inequalities and unemployment, ecological issues related to energy and climate change all have a common basis. Solution to all these issues requires emergence of effective, democratic institutions for global governance. The current unrepresentative character of the UN Security Council, the veto power exercised by its five permanent members, and the absence of a global central bank are a few examples of the limitations of the current system. The Academy could undertake a far-sighted initiative to examine the essential requirements for effective global governance in the coming decades and project a model capable of overcoming the limitations that hamper the transition beyond the nation-state system.
  - e) **World University** – an original seminal idea of global significance can be found in the Academy's original Manifesto. WAAS founders envisioned the possibility of the Academy itself functioning as an informal "world university", a visionary idea which was far ahead of its time.

Today that is no longer the case. The enormous increase in demand for higher education all over the world will necessitate development of entirely new models of educational delivery which can accommodate a vast increase in student population with far greater efficiency and lower cost than traditional forms of higher education. Technology now makes it possible to consider very different models for delivery of higher education, as different from existing models as Amazon's strategy for becoming the largest book seller in the world without operating a single bookstore.

Internet-based education is not a new idea. Many universities are already offering web-based courses. But none of these constitutes a truly inclusive global approach to delivering higher education. A global system would generate enormous benefits in terms of efficiency and equality of opportunity. Imagine a global network that enabled millions of students around the world to access the top academicians in each specialized area of their interest.

In addition to evolving a new model for delivery of education, the World University also presents an opportunity to found a new intellectual basis for the organization of knowledge based on the principles of Reliable Knowing.

A project based on this idea could include

- (1) An examination of the strengths and weaknesses of traditional forms of higher education.
- (2) An assessment of the global demand for higher education over the next few decades and challenges in meeting the needs through traditional means.
- (3) A survey of alternative technology models now in operation or under preparation to identify the most advantageous model.
- (4) Research undertaken on alternative basis for the organization of knowledge and education based on the concept of Reliable Knowing.
- (5) A global survey of educational leaders on this issue and one or more international conferences to explore alternative models.
- (6) Identification of global players interested in these issues as potential partners with WAAS, including international organizations such as UNESCO, national governments of developing countries with large populations, scientific and other academic institutions, commercial organizations, etc.
- (7) Research and development of university level on-line course-ware in collaboration with United Nations University.

*Prepared by Garry Jacobs, chair SCPD, chair SPC (2009-10), chair ECC (2009-10)*