GLOBAL LEADERSHIP FOR THE 21ST CENTURY

Phase 1 Interim Report & Research Proceedings

October 2020
Global Leadership for the 21st Century

Partners & Collaborators

Collaborating UN Entities

1. International Labour Organization
2. United Nations Conference on Trade and Development
3. United Nations Economic Commission for Europe
4. United Nations Economic Commission for Africa
5. United Nations Educational, Scientific and Cultural Organization
6. United Nations High Commissioner for Refugees
7. United Nations Institute for Training and Research
8. United Nations Major Group for Children and Youth
10. World Health Organization
11. Young UN

Implementing Partners

1. Art for the World
2. Club of Rome
3. Ethical Markets
4. Fire Drill Fridays
5. Foundation for a Culture of Peace
6. Future Capital Initiative
7. Global Education Futures
8. GlobalMindED
9. Global Security Institute
10. Geneva Press Club
11. Greater Pacific Capital
12. Institute for Advanced Studies in Levant Culture and Civilization
13. Institute of Electrical and Electronics Engineers
14. Moscow State University
15. Mother’s Service Society
16. Nizami Ganjavi International Center
17. Person-Centered Approach Institute
18. World University Consortium

Contributing Organizations

1. AQAL Capital GmbH
2. Berggruen Institute
3. Bohdan Hawrylyshyn Family Foundation
4. Global Institute of Integral Management Studies
5. GlobeScan
6. Inter-Parliamentary Coalition for Global Ethics
7. Inter Academy Partnership
8. International Centre for Sustainable Development of Energy, Water and Environment Systems
9. International Institute for Human Security
10. International Trade Centre
11. International Union for Conservation of Nature
12. Inter-Parliamentary Union
13. Millennium Project
14. World Summit of Nobel Peace Laureates
15. Parliamentarians for Nuclear Non-proliferation and Disarmament
16. Protect our Planet Movement
17. Serbian Association of Economists
18. Social Trade Organisation
19. SPARK
20. Transcendent Media Capital
21. University of Perugia
22. Weaving Lab
23. We, The World
24. WeYourChildren.org
25. World Future Council
26. World Skills
27. World Sustainable Development Forum
28. Youth Leadership Network
29. Yunus Centre
GL-21 is intended to address the multidimensional global leadership challenges confronting humanity today by identifying catalytic strategies to shape and energize a more vibrant, inclusive, participatory multilateral system and generate fresh momentum for sustainable peace and human security. The project is founded on an inclusive conception of leadership that encompasses a very wide range of instruments, stakeholders and strategies.

This interim report is based on the research findings of 14 working groups and conferences involving a cross-section of more than 250 experts from multilateral institutions, governments, business, academia, civil society and the arts. It examines global challenges and opportunities and explores the potential for a wide range of catalytic initiatives to overcome obstacles to global progress. The report addresses five interdependent pillars of a comprehensive approach to building global leadership and social momentum—Redefining Multilateralism, Sustaining Peace and Human Security, Mobilizing Civil Society, Financing Implementation of the SDGs, and Transforming Global Education. Under each pillar it identifies key thrust areas for breakthrough initiatives. It also outlines issues to be addressed by working groups during webinars and debate at the upcoming conference in Geneva on November 24-25, 2020.

The Context

Humanity confronts an acute nexus of challenges of unprecedented urgency, magnitude, and intensity. The global community is threatened simultaneously by the pressing exigency of the COVID-19 pandemic, severe economic recession, skyrocketing unemployment, a retreat from democracy to autocracy, polarization of society, resurgence of competitive nationalism, renewal of the arms race, and the existential threat posed by climate change.

Global peace and security, international relations and multilateral cooperation, democracy and rule of law, economy and finance, health and education, welfare and sustainable development are all under siege at precisely the moment when we are also confronted by an unprecedented crisis of public trust and confidence in our leaders, governments, international organizations, multinational corporations, financial institutions, the press and the media.

The report concludes that in spite of the unprecedented global challenges, there is a growing recognition among a wide range of international stakeholders that the current crisis situation also offers a unique opportunity to launch humanity into a more dynamic, equitable, resilient, and sustainable phase of global social evolution.

GL-21 CONFERENCE ON
Global Leadership for the 21st Century
Palais des Nations, Geneva
November 24-25, 2020

This is a Planetary Moment and a time for global leadership to generate Planetary Momentum. The United Nations Office at Geneva and World Academy of Art & Science in collaboration with partner organizations are conducting the plenary GL-21 conference on Peace, Multilateralism and Human Security. The conference will examine strategies and recommendations of this two-year project to fill the global leadership vacuum, enhance multilateral cooperation, promote human security, and accelerate implementation of the SDGs. Click here for more information.

The Leadership Challenge

At the end of World War II, the world was emerging from five years of horrendous conflict. The victors in that war established the United Nations in an effort to avoid any repetition of the two catastrophic events which wracked the first half of the 20th century. They had the advantage of a temporarily dominant position of leadership combined with the hindsight of calamities to be avoided and the widespread support of people and nations eager to prevent recurrence of global calamity.
Today the situation is different. The threats lie still before us, not behind. We can no longer rely on recent bitter memories and hindsight. The future that is approaching with such rapidity is filled with uncertainty. Although there were voices which warned of the danger of a global pandemic, only now that it is upon us has the magnitude of the calamity become apparent. Similar voices have been warning for decades about the approaching calamity of climate change, but still dissenting voices contest and vested interests reject the warning in spite of the overwhelming evidence of science corroborated with increasing frequency by natural events.

The challenges today are far greater in number, intensity and complexity than on any previous occasion. Unlike 1945, they do not come at a time of broad-based international consensus, universally acknowledged leadership and unprecedented consolidation of power. Rather they come at a time when ideas, beliefs, policies, systems and strategies are hotly contested; trust and confidence in both institutions and individual leaders are at a low ebb; there is a far larger number and variety of influential stakeholders; and power is more broadly distributed among nation-states and also among other groups, including business, civil society and science.

Our challenge is to convert unparalleled crises into opportunities for global social progress. The situation calls for more dynamic, varied, creative and distributed forms of leadership backed by more inclusive, effective, and networked forms of multilateral coordination that mobilize the full spectrum of global stakeholders acting on behalf of all humanity.

**GL-21 Project**

In this context, the United Nations Office at Geneva (UNOG) and the World Academy of Art & Science (WAAS) have launched a multi-stakeholder, multi-sectoral project in collaboration with more than 20 partner organizations to identify effective principles and innovative strategies to accelerate the emergence of dynamic and effective Global Leadership for the 21st century.

The world continues to face grave global challenges that no single Member State or organization can address alone.

– António Guterres
UN Secretary General

GL-21 is predicated on an understanding of leadership as a conscious instrument to convert the long slow process of social evolution into a conscious process of social transformation. But any transformative process must start from where we are with full cognizance of the obstacles to be overcome and full knowledge of the process by which they can be surmounted. Idealistic solutions may provide us a destination to strive towards in the future. But right now we need actionable catalytic strategies which begin from where we are with the resources at our disposal to support immediate and effective action.

Our urgent task is to fill the current leadership vacuum by generating greater levels of awareness, energy, commitment, institutional dynamism, operational innovation and social engagement and to continuously enhance them to achieve progressively higher levels of momentum. GL-21 has been initiated for this purpose.

The project is based on a comprehensive concept of leadership as a living social process. It encompasses the full spectrum of actors, strategies and instruments for directing and accelerating the evolution of global society. It can be generated by visionary individual initiative and dynamic organizational innovation by international organizations, national governments, scientific academies and research institutions, business and financial institutions,
the media, the arts and humanities, culture, civil society and youth groups. It can also be created by building greater consensus and support for the inspiring values and objectives embodied in the Sustainable Development Goals. So too it can be generated by forming new coalitions and collaborative networks, formulating more appropriate metrics for assessing progress, framing more effective laws and policies, and countless other types of leadership initiative at all levels of global society. It can culminate by generating momentum for a global movement to support conscious social transformation.2,3

Effective leadership requires an inclusive synthetic vision of the whole and its constituent parts, and their interrelations with one another. GL-21 is based on an integral perspective of social reality in which all levels, sectors and stakeholders are complementary dimensions of a single whole, interconnected, interdependent and inseparable from one another. The figure above represents the main issues examined by GL-21 and their interplay with crosscutting social agencies, all intersecting and converging as challenges and opportunities for global leadership. Trans-disciplinary interdependence is self-evident across the hexagon.

The project is divided into three phases:

- **Phase I** – Examination of challenges and their root causes and exploration of potential remedies and Catalytic Strategies as outlined in this Interim Report;
- **Phase II** – Formulation, Analysis and Debate of emergent opportunities for presentation at Geneva conference;
- **Phase III** – Final Recommendations, Conclusions for the Final Report to UNOG, Communication and Educational Outreach Strategies.

**Phase I Working Groups and Exploratory Conferences**

The objective of the first phase of GL-21 was to identify and analyze major global challenges and their underlying root causes, research alternative strategies and models, and explore innovative catalytic strategies and proven projects which can be applied, replicated or scaled up for greater impact.

Fourteen working groups were constituted to identify key issues and opportunities for examination. The methodology included consultations, interviews, webinars and conferences with leaders and expert representatives of international organizations, national governments, scientific academies and research institutions, universities, business and finance, and civil society organizations, with special emphasis on youth groups.

In June 2020 UNOG and WAAS invited 20 partner organizations to participate in a five-day exploratory e-conference on “Strategies for Transformative Global Leadership”. The objective of the conference was to identify catalytic strategies and successful initiatives to fill the global leadership gap and generate positive momentum for progress. The event involved more than 200 speakers in 35 special sessions covering political, economic, financial, educational, health, technological, scientific, social, cultural and ecological issues. This was followed by a series of panel discussions and smaller meetings on specific subjects in collaboration with partner organizations. Papers and proceedings from these events are available on the [WAAS Website](#).

**Phase II Research and Geneva Conference**

The Working Groups, June e-conference, webinars, articles and working papers generated in association with GL-21 identified a number of high potential areas in which catalytic initiatives can be undertaken to enhance leadership in different sectors and at different levels of the global community.

The findings of Phase I are now being processed to formulate perspectives, catalytic strategies and initiatives for presentation and discussion at the main conference at UNOG in Geneva in late 2020.

The conference will be organized into five interrelated pillars or themes as discussed in this report:

1. Redefining Multilateralism
2. Sustaining Peace, Human Security & Resilience
3. Mobilizing Civil Society
4. Financing Implementation of SDGs
5. Transforming Global Education

The recommendations and conclusions of the Geneva conference will constitute the core of the GL-21 Final Report, to be followed and disseminated through public communication, educational and other outreach strategies.

This interim report presents a synthetic representation of the five themes and specific leadership issues and opportunities to be examined and developed during Phase II and presented at the Geneva Conference.
1. Redefining Multilateralism

There is a compelling need to redefine our conception of multilateralism and the institutional system constituted to support it. Multilateralism needs to be reshaped to take into account the proliferation in the number, variety and diversity of stakeholders acting globally, the growing volume and speed of international interactions and transactions taking place, and the increasing complexity of international relations. Its concept of security needs to be modified to reflect a mutation in the sources and nature of conflict and insecurity from war between nation-states to internal weaknesses within states, resulting from political instability, ethnic or religious strife, administrative incapacity, economic breakdown, natural calamity or environmental degradation. Its focus needs to be broadened from territorial issues to encompass a wide range of non-material, cross-border factors, including information flows, financial flows, trade, intellectual property rights, technological dissemination. Its priorities need to be reordered to effectively address threats arising from the COVID-19 pandemic, unemployment, food insecurity and climate change. Its institutions, strategies and policies need to be coordinated and integrated in response to the growing interdependence and complexity of global society, which renders ineffective piecemeal strategies and policies implemented by specialized, sectoral institutions acting independently. We live in an increasingly globalized, interconnected world in which global challenges can only be solved through comprehensive, integrated strategies implemented by coordinated collective action.

A new form of multilateralism or plurilateralism is needed that effectively engages a substantially larger number and wider range of stakeholders. Changes in the global system can only be achieved with the active and vocal involvement of global civil society unleashing a global social movement. Multilateral institutions must be remolded to foster close collaboration between specialized agencies, support more decentralized and dynamic management and leadership initiatives, and devise and implement more effective ways to bridge the vast distance and surmount the barriers that separate “we the people” from decision-making in international affairs.

Building stable, democratic, prosperous, resilient societies is the antidote to human insecurity. A major paradigm shift is urgently needed to a more inclusive, representative, participative, multi-stakeholder system of global governance equipped to understand and respond to the speed and complexity of the issues we face, and committed to realize the comprehensive agenda of human security goals set forth by the world community. Whatever the shortfalls in the present system, its achievements have been enormous and the need for a multilateral system today is greater than ever before. There is simply no viable alternative to multilateralism. In today’s interconnected and interdependent world, governments and intergovernmental organizations alone cannot effectively address complex global challenges. These challenges require our collective response.

This report addresses the issues under Pillar 1 Defining Multilateralism under the following five headings.

1.1. Evolving Global Context

Reshaping multilateralism needs to take into account fundamental changes taking place in the world today. Recent events have generated a deep awareness of the need for radical change, not merely reforms or a return to an earlier form of imperfectly engineered system. A convergence of tipping points and acceleration of timelines threaten to undermine the stability of the current global system.

The international system has become much more inclusive than ever before. For the first time in the history of mankind, it includes nearly all of humanity. The number and diversity of stakeholders acting globally, the volume of international interactions, the interdependence and complexity of the engagements have all expanded beyond imagination. A global identity, a global sense of community, a shared global commons, and a shared global culture are gradually emerging.

There has also been a deep mutation in the nature of conflict. At the same time the sources of conflict are also changing. Wars used to be a matter of competition between powers. Weakness is replacing power as the source of conflict and war. Problems resulting from the flight of political, economic and environmental security now present more dangerous threats to global peace than superpower rivalry. These diverse causes of insecurity are turning the international environment upside down.

Traditional boundaries are becoming blurred. The territorial notion of politics has been altered by a wide range of non-material, increasingly fluid and rapidly changing cross-border factors, including information flows, financial flows,
trade, intellectual property rights, technological dissemination, the spread of social movements. All of the major crises confronting humanity today are multi- and intersectoral with respect to both their causes and the requisite solutions.

The world today is also increasingly integrated. As society has expanded horizontally to encompass the whole world, its various dimensions, sectors and dimensions of activity have become increasingly interrelated and interdependent with one another. The multilateral system has to be reshaped to address a far wider range of issues as inseparable dimensions of a complex and increasingly integrated global system. It also has to be empowered with the mandate, authority, resources and commitment of member states required to meet the global challenges to Human Security prevailing today. It has to be capable of transcending disciplinary and institutional silos to address the complex interactions and interdependencies between different fields of social existence that cannot be addressed by the specialized action of narrow sectoral institutions, policies and programs.

These fundamental changes—greater inclusivity, mutation of the nature of conflict, increasing mobility and complexity—reflect a profound transformation in the nature of international relations. As a result of them, the notion of interstate relations no longer adequately captures the nature of the global community or the challenges of global governance. The COVID-19 pandemic is only the most recent and dramatic expression of challenges far beyond what was anticipated when the present global system was founded and they can only be effectively addressed by radically redefining or reinventing the multilateral system.

**Issues under examination**

This heading focuses on the need for changes in the multilateral system generated by broader developments in global society. It will examine the circumstances that account for the current global leadership vacuum, necessitate deep changes in the structure and functioning of the multilateral system, call for new forms of leadership, and open up new opportunities for breakthrough initiatives.

1. Limitations imposed by the original constitution and structure of the UN system on its capacities for effective action.
2. Changing conditions and circumstances which necessitate actions to substantially strengthen the multilateral system.
3. Implications of the changes in the types and distribution of power in international relations for efforts to define or invent a more effective multilateral system.
4. Opportunities for enhancing the effectiveness of multilateralism arising from the evolution of global society.
5. Multilateral institutions as a counterweight against the retreat to unilateral and bilateral initiatives.

### 1.2. Rethinking Multilateral Institutions

The multilateral system is evolving with the evolution of global society and gradually giving shape to an increasingly interconnected global community with shared values and common interests.

> We need an inclusive multilateralism, drawing on the critical contributions of civil society, business, foundations, the research community, local authorities, cities and regional governments... We must ensure that its stakeholder engagement mechanisms become more agile, empowering and representative.
> — António Guterres, UN Secretary General

Efforts to reform the UN system in past decades have usually met with stiff opposition from member states as well as by internal resistance to change from within the organization. Thus, only piecemeal additions and incremental improvements have generally been made. But in spite of this resistance, substantial changes have been brought about by bold leadership in concert with the inexorable pressure of the forces of global social evolution.

When the UN was founded by 51 nations in 1945, none anticipated that within 15 years the entire global systems of empires would virtually dissolve into thin air, emancipating nearly one-third of humanity, and the number of nation-states would eventually multiply three-fold. In spite of the dominance of the Security Council, the General Assembly has acquired greater power and significance than was originally intended.

None could foresee in 1948 that the Universal Declaration of Human Rights, which was established as a set of idealistic principles without legal status or means of enforcement, would in coming decades acquire increasing force in international law and become the foundation for the Sustainable Development Goals adopted unanimously by 193 nations in 2015. And many other initiatives such as the International Campaign to Ban Landmines and the International Court of Justice’s advisory opinion on the legality of nuclear weapons have in fact altered the status quo and balance of power in some important areas.
A review and reassessment of international institutions is needed to identify needs and opportunities to align its mandate, structures, strategies, policies and funding to enhance their capabilities to preserve peace and promote human wellbeing. The pressure generated by multidimensional challenges can be leveraged to overcome resistances and initiate catalytic change processes both from within and from outside the UN system.

**Issues under Examination**

This heading will engage a cross-section of stakeholders from government, business, academia and civil society to explore catalytic strategies to expand multilateralism through multi-sectoral networks.

1. Potential ways to make the multilateral system fit for purpose in the 21st century.
2. Identification of underutilized sources of power which can be harnessed to support positive transformations of the international system.
3. Reformulating the UN’s role and strategy in guiding the process of global evolution.
4. Integrating strategy and structure for optimal performance by breaking down silos, inter-agency coordination, and closer networking between IGOs and with other stakeholders.
5. Catalytic strategies for impactful changes in the multilateral system both from within and outside the system.

**1.3. Distributed Leadership**

Leadership capabilities are needed at all levels of the multilateral system as well as in national missions and governments, international business, civil society and other organizations. Moreover, the key to effective leadership is reflected in the capacity of organizations to generate multiple levels of effective leadership and to distribute authority accordingly both down the line and out from headquarters to regional and national officers.

This heading will engage a cross-section of stakeholders from government, business, academia and civil society to explore catalytic strategies to expand multilateralism through multi-sectoral networks.

**Issues under Examination**

1. Expanding stakeholder participation in the multilateral system
2. Impact of the transformation of the global community on the potential contributions and appropriate roles for a wider range of stakeholder groups.
3. Promoting decentralized leadership and initiative
4. Enhancing leadership development programs and standards of performance evaluation

**1.4. Building Trust in Multilateralism**

Strengthening multilateralism is absolutely essential for humanity to effectively address the global challenges confronting the world today. Yet some UN member states and large portions of humanity lack confidence in the value of multilateralism, either underestimate its importance or rely on unilateral and bilateral initiatives which undermine its power to serve the human community.

The UN system was established to serve its member states and the human community rather than to exercise authority over them. It depends for its mission on trust and confidence far more than on power. Anything that enhances public trust and confidence in the multilateral system enhances its capacity for effective service. Anything that diminishes public perception impairs its functioning as well as that of the tens of thousands of UN staff whose motivation is strongly influenced by public perceptions of the UN system.

In a June 2020 survey by GlobeScan, citizens of 27 representative member-states expressed just under twice the level of trust in the UN system (26%) than as they had in national government (15%) and more than twice that of global companies (12%). But both these figures were far below the ratings for medical professionals (81%), science/academic institutions (73%), NGOs (41%). These figures reflect a general decline in respect and trust for all types of social institutions in times of great uncertainty about the future. But they also highlight an opportunity that can be leveraged to strengthen the UN system and enhance its effectiveness by strategies which strive to further build greater confidence and trust among the citizenship of member countries.
Efforts are needed to overcome the “communications deficit,” which refers to the need for the UN to more effectively communicate the essential role it plays and the real-life impact of its work.

Issues under Examination

This heading will engage leaders of UN agencies, prominent international civil society organizations and the media to explore innovative strategies that can be adopted to enhance awareness, knowledge, understanding and support for multilateralism through relations with its vast and diverse network of stakeholders around the world as a means to strengthen support for the UN at a time when it is more vitally needed than ever before.

1. Strategies to enhance the public impact image of existing UN initiatives with parliaments, cities, business, academia, NGOs, educational institutions and other civil society organizations.
2. Strategies to foster a common global human identity and consciousness
3. Strategies to enhance public confidence and support for international organizations and multilateral initiatives.

1.5. UN Culture

The UN system is an unprecedented cultural experiment striving to evolve an effective working organizational culture that respects and harmonizes the enormous cultural diversity of global society. The structure, authority and policies of UN agencies are largely shaped by UN member states, which imposes limits on the capacity for leadership initiative, the authority of management for execution, and the organizational effectiveness of multilateral institutions. But the culture of the UN is also shaped to a great extent by the values, cultural traditions, education and experience of its large and diverse multinational work force in constant relationship with one another and with representatives of member states and other stakeholders.

As every multinational corporation knows from experience, cultural diversity presents serious challenges to organizational dynamism and effectiveness, and nowhere are those challenges greater than in the international institutions for global governance. These challenges arise not only from the diversity of cultures involved, but also due to the rapid evolution of organizational cultures in response to globalization and technological innovations and due to growing gap in values, expectations and acceptable behavior between younger and older generations.

All three combine to magnify and multiply the challenges of evolving a more effective, contemporary culture for the UN system. Differences are inevitable between the cultural expectations and organizational conduct of management and staff, a culturally diverse workforce, younger and older generations, the functioning of semi-autonomous agencies, agency-national relations, and interface with the wider global community.

In spite of these constraints, effective catalytic strategies can be applied to enhance energy-levels, dynamism, responsiveness, operational efficiency and flexibility, innovation and creativity, and organizational resilience within the UN system. Measures can be introduced to flatten hierarchical structures, promote decentralization of authority, delegate and accelerate decision-making, foster coordination within and between agencies, enhance vertical and horizontal communications, streamline bureaucratic administration, foster intra- and inter-agency coordination and cooperation, enhance freedom for initiative, raise staff involvement and morale, improve performance metrics and staff recognition. Culture change can energize and transform the UN system and dramatically enhance the impact of its work.

Maximizing efforts to enhance organizational effectiveness, staff engagement and cultural harmony within the UN system will improve the perceptions of member states and the general public worldwide and pave the way for more fundamental and essential structural reforms that have been prevented by the absence of external support.

Issues under Examination

This heading engages UN staff, including members of Young UN, to explore energizing catalytic strategies to enhancing the human capacities, skills and attitudes of staff and the quality, efficiency, speed, effectiveness and impact of UN agency activities.

1. Energizing UN identity, vision, mission and organizational values
2. Enhancing intra- and inter-agency coordination
3. Promoting organizational dynamism through value implementation and microsystem reforms
4. Insulating politics from management
5. Enhancing professionalism
2. Sustaining Peace, Human Security & Resilience

The current international security paradigm is incapable of addressing the multidimensional threats confronting modern civilization. The prevailing system places almost exclusive emphasis on military power. But the most serious security problems today are not the ones which wars create but the crises with the potential to create wars and massive migration along with the socio-political fallout generated by populism and fascism. Building stable, democratic, prosperous, resilient societies is the only effective antidote to sustainable peace and human security.

A major paradigm shift is urgently needed to create a more inclusive, representative, participative, multi-stakeholder system of global security system equipped to take a leadership role in responding to the complex nexus of security threats issues and committed to realize the comprehensive agenda of human security goals set forth by the world community. This is the most appropriate leadership task of the UN system and its member nations on the 75th anniversary of its founding.

Nobody is safe in a world of pandemics, weapons of mass destruction and climate change unless and until all are safe. Human security is not possible without economic, social and ecological stability and resilience. We need to design resilience into our social systems. The paradigm shift to an inclusive, global human security perspective is essential to reshape and refocus the purpose and function of our global institutions to address the full spectrum of humanity's security needs.

This report addresses the issues of Pillar 2: Sustaining Peace, Human Security & Resilience under the following five headings.


COVID-19 is a wakeup call to transform our systems. The combination of the pandemic with the economic downturn, retreat from democracy to autocracy, polarization of society, rise of competitive nationalism and state capitalism, pressures of immigration, rising levels of inequality and the growing evidence of climate change represent a confluence of security threats—signs of a Super Bubble—with potentially devastating consequences for global society.

Our current security paradigm is ill-prepared and ill-suited to address challenges of this type. We are still entrenched in the old model based on the flawed belief that our security depends primarily on a strong military. The pandemic underlines the obvious fact that since the founding of the UN in 1945, the primary security threats are no longer violent conflicts between nation-states, but the concept of security determining the policies of nation-states remains heavily weighted by the bias toward military expenditures. For example, the total cost of universal COVID-19 vaccination for all humanity is unlikely to exceed 5 or 10% of total global military spending, while total global fatalities resulting from COVID-19 by Spring 2021 are forecast to be at least 12 times greater than total global fatalities resulting from violent conflicts during 2019.

Moreover, we need a shift from a competitive to a cooperative security system. All security arrangements of the past have been based on the concept of competitive security in which the security of each nation is perceived in terms of its military superiority over potential adversaries. The competitive security paradigm, whether pursued by individual nations or groups of nations, is fueling ever higher levels of military expenditure and higher levels of insecurity. The greater the military preparedness of one or group of countries, the greater the perceived threat or sense of insecurity of those who are not included within the system. Whereas in a truly cooperative security system, the maximum security of all is achieved by minimizing the investments of each and replacing self-reliance with shared security commitments.7

The concept of security is being skewed in the wrong direction. There is a perversity in the way we are allocating capital to prepare for war when resources are so urgently needed to enhance the welfare and wellbeing of people in order to...
reduce the likelihood of armed conflict. The current acceleration of global military spending reflects a return to the failed strategies of the past at a time when a cooperative and inclusive system is the only means to promote peace and security for all. A paradigm shift is needed in the minds of leaders and in the strategies of nation-states.

**Issues under Examination**

This heading engages members of different agencies, departments, funds and programs responsible for peacekeeping, arms control, emergency relief, food-security, immigration, refugees, including UNHCR, WFP, ILO, UNICEF, ICRC, WHO, CTBTO, inter alia.

1. Implications of the changing nature of security threats for reconceptualizing the effective role of multilateral institutions in the global security framework
2. Enhancing interagency coordination to anticipate, prevent and respond to emerging security threats
3. Envisioning a common global cooperative security system fit for purpose
4. Reviving the original concept of UN as a keeper of the peace and a non-partisan arbitrator rather than a peace enforcer while clarifying the purpose, scope and structure of UN Mandates
5. Enhancing systemic trust in the UN as the institutional foundation for global security as a counter to the growing reliance on unilateral and bilateral initiatives which undermine the advantages of multilateralism

**2.2. Advancing a Comprehensive Human Security Agenda**

Global leadership requires a re-evaluation of security risks, a reconceptualization of security strategies, and re-prioritization of security measures to address the real threats to human security. No country can be safe without a stable and vibrant economy, sufficient jobs for all job seekers, and a good and safe social policy. The nations which have proven resilient in the face of the COVID-19 pandemic are those which have already shifted to a broader conception of security that also encompasses economy, ecology, health, education, social welfare and wellbeing. Failure to address the human security threats will only lead to more wars, more migration, more cultural tensions, a greater shift to populism, social polarization, autocracy and even more conflict.

The pandemic is not only an unprecedented threat. It is also an unprecedented opportunity. For it has generated unprecedented awareness of the fragility of our present global social system and created a felt need for rapid transition to a more resilient system for human security. Human Security is a people-centered, comprehensive, holistic perspective, a unifying framework for addressing both the direct and root causes of insecurity. We all have a role to play in building a new social contract. And this new social contract has to be between society, the economy, politics and nature—**a Global Green New Deal.** So also, we have the responsibility to collectively craft a new culture of multilateralism, of cooperation and solidarity, a multilateral system that is inclusive, that is efficient, relevant, accountable and truly connected to people’s needs and lives.

The SDGs address all the major issues confronting humanity and they are all interrelated and interdependent. None can be addressed independently. Therefore, achievement of the SDGs is severely impeded by the fragmented nature of our scientific disciplines, academic courses, policy-making institutions and implementation agencies. There is need to establish new types of transdisciplinary multi-stakeholder international research programs and institutes to bridge the gaps between academic research, political action, public support and practical results.

The aim of these integrated initiatives would be to formulate, disseminate and support implementation of comprehensive, integrative, innovative strategies and policies by governments, business, NGOs and the general public to achieve the SDGs nationally, regionally and globally in the shortest possible time.

**Issues under Examination**

This heading seeks to reconcile the objectives of political, economic, financial, social, wellbeing and ecological dimensions of security. It examines security as a comprehensive, inclusive, integrated conception. It will highlight the interrelations and interdependencies between different dimensions of human security and its implications for action. It will also examine human security from an evolutionary perspective to better understand sustainable and resilient development as expressions of a social process rather than merely a set of measurable goals and standards.

1. Implications of the concept of development as a multidimensional, integrated human social process for the design of technical assistance programs, the structure and functioning of UN agencies, and the implementation and assessment of development programs
2. Implications of the interlinkages and interdependencies between dimensions on effective strategies to accelerate achievement of the SDGs
3. Catalytic strategies for addressing the multi-dimensional challenges posed by the COVID-19 pandemic from an integrated, social process perspective
4. Reconceptualizing development research as a multistakeholder, multidisciplinary integrated activity involving all stages from theory and analysis to policy-making, implementation and evaluation

2.3. Anti-Crisis Transition Economic Strategies

The current economic and financial system represents a major threat to national and international security. A retreat from international cooperation, trade wars, competitive nationalism, state capitalism, rising unemployment and inequality, and the growing role of money power and business in national governance are behind much of the deterioration in relations between nation states.

The 2008 financial crisis showed how vulnerable and unprepared states are to deal with the consequences of economic shocks. The EU and the Eurozone have been severely tested and are yet to fully recover the strength and cohesion they possessed more than a decade ago.

Many of the policies that precipitated the crisis in America which were discredited and suspended were restored with equal or greater prominence after 2016 and adopted by other nations, leaving the entire world economy more vulnerable than ever to the sudden impact of the pandemic on the world’s financial system and real economy. Beyond these immediate threats loom the potentially destabilizing impact of the 4th Industrial Revolution and climate change on unemployment, inequality, food-security, migration, social and political stability.

All the challenges we face today are global in nature and can only be effectively addressed by closer multilateral cooperation and coordination. A retreat to nationalist self-reliance will only exasperate the problems and reduce our capacity for effective action. A multi-track anti-crisis strategy is needed to promote recovery of the real economy combining innovative and conventional financing methods. Parallel electronic currency can provide the necessary resources for supporting investments in human capital to relieve the burden of the pandemic while also financing the transition to transform neoliberal capitalism into a sustainable, human-centered economic system. These can be combined with development of new asset classes such as green bonds, healthcare bonds, green credits, healthcare credits, etc. These investments can generate positive externalities far greater than those generated by current policies.

The Anti-Crisis program should also include replacing the linear cradle-to-grave resource model with a circular carbon-neutral economy, rapid transition to renewable energy, elimination of fossil fuel subsidies and investments in expansion of exploration and production, massive reforestation and other nature based solutions to restore degraded and endangered ecosystems, a floor price on carbon, global carbon tax, tax on short term speculative investments, etc. At the macro level the focus must be on social well-being indicators rather than GDP. At the micro level, ESGM (environmental, social, governance and medical) metrics are needed to drive business improvement.

Issues under Examination

This heading examines the dimensions of a comprehensive anti-crisis economic strategy. It focuses simultaneously on the goals of rapid recovery from the devastating impact of COVID-19 with rapid transformation of the economy to a more stable, inclusive, equitable and sustainable basis capable of redressing the excesses and misdirections of prevailing neoliberal economic models.

1. Strategies reconciling economic growth with ecological sustainability
2. Internalizing externalities to reflect the true cost and benefit of economic activities to real living standards, wealth-creation, wellbeing and sustainability
3. Changing the metrics for evaluation of economic progress to reflect real impact on household living standards, economic equality, health, wellbeing, and ecological sustainability
4. Redefining the appropriate blend of markets and governments, competition and regulation
5. Eliminating the invisible barriers to equitable markets—regulatory capture and rent-seeking

2.4. Strategies for Full Employment

COVID-19 has brought into stark relief the vulnerability and the critical role of employment as part of a comprehensive human security framework so essential to freedom, welfare, well-being and social stability. But job losses and rising levels of socio-economic insecurity and inequality due to the pandemic and the residual effects of the 2008 financial crisis are not the only cause of concern across the world. They add to the growing uncertainties about the future of human work in the era of AI, robotics and digital platforms. It is essential to avoid a repetition of the flawed quantitative easing programs launched in 2008 by the US and European nations which channeled trillions of dollars to reinforce failed
economic principles and policies. It took five years for employment to return to pre-crisis levels. Once again we find that the COVID-19 stimulus packages in the US have mainly resulted in soaring equity prices at a time of deep recession rather than supporting growth of incomes and jobs.

The job crisis is at the same time an opportunity to think about a New Social Contract in response to the destabilizing impact of financialization, neoliberalism and rising inequality. Full and productive employment is an essential condition for human security and a vibrant prosperous economy, as set forth in SDG Goal 8. Yet even before the COVID-19 pandemic wrought havoc on economies around the world, a large proportion of the working age population in most countries lacked access to steady, remunerative job opportunities, including a disproportionate number of women, those with disabilities and single parent families. High levels of unemployment are also associated with high levels of poverty among children. Unemployment is one of the principal sources of the soaring levels of inequality prevailing in many countries.

**SDG Job Creation**

Achieving the SDGs in the four sectors of food and agriculture, energy and materials, cities, and health care and well-being could create 380 million jobs by 2030. Nearly 90 percent of these would be in developing countries. The Better Business, Better World report found that implementing the Sustainable Development Goals could also unleash $17 trillion in profit. The Green New Deal proposals in USA and Green Deal in Europe both call for the introduction of major job creation programs, but there is urgent need to support massive employment security initiatives worldwide.

The responsibility of national governments for generation of employment has long been acknowledged, even in the capitalist world. Articles 23 and 24 of the Universal Declaration of Human Rights, the New Deal and US Employment Act of 1946, and similar legislation in many other countries affirm the right to work, free choice of employment, just and favorable working conditions, and protection against unemployment. In a market economy, employment is the economic equivalent of the right to vote. Without access to remunerative job opportunities, freedom of citizens in democratic societies is severely limited.

It is time that we stopped thinking of economic stimulus programs, public investment and tax cuts as the principal means for creating new jobs. Catalytic strategies that can generate new employment and self-employment opportunities on a very large scale include: job guarantee programs, complementary regional digital currencies designed to increase local circulation and velocity of money, access to investment and training for SMEs as the real engines of job creation, responsible public procurement programs targeting local sourcing, development of cooperative businesses and social enterprises, targeted vocational training and apprenticeship programs to fill the skill shortages, organizational innovation, and entrepreneurship. The key to job creation is to recognize that human beings are the most precious and underutilized of all our resources.

**Recognizing the right of every citizen to employment is the essential basis and the most effective strategy for generating the necessary political will to provide jobs for all.**

– International Commission on Peace & Food

Actions that can dramatically enhance job creation include: shifting taxation from employment to resource taxes on non-renewable resources and carbon, elimination of fossil fuel subsidies, and tax on short term speculation. There is an urgent need for the formulation of a comprehensive theory that can be applied individually or in combination by countries at different levels of development. If economic systems based on current theory are unable to provide sufficient employment opportunities, the prevailing theory and its application must be replaced with new theory and new strategies.

A major obstacle to full employment programs has been the belief that they are unaffordable and therefore unsustainable. Support for employment programs has also been reinforced by evidence that the full social, economic, political and environmental costs of unemployment in terms of lost productivity and GDP, deterioration of work skills and re-employability, poor nutrition, impaired physical and mental health care, drug and alcohol use, crime, violence, political polarization, extremism and social instability in all probability exceed the cost of providing sufficient job opportunities for all job seekers. High levels of unemployment can severely impact food and nutrition, physical and mental health, education, violence, crime, drug usage, political stability, democracy and human rights.

**Impact of Pandemic on Jobs**

The pandemic has wreaked havoc on global employment markets. The latest ILO report estimates that during the first quarter of 2020, an estimated 5.4 per cent of global working hours, equivalent to 155 million full-time jobs, were lost relative to the fourth quarter of 2019. Working-hour losses for the second quarter of 2020 relative to the last quarter of 2019 are estimated to reach 14.0 per cent worldwide, equivalent to 400 million full-time jobs.
Issues under Examination

This heading engages experts in employment generating strategies to examine existing and proposed strategies for moving economies to full employment and the financial mechanisms available for doing so in a fiscally responsible and sustainable manner.

1. The right to employment and its central place in strategies for human security
2. Assessing the real social costs of prolonged unemployment
3. Successful job creation strategies and programs
4. Decentralized implementation of national programs to optimize community development
5. Financing public job creation programs

2.5. Global Food Security

Due to the pandemic, life-threatening levels of food insecurity in the developing world are expected to nearly double in 2020 to 265 million. The majority of people suffering acute food insecurity in 2019 were in countries affected by conflict (77 million), climate change (34 million) and economic crises (24 million people). Malnutrition is further impacted both by closure of free and subsidized food to millions of school children. The largest numbers of vulnerable communities are concentrated in countries that are already confronting security threats from poverty and military conflict and climate-related afflictions like drought, flooding and soil erosion. The primary problem is not shortage of food production, but rather problems of distribution and affordability due to poverty and rising levels of unemployment. Food remains widely available in most of the world, though prices have climbed in many countries, as fear of the virus disrupts transportation links, and as currencies fall in value, increasing the costs of imported items. Therefore, an integrated strategy is essential for achieving food security.

SDG 2 is dedicated to ending hunger in the world. Food security requires cooperation, coordination and leadership at the global level. Global food security requires the capacity to produce physical abundance of food; the capacity to create a responsive organization to link production, distribution and consumption; the capacity to create an integrated communications network for information and transactions; and the capacity for legal enforcement.

The world possesses all these capacities at the present moment. But it must also be founded on and driven by the global recognition of food security as a fundamental and inviolable human right and the enshrinement of that right in law and treaty. Mere production of more food is not sufficient to eradicate hunger. In most countries access to gainful employment is now the single greatest challenge to achieving food security. Even in the most prosperous nations, employment opportunities and income security are subject to market forces and cannot be considered a source of absolute security.

Unless the right to food is legally enshrined and enforced, the specter of insecurity will remain. Security implies protection of that which has been acquired supported by an organization for emergency relief in the face of any contingency. True food security is not just a state of capacity for production or economy where-with-all to purchase. It is, in essence, a psychological state of confidence in which the very possibility of deprivation has been removed. Such a state is difficult to conceive in the world today, but that does not mean it is unachievable.

Food shortage on an abundant planet is a matter of distribution issues of a food system run by special interests, speculations, and lack of consideration for the overall human security. The competitive food security model leads to wasteful over-production, widely fluctuating and unremunerative prices, sustainable subsidies and ecological practices. It needs to be replaced by a cooperative food security system at the local, national and international level striking a balance between market forces and global guarantees. Achieving the SDGs will require actions on the agriculture and food security fronts, and such actions should be at local, national, regional and global level through a well monitored and coordinated approach. We need to strike a balance between market forces and global guarantees.

The creation of an international organization for food security to stabilize supply and prices can provide all players with access to the essential information required to make intelligent decisions regarding what and how much food to produce to meet projected demand nationally and globally. It can substantially reduce the risks of agriculture as a business, thereby encouraging banks and insurance companies to extend the credit and insurance coverage needed to protect producers, while ensuring stable supplies and prices for consumers.

The establishment of an International Food Corporation would reduce price fluctuations and ensure food security
through effective marketing and distribution systems. Even if the largest food exporting countries shun participation, an alliance of other countries could still establish the model as a group insurance program against local and regional crop failures due to erratic weather and a shared buffer stock as a strategic food reserve system.

The world community possesses the technological, financial, organizational and human capabilities required to eradicate world hunger and assure a modicum of real food security to its entire population within a decade. It is not a matter of charity or aid. As in the case of universal education, it is a question of ensuring to all citizens the essential requirements for self-reliance and self-development.

It requires a shift in emphasis from managing food to developing human beings.

Issues under Examination
This heading examines catalytic strategies to effectively address the global food security

1. Food security as a fundamental human right
2. Sources of food insecurity and their remedy
3. Integrated strategies linking food security and employment security
4. Global strategies to ensure availability of food at affordable prices

3. Mobilizing Civil Society

A new form of multilateralism or plurilateralism is needed that effectively engages a substantially larger number and wider range of stakeholders. The last three decades have brought about radical changes in the institutions of global society actively engaged at the global level which possess the knowledge and capacities essential for addressing global issues. Non-state actors are playing an increasingly important role in analyzing problems, shaping political discourse and influencing public opinion in global society. Subnational structures, megacities, national academies, networks of research institutions and universities, pressure groups, national and international civil society organizations and social movements are all stakeholders and players in global affairs.

International civil society institutions have multiplied exponentially and are now forging networks to multiply their reach and effective power. NGOs such as Fridays for the Future have generated greater awareness of the climate threat than recent pronouncements by IPCC. From an estimated 28,000 NGOs in the whole world at the beginning of the 21st century, today there are approximately 10 million, representing a 350-fold multiplication in two decades. Today there are approximately 41,000 active international organizations from 300 countries and territories. This includes intergovernmental (IGOs) and international non-governmental organizations (INGOs), with about 1,200 new organizations being added each year. In addition, lower level government institutions are also forming networks that extend beyond national boundaries.

This wide and expanding range of stakeholder institutions possesses an enormous range of knowledge, organizational capabilities and technological resources. They too represent the aspirations and interests of “we the people”—in many cases more directly and effectively than the institutions of national government. But only a few of the very largest have an effective voice at the international level.

Multilateralism needs to be redefined to give voice to, engage and harness the capabilities of a much broader range of stakeholders. At a time when many nation-states are turning inward and re-forming into blocs, leadership in thought is needed to redefine the concept and practice of multilateralism to include all the legitimate stakeholders who represent the human community.

We should mobilize as much of our general population as we can to have a sense of empowerment, to have a sense of entitlement, to have a sense of belonging to a whole, of which they are a part and which gives them the inherent right.

– Vaira Viķe-Freiberga, President of Latvia (1999-2007); Co-Chair, NGIC

3.1. Strengthening Civil Society & Youth Networks

The efforts of the NGO community to influence government policies are strongly supported by the public. The June 2020 GlobeScan survey found that 70-94 percent of those polled in 27 countries strongly or somewhat support NGO lobbying on issues ranging from education and social services to corporate behavior, boycotts and public protests.

The 10 million strong NGO community is largely fragmented into tiny units and networks organized by location, type and special interest. Combined they represent an enormous untapped organizational resource for spanning the distance between local communities and global governance. Six NGOs launched ICBL, the international coalition that banned land mines. Fridays for the Future is an international movement of students striking for action on climate change.
Some are organized globally into loose federations like Mayors for Peace which has nearly 8000 member cities in 163 countries. Parliamentarians for Nuclear Non-Proliferation and Disarmament (PNND) is a global network of over 700 parliamentarians from more than 75 countries.

Mostly working by themselves or in collaboration with other specialized agencies, they all share a common commitment to public action on behalf of humanity as a whole, yet lack appropriate organizational structures to act in unison. Strengthening global civil society networks represents a huge potential for bridging the gap between “we the people” and the multilateral system. Global networks already exist. Facebook already has 2.7 billion active users per month, making it not only the largest social network but arguably the largest interconnected group of individuals on the planet. But social networks of individuals lack the unifying organizational structures for collective action. Youth are a better candidate for that. Millennials belong to the networked next generation which grew up with unprecedented opportunities for interconnectedness spanning people, events and cultural perspectives around the world. Building networks of older generation organizations is hampered by the establishment of well-defined identities, traditional ways of independent functioning and even competition among themselves.

Formal and informal youth groups such as Fridays for the Future and Protect our Planet, a WAAS partner, have already demonstrated a much greater facility and inclination to merge into larger social movements, such as Occupy Wall Street and Black Lives Matter.

Millennials also represent the most environmentally conscious, concerned and committed community on earth—quite understandably since they are the generation which has incurred the greatest impact of climate change and other forms of environmental deterioration.

### Issues under Examination

This heading engages representatives from international civil society organizations, social media, AI and telecom, UN agencies and prominent NGO leaders to examine ways to magnify the voice of civil society in global affairs.

1. Strengthening specialized global NGO networks
2. Linking together special interest networks to forge a unifying network
3. Uniting individual youth groups into global specialized and general networks representing the aspirations, interests and concerns of the next generation.
4. Mobilizing the combined resources of global civil society to create a direct voice for humanity through global platforms for polling and referendums directly involving the world citizenry.

### 3.2. Energizing Local Communities

Subnational structures empowered by digital technology and capable of responding at faster speeds than states have already started to enter into their own trade agreements. Megacities and provinces are now playing a critical role in planning and organizing the response to the pandemic. This recent trend is in accord with history. The most creative moments in the growth of civilization were not those dominated by massive empires. The growth of civilization has thrived on the freedom of small, innovative social units, such as the tiny kingdoms of ancient India, the city-states of ancient Greece and renaissance Italy. Silicon Valley, Route 128, Bangalore, New York, London, Singapore and Shanghai are their modern counterparts. An alliance of tiny island states played an active and very effective role in the climate treaty adopted in Paris.
In times of political polarization and paralysis at the national level, state and local communities provide enormous untapped opportunities for effective action. Cities and regions are small and near enough for local communities for citizens to have a direct input and powerful impact on public policies. California’s policy commitment to energy efficiency and renewable energy has generated ten times more jobs in solar than in natural gas electricity generation. Immediately after the US announced withdrawal from the Paris Accord, more than half of the states joined the US Climate Alliance affirming their commitment to the goals of the Paris Agreement. More than 100 cities, nearly 1000 businesses and a few hundred colleges and universities representing 120 million Americans made similar commitments. More than 7000 cities in 112 countries have joined the Global Covenant of Mayors for Climate and Energy commitment to publicly measure and report their carbon emissions using a standard measurement system.

**Issues under Examination**

This heading engages urban political, social and civil society leaders to examine catalytic strategies to broaden the active participation and contribution of civil society and subnational agencies in the multilateral system.

1. Effective strategies and models for national and international collaboration between sub-national groups related to SDG implementation
2. Mobilizing the combined resources of global civil society to foster active citizen participation
3. Creating a common global platform for people around the world to directly project their views and priorities regarding national and global issues without the intermediation of partisan, nation-centric political institutions
4. Fostering subnational global networks on key issues on the UN agenda
5. Enhancing the public impact of existing UN initiatives in collaboration with parliaments, cities, business, academia, NGOs, educational institutions and other civil society organizations

3.3. Restoring Trust in the Media

The term “Fourth Estate” refers to the power of the press and news media for framing and influencing public opinion on governance issues of critical importance. The loss of faith and confidence in the credibility and impartiality of global news media severely impairs the functioning of democratic societies, undermining social cohesion, aggravating polarization and foster social unrest. At the same time it is a powerful means for strengthening the hold of autocratic regimes and entrenched interests.

The dissemination of fake news through social media and the takeover of the media by partisan political and business organizations pose severe challenges to the institutions of global governance, democracy and evidence-based science. A recent survey of 27 major nations shows that four out of five Internet users worry about what is real and fake on the Internet (79%), with nearly half (45%) strongly identifying with this concern. In spite of rising public concern, most opinion polls show that citizens oppose direct government regulation of the Internet, suggesting that an acceptable solution will have to be directed by independent non-partisan parties.

**Issues under Examination**

This heading engages leading journalists, social media experts, political leaders and social activists to examine potential strategies and models for establishment of independent, non-partisan international rating agency as a means to measure commitment to objectivity and as a guide to the general public.

1. Criteria for non-partisan objectivity for assessing the journalistic policies and standards of global news media
2. Possible models for regulating the reliability of news content
3. Standards and procedures for ensuring independence and credibility of the system

3.4. Harnessing the Transformative Power of the Arts & Culture

Ideas can enlighten the mind with new direction, but the arts and humanities can both capture and enrapture the imagination and stir the heart with symbolic representations far more powerful, uplifting and motivating. The visual and performing arts can be potent and creative catalysts for generating awareness and aspirations, releasing social energies for action, and achieving beneficial transformative change. Art can break down intellectual, national, ethnic, linguistic,
religious and ideological barriers that cannot be achieved by other means, as WHO and the UN use the visual arts as an effective medium for communicating public interest health messages regarding COVID-19 even to the illiterate.

### Art Impact for Health

WHO utilizes art and culture as powerful medium to communicate and inspire Health for All as an innovative strategy to promote patient wellbeing and the humanization of healthcare in a hospital environment.

The program empowers children and adults to advance their own physical and psychological health by self-expression and social relations through painting, poetry, sculpture, music and video. It demonstrates the impact of integrated person-centered care practices and promotes transdisciplinary, intergenerational working groups through international, national and community networks.

### Issues under Examination

This heading engages visual and performing artists, media and UN communication specialists, corporate marketing experts, catalytic strategies and political campaigners to examine the potential for multiplying the impact of art as an effective form of leadership to address global challenges, enhance support for the multilateral system, and strengthen global solidarity.

1. Common characteristics of successful instances in which the arts have served as an effective medium for generating public awareness and stirring public opinion to address global challenges
2. High potential applications of the arts to enhance awareness and commitment to implementation of the SDGs
3. Educating, motivating and incentivizing artists and writers on how to direct their creative abilities toward promoting the global common good

### Live Aid

The worldwide Live Aid concerts demonstrate the deeply transformative impact of arts to enable socio-cultural shifts. Launched in 1985 as a music-based global charity event to raise funds for famine relief in Ethiopia, the 16-hour long concert gathered the most renowned artists in music and was broadcast globally by satellite. It drew an audience of 1.9 billion across 150 nations, mobilized donations of $127 million and surplus grain to end the immediate hunger crisis in Africa.

### 3.5. Academies, Research Institutes and University Networks

**IAP GLOBAL**

The 140 national and international academy members of the Inter Academy Partnership (IAP) harness the expertise of the leading scientists to inform public and policy-makers about scientific, evidence-based solutions to global problems. IAP’s inter-regional project Climate Change and Health focuses on climate change adaptation and mitigation strategies that bring implementation at global, regional and national levels.

Effective leadership must be based on knowledge and knowledge generation needs effective structures, management and communication. Global surveys confirm that medical (81%) and scientific institutions (73%) are the most trusted of all leading institutions. Academies are leaders in thought, collective wisdom and social power.

Academia represents an important agency for non-political cultural diplomacy at the regional and global level. Exchange of researchers, faculty and students supports the global exchange of knowledge, spread of technologies, appreciation for cultural diversity and sense of global citizenship.

National academies can multiply their effectiveness and social impact by transcending national boundaries in collaborative efforts to address regional advice for decision makers concerning global challenges.
Building global collaborative networks of academies, universities and research institutions working together to address global challenges can multiply their available resources and impact. Science-based decision making is crucial to increase the effectiveness of public policies designed to reduce inequalities and impact poverty by mobilizing their member academies to interact with governments and society, and with the wider scientific community.

**Issues under Examination**

This heading seeks to identify ways to expand, replicate and integrate networks of this type into a tightly coordinated global system. It examines opportunities to expand the scope and increase the effectiveness of scientific networks in collaborative efforts to address global and regional challenges.

1. Identification and replication of the most successful inter-academic networking models for international scientific collaboration on the SDGs and other regional and global challenges
2. Shift from competitive to collaborative funding strategies for inter-academy, inter-university and inter-research institutional projects in order to expand the range of expertise, maximize efficiency and impact.
3. Enhance effectiveness of communication and out-reach strategies for widest international dissemination, application and impact of evidence-based research findings.

### 3.6. Transformative Leadership – Stakeholder Participation

Change takes place only when the society itself becomes conscious of the need for change, awakens to the possibility, aspires to realize it, unleashes its energies and channels them into new forms of activity and new or altered forms of organization to spur social transformation.

Leadership plays an important role in that process and utilizes many different instruments for that purpose. The inspired or visionary individual leader is one form of leadership, quite prevalent in the past, but there are many others which are assuming increasing importance in the modern world. Leadership can be generated by ideas, values, goals, organizations, strategies, books, measures, and in countless other ways.14

In order to be effective, GL-21 must base its recommendations and proposals on a more comprehensive and inclusive theory of social change that recognizes the role of all these factors in the process of change and leadership.

**Issues under Examination**

This heading examines the process of social evolution to identify catalytic strategies which can be applied to address the major issues under consideration by GL-21.

1. Strategies to promote social awareness and release social energies for change
2. The role of inspiring values and goals such as the SDGs as catalyst for change
3. The role of organization in channeling social energies
4. Leadership as a catalyst for all stages of the social process

### 4. Innovative Strategies for Financing the SDGs

**Status of Business & Finance**

The number of multinational corporations has multiplied—from 7000 in 1970 to 82,000 in 2008 with 230,000 foreign affiliates by 2014.15 The revenues of the 20 largest MNCs today equal or exceed those of 75% of nation-states and have assumed an increasingly important role in the global social systems. The largest MNCs today exceed in size the wealth and influence of many nation-states and have assumed the role of global social systems. Global financial assets have multiplied from $10 trillion in 1980 to about $350 trillion today.

Business and finance have been principal drivers of globalization over the past two centuries and continue to play a very prominent role in shaping social evolution. They have linked and integrated national economies and financial systems into a unified system with the potential for producing, distributing and financing the material needs of all humanity. They have transformed the world economy by financing trade, enterprise and global supply chains.
The world’s leading financial institutions have become linked as elements of an increasingly integrated global financial system. Global Business has fashioned the Internet as the world’s first truly global social institution linking billions of people together while national governments were preoccupied by domestic concerns and multilateral institutions faced declining support from their members.

This enormous multiplication and concentration of wealth has magnified the role of money as a medium for the exercise of social power in all fields and sectors of global society, resulting in an increasing concentration of political and social power with inordinate influence on politics, law and government, social stability, and international affairs.

The financial power of business and finance is essential for the maintenance and development of the multilateral system and for implementation of the SDGs. And recent developments have enormously multiplied that power. The current financial system is the product of the victory of globalization, free trade and democracy over socialist and communist alternatives. However, in an age of populism, both the far right and the far left have been able to argue successfully with their electorate, or within autocracies, that the system does not meet the needs of the world today. Rather than focusing on how to generate greater wealth and to distribute it better, the system of wealth generation itself is being challenged.

While the financial community has not articulated a vision of its own transformation, there are many initiatives underway within the community and as part of the UN’s programs to conceive the changes that are required.

In order to meet the historic challenge of transitioning beyond a carbon-based industrial civilization, the transformation of finance is needed to mobilize its capabilities for innovation and multiplying the capital available for sustainable investments. In a near and urgent time horizon, funding is required for major initiatives to address the SDGs and critical challenges such as climate change, structural poverty in developed and developing countries, and the current COVID-19 pandemic.

Responses to the pandemic during 2020 have demonstrated that there is a huge amount of capital available to address priority issues which can be mobilized on short notice. The total global government stimulus in response to the pandemic has already crossed US$15 trillion (including US$7 trillion in quasi-fiscal loan and credit guarantees). The continued failure to galvanize funding—public and private—to address the world’s major challenges can further fuel tendencies toward populism, isolationism and transactionalism. It threatens to undermine multilateralism, resulting in additional pressure on the budgets of UN agencies.

The current UN annual budget of $5.5 billion is equivalent to only one day’s global military spending and the budget for all UN agencies combined is less than 10 days, yet the organization is under constant pressure due to the reluctance of member nations, most especially its largest donor the USA, to invest in this vital multilateral system. To put the challenge into perspective, the global financial requirements to achieve the SDGs are estimated to range between USD 4 and 8 trillion or more annually over the next decade, depending on what expenditures are included. Funding of this magnitude can only be obtained from a combination of public and private financing sources. Thus, finance lies at the heart of the operation of the multilateral system and financial innovation will play a critical role in determining its future.

The world economy represents a paradox of scarcity and abundance—a global economy with the capacity to produce enough to meet the needs of all human beings and a widening gap between those who struggle for their existence living side by side with a small minority who possess an inordinate portion of the world’s wealth. The current industrial era
finance model is a root cause of the problems we face today. It needs to adapt to a digital, globalised, democratized world where other forms of social power—communication, human rights, education, health care, etc.—are being far more widely distributed. Policies based on neoliberal economic theory have managed to create an enormous wealth for a relatively small minority combined with rising levels of inequality, economic insecurity, environmental degradation, risks and uncertainty regarding the future. The real challenge now is to evolve a model that is inclusive of all humanity and sustainable.

Sixty percent of the world’s financial assets are held and managed by large financial institutions and banks all over the world, having originated mostly in households. These institutions will adapt or become increasingly disintermediated or displaced by newcomers, as we are seeing in every other industry. Finance needs mobility, flexibility, coordination to be relevant in a world where change is the constant and equilibrium cannot be expected, but it also needs to be fine-tuned and integrated with the real economy and evolving social needs.

The ‘democratisation of finance’ is the future and digitisation and cybertechnology is an enabler of the widespread decentralisation of finance and the empowerment of individual level financial systems. Increased awareness, consciousness and self-empowerment of people regarding their condition and human rights are drivers of change. Households own the vast majority of wealth and as consumers will increasingly make choices at the point of purchase to consume from businesses that fit their views and values, driving industry to respond in ways that affect their products and activities. This in turn will drive value and investors will follow.16

‘Big finance’, whether state driven or private sector, acts as a utility for the mass market (credit and deposits) and as an agent for other market participants, and will need to change dramatically if it is to exhibit a clear, socially-relevant and sustainable mission. The financial system needs a major shift towards sustainability-based capitalism which delivers both financial returns and social impact in a far more equitable and balanced way, the result of which is increasingly being judged by an impatient world population through social media. The evolution of financial systems will inevitably be aligned with the systemic political, social and economic evolutions and revolutions underway. The question for incumbent institutions is how fast they can change to champion and lead that change so that they are not victims of it.

This report addresses the issues of Pillar 4: Innovative Strategies for Financing the SDGs under the following five headings.

4.1. Special Purpose SDG Investing and Inclusion

Financial inclusion is an enabler of other Sustainable Development Goals. It features as a target in eight of the seventeen goals, and in particular is critical to enabling eradicating poverty (SDG 1), ending hunger (SDG 2), achieving food security and promoting sustainable agriculture, profiting health and well-being (SDG 3), achieving gender equality and economic empowerment of women (SDG 5), promoting economic growth and jobs (SDG 8), supporting industry, innovation, and infrastructure (SDG 9), reducing inequality (SDG 10) and strengthening the means of implementation (SDG 17).

It is time to introduce SDG 18 for sustainable finance to finance the SDGs and drive change in finance and financial systems to pave the way for financing major issues in the future.

– Ketan Patel, Founder & Chief Executive Officer, Greater Pacific Capital

Development finance is an essential ingredient in financing initiatives that build new markets, which can then attract private sector players as they mature. Sovereign, pension and development funds have an important role providing financing through crises to protect stakeholders, and their perpetual capital affords them the ability to take the long-term views required to price market externalities.

Issues under Examination

This heading engages financial and economic experts to address the potential for special purpose instruments to initially focus on SDG 5 and 10 and examine the tools that allow that to be expanded to broader financial inclusion.

1. Focus on women and their role in the financial system in developing countries to promote inclusion.
2. Literacy as a tool for the poor to participate in the financial system.
3. Special Purpose SDG Private Bonds specifically targeting funding of the SDGs.

4.2. Next Generation Conscious Capital and Impact Investing

Changing public perceptions and the transition to the next generation of younger wealthy investors are having a profound impact on the future of business and financial markets. Impact investing has come of age. Climate Action 100+, an
initiative supported by 518 institutional investor organizations across the globe representing financial assets of $47 trillion, recently wrote to 161 fossil fuel, mining, transport and other big-emitting companies demanding that they set thirty climate measures and targets on which future investment decisions will be based. Similar pronouncements by some of the largest institutional investors in the world show that profitability is no longer regarded the sole or sufficient criteria for investment decisions. Similarly, ESG indices reflecting corporate compliance with the ecological, social and governmental concerns for sustainability and fairness are gaining recognition among investors.

Much of today’s wealth in the world is tied to a relatively small number of families. A large number of these families—especially the ‘NextGens’—are prepared to use their financial resources as a force for good in the world at large while still meeting their overall financial returns objectives.

**Issues under Examination**

This heading engages the next generation of wealth to examine strategies to determine how their wealth can be both for profit and purpose, encompassing ESG and related impact investment criteria.

1. The role of wealth to finance projects and initiatives and how the criteria could be changed to create a profitable impact.
2. The data and information platforms required to supply a pipeline of major issues that meet the requirements and their amalgamation or creation.
3. The formation of group financing initiatives that allow scale of capital deployment to major worthy initiatives.
4. Beginning with a focus in Europe the initiative will be expanded to other parts of the world.

**4.3. Innovative Strategies for Mass Participation of the Poor**

More than 880 million people around the world live in urban slums, lacking access to adequate water and sanitation or adequate housing. By 2025, it is estimated that 1.6 billion people, c.20% of the world’s 7.6 billion population, will still lack access to secure and affordable housing.

In Africa, nearly half the population lives in substandard living conditions and in India and China nearly a quarter of the population lives in such conditions or in slums.

**Issues under Examination**

This heading engages financiers on creating the funding pipeline for the people to create inclusion for mass poor populations.

1. The initial focus is on scaling further an International Micro Housing Finance Inclusion Initiative based on a highly successful program in India that funds low cost housing for first-time home owners.
2. The transfer of lessons and expansion of that program with like-minded institutions to become an international program.
3. The development of broader and more sophisticated fit-for-purpose financial instruments.

**4.4. Funding SDGs with Digital Currency**

Digital currencies from multiple actors have primarily been utilized until now as an instrument for speculation, tax evasion and illegal activities, but it has the potential to play a highly positive role in global social development. The introduction of a parallel electronic currency specifically designed to finance global commons and human-centered economy can create the necessary resources to achieve the UN SDGs and address the asymmetric shocks of COVID-19, while stabilizing the existing monetary system.

Leading central banks around the world are already actively studying the potential application of this approach to directly inject purchasing power without dependence on the banking system to finance the huge multi-trillion-dollar annual investment requirements for achieving the Sustainable Development Goals, with special emphasis on investments in human resources and environmental protection.

Central Bank Direct Digital Currencies (CBDCs) have the capacity to directly target critical investment needs, instead of resorting to traditional quantitative easing which channels funds to existing institutions and is largely diverted from its social purpose to financial markets. A full report is under preparation by a WAAS expert group.
Issues under Examination

This heading examines the feasibility, potential benefits and risks of generating central bank digital currencies for financing the SDGs while supporting rapid recovery from the economic downturn resulting from the COVID-19 pandemic.

1. Feasibility of creating a parallel digital currency system administered by central banks for financing economic recovery and implementation of the SDGs
2. Impact on government budgets, the existing financial system, inflation and economic recovery
3. Steps required for implementation
4. Next Generation Impact Investing

4.5. System Change Investing

Focusing on root causes and system change is essential for achieving the SDGs. System Change Investing (SCI) is a total systems approach focusing on changing the underlying systems and addressing the root causes which encourage harmful corporate behaviour.

SCI is powerful and relatively easy to implement, and provides a practical and profitable way to engage the corporate and financial sectors in system change. It is based on the same model as Socially Responsible and ESG investment strategies, but goes further to address root causes. Its ease of implementation is because it involves indirect instead of direct system change, and it is based on widely adopted practices. SCI strongly incentivizes companies and investors to do so. It also builds on existing corporate and financial practices. The method has strong potential to increase investment returns.

Impact investing based on ESG only addresses 20% of the problem. It fails to address the root causes generated by the wider economic and political system. SCI is the next level of ESG.

Issues under Examination

This heading engages financial experts and investment groups to examine catalytic strategies to promote SCI as the next step in impact investing for maximum social impact.

1. Rationale for System Change Investing and comparison with ESG
2. Strategies for implementation of SCI
3. Potential impact on changing economic, social, environmental and political behavior

5. Transforming Global Education

Education is the most effective instrument so far created by humanity for conscious social transformation. It is the means by which we come to understand the limitations and flaws in our earlier mode of thinking and acting, the problems overlooked and missed opportunities, the lessons offered by past successes and failures. It is the means by which we pass on to future generations humanity's cumulative knowledge and experience of the past so that they avoid our mistakes and advance more quickly and surely than we have up to now.

The speed and complexity of global social evolution have generated unprecedented levels of uncertainty and insecurity regarding the future of humanity. They compel us to adapt far more quickly than in the past to the challenges resulting from globalization, technological advances both for war and for peace, and environmental degradation on earth and in the atmosphere. The quality of our decisions, policies and actions depends on the quality of our understanding about the factors and forces driving global social evolution. We simply do not have time to waste by repetition of past errors or slow trial and error learning processes. If education has been a principal driver of global progress over the past two centuries, it has now become a critical requirement to cope with mounting challenges of unprecedented speed, magnitude and complexity. The current global educational system is not fit for purpose. Even at its best, it reinforces adherence to outmoded ideas, theories, policies and practices through outdated ineffective forms of pedagogy and unaffordable, inaccessible and inefficient delivery systems.

In spite of enormous investments over the past half century, the global system is grossly inadequate to meet the aspirations of hundreds of millions of youth and the rapidly changing needs of global economy and society. At its worst, it becomes a major obstacle to human adaptation. The 19th century mass production education in specialized siloed disciplines by rote memorization, mindless repetition, and unthinking adherence to dogma is perpetuated by an institutional mentality that is too firmly oriented to preserving past knowledge than to focusing on the future knowledge youth will require to respond to the challenges of the 21st century. Conservatism becomes destructive when it fails to heed the need for change.

Transforming global education is an urgent necessity and an enormous challenge beyond the scope of GL-21. But this project can identify catalytic strategies that can make an impact which is illustrative of the scope for far more profound changes which are both possible and essential.
This report addresses the issues of Pillar 5: Transforming Global Education under the following four headings.

5.1. Global Leadership Education

We cannot change the global system overnight but we can rapidly and dramatically improve the education of both existing and future world leaders in national governments and multilateral organizations, in politics, diplomacy, business, academia and civil society by imparting to them a knowledge of the complex factors propelling social evolution and the process by which it can be consciously shaped and directed to address challenges and tap opportunities.

The prevailing silo-based division of scientific disciplines and academic courses generates a piecemeal, fragmented view of the world we live in similar to the reflection cast by a broken mirror. There is urgent need to assemble the fragmented perspectives into a comprehensive, integrated perspective of the process of global social evolution and the process and strategies which can be harnessed to consciously lead and more effectively direct its course. WAAS has constituted an international working group in collaboration with UNITAR and other partner organizations to develop transdisciplinary educational courses designed to better equip leaders, diplomats, public administrators and policy-makers to understand and respond appropriately to the rapidly unfolding challenges of our time.

Issues under Examination

The purpose of this heading is to identify the essential content of GL-21 courses to be developed based on the research, conference proceedings and recommendations in the final report to UNOG. It will engage an international working group in collaboration with UNITAR and other partner organizations to develop transdisciplinary educational courses to explore ways to better equip leaders, diplomats, public administrators and policy-makers to understand and respond appropriately to the rapidly unfolding challenges of our time.

1. A critique of the reasons for the failure of contemporary social sciences to provide leaders and policymakers with the knowledge required to foresee, prevent and effectively address the complex challenges confronting humanity in the 21st century
2. Fundamental changes in perspective needed to overcome the limitations of prevailing approaches to the world
3. Characteristics of leadership courses better equipped to meet social needs
4. Exploration of rapid delivery systems for an integrated approach to leadership education

5.2. Global Learning Delivery Systems

In 2013 UNESCO projected the need for opening hundreds of universities a year over the next 15 years to meet the growing demand for higher education. In response, the UNOG-WAAS conference on New Paradigm in June 2013 called for design and development of new models for education delivery able to address the urgent need to provide world-class, accessible and affordable higher education for students everywhere in the world. Recent projections are that tertiary enrollment will more than double by 2040. If it is to be met through the present model delivery system, it would require opening two new universities a day the size of Harvard every day for the next 20 years. Given the enormous cost involved and the already severe shortage of trained teachers, this is unrealistic. Rapid expansion of the educational system is feasible, affordable and absolutely essential to prepare youth for successful adulthood in the rapidly changing economic environment, but it requires a major change in content, pedagogy and delivery system.

The scarcity of new jobs in formal employment necessitates a reorientation of education to prepare youth for entrepreneurship and self-employment. The drastic decline in job security means that youth today must be equipped with the capacity for life-long learning to work in a widening range of different occupations throughout their careers. The rigid disciplinary siloes prevalent in higher education are no longer feasible.

The knowledge required for work has become increasingly multidisciplinary and transdisciplinary. The proliferation of disciplines and subdisciplines has broadened the range of options and opportunities to combine and mix subjects, develop unique personal capacities and to meet specific work applications.

With this objective, WAAS and nine partner institutions established the World University Consortium and conducted five international conferences examining alternative delivery systems and pedagogical models better suited to utilize the immense potential of online learning technologies. It was anticipated at the time that the rapid development of online learning systems could meet a significant portion of the need for expanding the global higher education system. But in spite of major advances in online education, the conservative nature of the existing system combined with resistance from faculty and administrators and technological limitations slowed adaptation.

COVID-19 combined with rapid advances in telecommunications, computers and AI has changed everything. It has compelled institutions of higher education to very quickly make up for a decade of slow adoption and for instructors to quickly learn to adapt to the new delivery system. The sudden onset of COVID-19 has resulted in the suspension of physical classroom education...
at all levels around the world, generating an urgent need for a rapid transition to online learning, for which the conventional classroom pedagogy is very poorly suited. Few teachers are equipped to make the transition without extensive training in new pedagogy. While much remains to be done, the momentum for rapid transformation now makes it possible to provide person-centered, interactive, peer-to-peer, transdisciplinary education adapted to the needs and technological capabilities of the information rich 21st century.

**Issues under Examination**

This heading engages an international working group of educators in collaboration with UNITAR and World University Consortium to examine the feasibility of rapid transition to more affordable, adaptable, innovative, equitable and effective delivery systems for higher education.

1. Critique of the limitation of existing models of higher education
2. Characteristics of a new paradigm delivery system
3. The role of certification as a critical determinant
4. Designs for alternative systems and learning networks

### 5.3. Multi-disciplinary and Transdisciplinary Initiatives

Most of the problems confronting global society today are reflections of the fragmentation of knowledge, theory, education, research, policy-making and implementation into disciplinary silos.

The division of knowledge into academic disciplines, university departments, discipline-specific research projects and funding categories poses serious obstacles to the development of theory, knowledge, policies and programs that accurately represent the complex sources of the problems and the multidimensional strategies needed to address them effectively.

Today most science and technical education is insulated or divorced from social impact.

For example, engineering education routinely omits the study of the impact of advances in technology on society and people. Medical education omits training in the psychological and social perceptions and consequences of illness and treatment. Science and technology administrators in all fields need to be equipped with an understanding of the social context and consequences of their work, the processes for policy and decision-making, methods for educating public opinion and building relationships with policymakers, stakeholders, and the general public.

A number of successful programs and models already exist, including the New Engineering Educational Transformation (NEET) initiated by MIT, the Singapore University of Technology and Design (SUTD), and the SHAPE-ID EU H2020 project to address the challenge of improving interdisciplinary cooperation between the Arts, Humanities and Social Sciences, Natural Sciences, Technology, Engineering and Mathematics, and other disciplines.

**Issues under Examination**

This heading engages a multidisciplinary team of experts from the natural, biological, engineering and social sciences, business and humanities to examine ways to enhance, extend and multiply successful strategies to overcome the disciplinary divides which impair effective research, policy-formation and implementation to address global challenges.

1. The urgent need for multidisciplinary education, research and policy-making to prepare leaders, decision-makers and thinkers.
2. Characteristics of successful interdisciplinary and transdisciplinary learning models and programs
3. Catalytic strategies for rapid expansion and replication of successful models and learning networks globally

### 5.4. Integrated Thinking

Einstein’s observation that we cannot solve problems with the same mode of thinking that created them in the first place is frequently quoted but usually honored in the breach. For nearly two centuries Economics ignored the impact on the natural environment based on metrics which measure velocity of economic activity rather than human welfare and count the depletion of non-renewable natural capital as an income rather than a drain on natural wealth. Reductionist mechanistic thinking in Economics, Business and Ecology is an obvious example of a far more widespread phenomenon prevalent in the health, psychological and cognitive sciences and other fields. Changing the way people think can only be done by fundamental changes in educational pedagogy at all levels.

**Issues under Examination**

This heading examines strategies to alter course design to develop the capacity for independent thinking and understanding of the world system as an integrated whole rather than independent, unconnected fragments.
6. Conclusions

In spite of the unprecedented challenges, there is a growing recognition among a wide range of international stakeholders that the current situation also presents a unique opportunity for catalytic leadership initiatives capable of harnessing available resources to launch humanity into a more dynamic, equitable, resilient, and sustainable phase of global social progress.

The five interdependent thrust areas and the 24 catalytic strategies discussed in this report are indicative of the potential for effective leadership initiatives of many different types in a broad range of areas. Those that are already being implemented can be replicated and multiplied in number and magnified in impact. Others can be taken up immediately as initial pilot efforts. Still others are extremely promising but require further research. All of them are being examined, refined and developed further during Phase II of GL-21 for discussion at the Geneva conference and presentation in the final report on the project. They are intended to illustrate the untapped potential to break the present global leadership vacuum through innovative approaches in order to prepare the way for deeper and more far-reaching efforts to accelerate global social progress.

Notes

6. A. Likhotal, “Global leadership,”
11. Lovins et al., A finer future.
12. Lovins et al., A finer future.
ANNEXURE A:
Phase 1 Research Proceedings

GL-21
Strategies for Transformative Global Leadership

These proceedings are a record of research undertaken by the World Academy of Art & Science and partner organizations during Phase I of the joint project on Global Leadership for the 21st Century initiated by WAAS and the United Nations Office at Geneva in November 2019. This discovery phase studies the sources and remedies for the unprecedented range and intensity of global challenges confronting humanity today related to peace, security, governance, economy, employment, ecology, education, food-security, health, wellbeing, science, technology, press and media, culture and the arts.

It examines the limitations in the present multilateral system that retard and obstruct efforts to address global issues effectively, resulting in a global leadership gap at precisely the moment when bold, visionary leadership and innovative initiatives are urgently needed to preserve the gains of the past and address the unprecedented challenges presented by the COVID-19 pandemic, rising levels of unemployment and inequality, the retreat from democracy and multilateral cooperation, and the existential threat of climate change.

The consensus view that has emerged from this research phase is that although the problems are extremely serious, humanity today possesses all the essential resources and capabilities to address them effectively. But these problems cannot be solved by continued reliance on prevailing ideas, theories, policies and institutional functioning.

Transformative changes are needed at all levels from research and education to policy-making and implementation. Deep change takes time. Therefore the research examined catalytic changes that can be implemented under present conditions in order to break the inertia and resistance and set in motion a process of rapid conscious evolution of global institutions and society.

These proceedings include summaries and video recordings of the 35 sessions of the five-day e-conference conducted by UNOG and WAAS on June 15-19, 2020 as well as shorter webinars and e-conferences conducted in collaboration with Nizami Ganjanvi International Center, Azerbaijan, during August-September 2020, the launch event for the Globalistics 2020 Conference organized by Moscow State University in May 2020 and several other events. These events constitute the exploratory discovery phase of GL-21 in which a number of critical areas were examined through published papers and dialogue among more than 200 experts from around the world. The proceedings also include a special report that provides updated information about reports on COVID-19 and its impact on human security and sustainability.
Regenerative growth is based on the premise of wholeness, of harmony, of the cycle of life. We should be refocusing on the kind of principles that we see in the U.N. Charter.

– Jonathan Granoff
President, Global Security Institute; WAAS Fellow

All challenges are potentials. Organisations must turn challenges into opportunities. We have the resources to address all issues.

– Tibor Tóth
Ambassador, Executive Secretary Emeritus, The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO); WAAS Trustee

Things have not changed because some people benefit from the systems that are currently in place. We need to be frank and honest about what we are confronted with. We need to have conversations about equipping not only young people but also those who work with young people, to build resilience, understanding and a perspective of the road ahead. We must trust our youth, mentor them and partner with them.

– Luvuyo Madasa
Social Entrepreneur; Executive Director ReimagineSA, South Africa
The current pandemic is only the most recent and urgent of the crises confronting global society today. Some of these are a direct result of COVID-19, such as the pressure on health care systems and fall in economic activity. Other pre-existing problems have been significantly aggravated by it, such as a steep rise in unemployment and inequality. Still others long precede the pandemic such as the return to strident nationalism, immigration tensions, nuclear weapons proliferation, deregulated finance, impact of artificial intelligence and autonomous technology and the climate crisis. These unprecedented threats are exasperated by the global leadership vacuum and the loss of confidence and trust in both our leaders and the institutions of governance established to address them.

The prevailing global system is manifestly inadequate to address the multidimensional challenges of an increasingly complex, rapidly evolving, interdependent world. Member states are retreating to the failed paradigm of competitive nationalism. The effectiveness of international organizations is undermined by the self-interested pursuit of national interests by member countries.

Since the founding of the UN, multilateral cooperation has never been smooth going. Every decade has had its pressing problems and pointed failures of multilateral institutions. At the end of the Cold War, we missed an unprecedented opportunity to shift the paradigm from competitive to inclusive cooperative security at the global level. There is growing awareness of the urgent need to redefine the multilateral system to build consensus on pressing global issues and evolve more effective mechanisms for global governance.

The conventional notion of international relations no longer captures the entirety of the global game. Giant MNCs now rival or exceed the wealth and power of many nations. The number of Facebook users is approaching two billion, making it the largest entity in the world and challenging the notion of the nation-state as the most representative model of democracy. The global impact of Fridays for the Future and the Black Lives Matter meta-movement is evidence of a fundamental change in the character of global society.

Humanity has never before been so interconnected. The policies of national governments are driven by powerful interest groups and the dynamics of electoral politics than the real views of their people. Yet humanity as a whole has no effective means to give voice to its shared values and collective aspirations. We need a system that actively reflects and engages ‘we the people’.

Today the major threats to security cover the complete spectrum of human needs. A broader, more comprehensive conception of security is needed to address COVID-19, soaring levels of unemployment, deep economic recession, and the climate change emergency. Humanity now possesses the capacity and resources required to achieve all 17 SDGs. The response of global society to the pandemic is a striking evidence of this untapped potential, but the determined will and effective institutional mechanisms for coordinated action are still lacking.

There is no alternative to multilateralism, but it must be transformed into a system that actively involves and reflects the perspectives of all major stakeholders—including not only national governments and international organizations, but also cities, scientific research institutions, NGOs, business and youth groups acting in a coordinated manner. Multilateralism is not dead.

It is more inclusive and vocal than ever before. It just needs to be transformed to meet the needs of the 21st century. A radical shift in mind is required to reinvent multilateralism.
Only a new or transformed multilateralism can re-establish trust based on the globally shared risks and concerns of communities rather than narrow interests of individual nations. Transformative leadership is needed to uncork the future, rather than striving to revive failed ideas and models of the past.

**Redefining Multilateralism**

**Global Governance Session**

The web conference “The Changing World Order and Its Implications for Multilateralism” held on 2nd July 2020 organized by NGIC in partnership with WAAS explored the subject of multilateralism. Multilateralism and multilateral organizations are increasingly under threat. Are the challenges the world is facing today the result of the weakness of the multilateral system, or the result of unprecedented challenges overburdening the system and going beyond what the multilateral institutions envisioned as capable of handling? The web conference sought to understand the problems facing multilateral institutions, find solutions, and identify the players who can help contribute towards the solution.

**Transforming Our World: Necessary, Urgent, and Still Possible**

*Edited by Ivo Šlaus & Published in May 2020*

Transforming our world is a huge task involving scientific disciplines and transdisciplinary activities: economy, health and politics, our values, our mindset. We all are responsible for ensuring the survival of humankind, and the SDGs best represent the necessary and urgent actions to be taken. The SDGs are an action plan for each one of us. The purpose of this book is to stimulate people to become aware that they can and should contribute toward achieving the SDGs, and excite them to action.

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*Produced by: The Mother’s Service Society*
There are multiple myths that we as a human race are conditioned by:

- the myth of pursuit of security by perfecting military weaponry to gain security to the extent that the world spends approximately sixty thousand dollars a second on military expenditures;
- the myth of shortage of money when in reality there exist 350 trillion dollars of private and government wealth;
- the myth of scarcity thinking: we live in an abundant world where nothing is in short supply.

But we insist on repeating the same unconscious behaviour of the past. Addressing these myths requires reflection on our superficial fragmented identities and our deep-seated interconnectedness.

We are still entrenched in the old model based on the flawed belief that our security depends primarily on a strong military. No country can be safe without a stable and vibrant economy, sufficient jobs for all job seekers, and a good and safe social policy. There is a perversity in the way we allocate capital.

The nations which have proven resilient in the face of the COVID-19 pandemic are those which have already shifted to a broader conception of security that also encompasses economy, ecology, health, education, social welfare and wellbeing.

COVID-19 is a wakeup call to transform our systems. A paradigm shift to a more inclusive and cooperative global cooperation is essential to meeting the world’s human security needs at the local, national and international level. Nobody is safe in a world of pandemics, weapons of mass destruction and climate change unless and until we are all safe.

Human security is all about placing humans at the center of development. The most serious security problems today are not the ones which wars create but the crises with the potential to create wars and massive migration along with the socio-political fallout generated by populism and fascism. Building stable, democratic, prosperous, resilient societies is the antidote to human insecurity.

A paradigm shift to an inclusive, global human security perspective is essential to reshape and refocus the purpose and function of our global institutions to address the full spectrum of humanity’s security needs. A Green New Deal for some countries may temporarily reduce the immediate impact of the pandemic and other threats on specific populations, but it cannot prevent their recurrence. A comprehensive and inclusive Global Green New Deal is the only viable strategy to address the vulnerabilities generated by the nexus of global challenges and create secure foundations for resilience in the future. Anything less is inadequate.

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**UN-WAAS PROJECT**

**Global Leadership Survey**

We seek to learn from successful leadership initiatives of the past in order to devise and refine more effective strategies for the global community to advance on humanity’s urgent priorities. Please share your valuable experiences so that all can benefit. Click here to access the survey form.
Leadership for Social Change

The technological transformations of the past two centuries convinced many social thinkers that technological development was the ultimate driver of social change.

The revolutions that ushered in authoritarian communism offered an alternative view that change was the result of changes in the control and exercise of political power.

Both contain elements of truth but both have proven to be partial and grossly inadequate to serve as effective instruments.

The lack of a comprehensive integrated theory of change is one of the reasons for humanity’s consistent incapacity to develop effective forms of leadership, to transform the long slow trial and error process of social evolution into a more rapid, clear-sighted process of conscious social transformation.

Leadership is an important instrument utilized by that process but it is only a catalyst for change, and can never be more than that. Change takes place only when the society itself becomes conscious of the need for change, awakens to the possibility, aspires to realize it, unleashes its energies and channels them into new forms of activity and new or altered forms of organization to spur social transformation.

Leadership plays an important role in that process and utilizes many different instruments for that purpose. The inspired or visionary individual leader is one form of them, quite prevalent in the past, but there are many others which are assuming increasing importance in the modern world. The idea of self-determination was a powerful catalyst for the movement that eradicated global empires after WWII. The values enshrined in the Universal Declaration of Human Rights have played a powerful leadership role in the evolution of a more humane society during the past half century. Those values constitute the original foundation for the leadership role being played by the 17 SDGs in the world today. The development of modern economy has been guided, or as we now realize, seriously misguided by the leadership role of a deeply flawed measurement system, GDP, recently renamed ‘Grossly Distorted Product’. Organization has always played an essential role in social evolution, but in recent decades it has become increasingly important.

The founding of the UN, WHO, FAO, World Bank, IMF and other international institutions after the war, the creation of the World Wide Web as the first truly global social system, and the exponential growth of global civil society organizations after the end of the Cold War are critically important forms of leadership.

In order to be effective, GL-21 must base its recommendations and proposals on a more comprehensive and inclusive theory of social change that recognizes the role of all these factors in the process of change and leadership. WAAS and its partners are in the process of examining and elucidating the essential elements of that process and the catalytic role of leadership in accelerating social evolution.
We are in the midst of a complex multidimensional crisis with profound economic and social consequences further aggravated by the sudden and severe onset of the COVID-19 pandemic. Recent developments have severely reduced the scope for reliance on conventional policy instruments utilized until now. A repetition of the policies applied for the 2008 crisis is likely to exasperate and prolong the problems and magnify their negative impact.

The current crisis is rooted in flawed and failed neoliberal economic theory which must necessarily be challenged in order to effect and sustain fundamental change in economic policy. This includes a reconsideration of the fundamental human right to employment and food security and other economic rights, the role of financial markets in economy, the distorting impact of economic measures used to guide and evaluate policy options which ignore externalities and the high social costs of exclusion, the balancing role of the public sector, law and regulation to address social and ecological factors that are beyond the purview of the market system as it is presently designed, the inordinate social power exercised by finance on politics and society, the principles of circular economy and regenerative capitalism. Interdisciplinary models must be developed by integrating human rights, law, governance, economy, people, society and the environment.

A complex crisis can only be addressed by a complex, systemic solution that addresses the root causes. Crisis mitigation requires a short-term anti-crisis program combined with long-term fundamental structural changes to ensure transition to a more stable, equitable and sustainable economy which addresses the current problems related to unemployment, economic insecurity, income inequality, resource depletion and climate change.

The decoupling of the financial sector from real economy can only be addressed by an intentional change in structural or industrial policies. Policy makers must work in concert with science, education, and frontier technologies. The massive investments needed to prevent prolonged recession must also be used to achieve the longer-term aim of shifting to a more humane and sustainable system by essential investments in the SDGs.

Policy options include green quantitative easing, green credits, green bonds to reshape the resource and energy intensive real economy and transition to carbon-free technologies. Universal taxes (carbon, medical, income, and maybe value-added) and automatic fiscal stabilizers are tax policy innovations.

The conclusions of the six sessions on economy, finance and business at the June conference reflect the dominant and increasing role that these sectors play on international relations and global society, reconfirming the Academy’s research on economic theory during the past decade. Valid economic theory must be based on the recognition of the inseparable interdependence between the economic, political, social, ecological and technological thought dimensions of reality and be designed to promote optimal integration with the wider whole. The functioning of financial markets must serve the wider objectives of supporting the real economy, employment generation, equitable distribution of incomes, human wellbeing and sustainability. Market fundamentalism is antithetical to the objective of a value based, human-centered economic system. Firms are social institutions intended to serve a social purpose. Unregulated markets are incompatible with human security and wellbeing. In a market economy, access to remunerative employment is the primary means for individuals to achieve economic security and welfare. Without economic freedom of this type there can be no real political freedom of choice. Full employment in combination with other sources of economic security is an achievable goal. It must be considered a fundamental human right.

GL-21 works towards defining and creating an inclusive multilateral system that is based on sound economic theory, collaborative corporate culture and cooperation at the global level to build a conscious humanity and a sustainable future.
COVID-19 has brought into stark relief the vulnerability and the critical role of employment as part of a comprehensive human security framework so essential to freedom, welfare, well-being and social stability. Job losses and rising levels of socio-economic insecurity and inequality due to the pandemic are of growing concern across the world, adding to the uncertainties about the future of human work in the era of AI, robotics and digital platforms. The crisis is at the same time an opportunity to think about a New Social Contract in response to the destabilizing impact of financialization, neoliberalism and rising inequality.

It is essential to avoid a repetition of the flawed quantitative easing programs launched in 2008 by the US and European nations which channelled trillions of dollars to reinforce failed economic principles and policies. It took five years for employment to return to pre-crisis levels. Once again, we find that the COVID-19 stimulus packages in the US have mainly resulted in soaring equity prices at a time of deep recession rather than supporting growth of incomes and jobs.

Full and productive employment is an essential condition for human security and a vibrant prosperous economy, as set forth in SDG Goal 8. Yet even before the COVID-19 pandemic wrought havoc on economies around the world, a large proportion of the working age population in most countries lacked access to steady, remunerative job opportunities, including a disproportionate number of women, those with disabilities and single parent families.

High levels of unemployment are also associated with high levels of poverty among children. Unemployment is one of the principal sources of the soaring levels of inequality prevailing in many countries. In a few short months, the global pandemic has multiplied the problem dramatically and it is likely to take years for employment levels around the world to return even to the pre-pandemic levels of 2019.

The responsibility of national governments for generation of employment has long been acknowledged, even in the capitalist world. Articles 23 and 24 of the Universal Declaration of Human Rights, the New Deal and US Employment Act of 1946, and similar legislation in many other countries affirm the right to work, free choice of employment, just and favourable working conditions, and protection against unemployment.

Without access to remunerative job opportunities, freedom of citizens in democratic societies is severely limited.

In a world in which individual citizens are expected to provide for their own economic livelihood and that of their families, access to employment is an absolute necessity for physical survival and human welfare. The right to employment in a modern economy is the economic equivalent of the right to vote in democracy. It must be recognized as a fundamental human right. Without access to remunerative employment freedom is meaningless.

It is time we stopped thinking of economic stimulus programs, public investment and tax cuts as the principal means for creating new jobs.

Catalytic strategies that can generate new employment and self-employment opportunities on a very large scale include: job guarantee programs, complementary regional digital currencies designed to increase local circulation and velocity of money, access to investment and training for SMEs as the real engines of job creation, responsible public procurement programs targeting local sourcing, development of cooperative businesses and social enterprises, targeted vocational training and apprenticeship programs to fill the skill shortages, organizational innovation, and entrepreneurship.
The key to job creation is to recognize that human beings are the most precious and underutilized of all our resources.

Actions that can dramatically enhance job creation include: shifting taxation from employment to resource taxes on non-renewable resources and carbon, elimination of fossil fuel subsidies, and tax on short-term speculation.

There is an urgent need for the formulation of a comprehensive theory that can be applied individually or in combination by countries at different levels of development.

If economic systems based on current theory are unable to provide sufficient employment opportunities, the prevailing theory and its application must be replaced with new theory and new strategies.

Anti-Crisis Transition Economic Programs

The pandemic is a major game changer compelling transition to new economic models. The sky-high valuation of market capitalization is a “bubble from within”. It reflects the fallacy of repeating the error of pumping trillions of dollars into the economy through conventional channels which are unable to absorb the surplus liquidity for beneficial purposes, and only reinforce underlying weaknesses in the existing system.

A new model for growth and a new economic policy platform are required. The conventional tools of Central Banks for capital market expansion are inadequate to promote recovery of the real economy. A multi-track strategy is needed combining innovative and conventional financing methods.

Parallel electronic currency would provide the necessary resources for supporting investments in human capital to relieve the burden of the pandemic while also financing the transition to transform neoliberal capitalism into a sustainable, human-centered economic system. This could be combined with development of new asset classes such as green bonds, healthcare bonds, green credits, healthcare credits, etc. These investments would generate positive externalities far greater than those generated by current policies.

The Anti-Crisis program could also include replacing the linear cradle-to-grave model with a circular carbon-neutral economy, rapid transition to renewable energy, elimination of fossil fuel subsidies, a global carbon tax, tax on short term speculative investments, etc. At the macro level the focus must be on social well-being indicators rather than GDP. At the micro level, ESGM (environmental, social, governance and medical) metrics are needed to drive business improvement.

Employment Guarantee Programs

The embrace of neoliberal economic policies has weakened government commitment to full employment over the last few decades, but a few countries have already adopted successful job guarantee programs, such as India’s National Rural Employment Guarantee Scheme which ensures at least 100 days of paid work for each rural household annually. The argument that low levels of unemployment spur inflation is now being challenged.

Support for employment programs has also been reinforced by evidence that the full social, economic, political and environmental costs of unemployment in terms of lost productivity and GDP, deterioration of work skills and re-employability, poor nutrition, impaired physical and mental health care, drug and alcohol use, crime, violence, political polarization, extremism and social instability in all probability exceed the cost of providing sufficient job opportunities for all job seekers.

Modern Monetary Theory supports the view that nations with a sovereign currency can directly create whatever funds are required to create full employment and that if the programs are properly designed and directed toward meeting real social needs and asset creation, especially ecological investments, the returns will exceed cost and inflation will not result.

The magnitude of the current economic crisis has generated strong vocal support for massive investments in job creation programs in the USA and EU.

Job Guarantee is an important aspect of the proposed Green New Deal today, on the assertion that environmental justice cannot be delivered without economic and social justice. A Job Guarantee Program could also form the basis for a Global Marshall Plan that tackles the twin threats of environmental and economic instability.
Several factors are dramatically altering the role of finance and money in the world today. Globalization has liberated money and finance from national regulations, thereby enabling banks to shed the constraints which divided commercial and investment banking and spurring the creation of the global casino in which trillions of dollars circulate the world in search of higher short-term returns. This has been magnified by the increasing financialization of economy and the rising share of the financial sector in GDP and profit-sharing. At the same time, the exponential growth of technology, especially fin-tech, is increasing access for non-traditional financial players and democratizing access to money. We are in a civilizational transition from industrial to digital information-based systems. The financial system is struggling to keep up with changing social attitudes, especially among the young and wealthy who are becoming more conscious and concerned about impacts of the financial system on society and the environment, which are altering investment decisions and shifting the balance from short-term profit to long-term sustainability. And finally there is the increasing role of money as a medium for the exercise of social power in all fields and sectors of global society, resulting in an increasing concentration of the world’s wealth among a very small number of the ultra-wealthy individuals and corporations and resulting in an inordinate influence of money-power on politics, law and government, social stability, and international affairs. The growing dominance of neoliberal economic theory over the past forty years has aggravated all of these trends.

The current industrial era finance model is the root cause of the problems we face today. The world economy represents a paradox of scarcity and superabundance—a global economy with the capacity to produce enough to meet the needs of all human beings and a widening gap between those who struggle for their existence living side by side with a small minority who possess an inordinate portion of the world’s wealth.

This obsolete model is not fit for purpose in the highly digital, globalised, democratic world today where the power is more with the common man than absolute, fixed monarchs. The world’s population and GDP have grown disproportionately with the system. The world has managed to create wealth and prosperity but the real challenge now lies ahead. Capitalism is under enormous strain. Individuals who own enormous wealth are inherently making a choice as to how their wealth will be deployed. We see the consequences of these choices only at the surface level, not yet at a deeper level.

‘Big finance’, whether state driven or private sector, acts as a utility for the mass market (credit and deposits) and as an agent for other market participants, but lacks a clear, socially-relevant and sustainable mission. The financial system needs a big shift towards a sustainability-based capitalism: there should be no trade-off between financial returns and social impact. The evolution of systems should be juxtaposed with social evolution.

Sixty percent of the world’s financial assets are cocononed in large financial institutions and banks all over the world, thereby creating an artificial divide between Finance and Economy when they should be serving the real economy. Banks today act merely as deposit taking institutions and agents for vested financial interests. Finance needs mobility, flexibility, and coordination to be relevant in a world where change is constant and equilibrium cannot be expected, but it also needs to be fine-tuned and integrated with the real economy and evolving social needs.

Our approach to designing solutions should take into account diversity, mobility and most importantly, an interdisciplinary approach. Resources should be channelized with a long-term focus. ESG is now a profit maximization tool where socially conscious companies can actually generate better returns. SDGs and ESG investments should become the core focus areas with particular emphasis on values like transparency and trust.

The world we live in is continuously evolving. It is time we introduced SDG18 for Sustainable Finance to finance the SDGs and drive change in finance and financial systems to pave the way for financing major issues in the future.

Development finance is an essential ingredient in financing initiatives that build new markets, which can then attract private sector players as they mature. Sovereign and pension funds have an important role providing financing through crises to protect stakeholders, and their perpetual capital affords them the ability to take the long-term views required to price market externalities. Mass financial inclusion is required to capture 2/3rds of the world in developed countries like the US (20-30% are not real participants) as well as in fast growing developing ones like India (c.70% to become full participants).

Digital currency from multiple actors used primarily as an instrument for speculation, tax evasion and illegal
activities is a disrupter, but it has the potential to radically change the financial model for the better. It can vastly reduce the costs and barriers to international transfers, provide global vehicles for crowdsourcing, and form the kernel of a truly global currency that is backed by the collective wealth and productive assets of the entire world.

Major central banks are already seriously considering the introduction of direct digital currencies, bypassing the banking system. Central Bank Direct Currencies have the capacity to directly target critical investment needs, such as the Pandemic and Climate Change, instead of resorting to traditional quantitative easing which channels funds to existing institutions and is largely diverted from its social purpose to financial markets.

Democratisation of finance is the future, digitisation and cybertechnology is an enabler of the widespread decentralisation of finance and the empowerment of individual level financial systems.

Increased awareness, consciousness and self-empowerment of people regarding their condition and human rights are drivers of change.

Households own the vast majority of wealth and consumers will increasingly make choices at the point of purchase to consume from businesses that fit their views and values, driving industry to respond in ways that affect their products and activities. This in turn will drive value and investors will follow.

### Innovative Financial Strategies & Projects

1. Special Purpose SDG Private Bonds specifically targeting funding of the SDGs

2. Public Sector Bonds for investment in the SDGs with returns subsidized by government to reflect the real positive externalities created by investment in education, health care, employment, renewable resources, conservation and other direct economic and social benefits of SDG implementation.

3. Next Generation Impact Investing by wealthy family offices in Europe with focus on next generation family investors concerned and committed to investments that eliminate negative externalities and promote positive sustainable social impact.

4. International Micro Housing Finance Inclusion Initiative based on a highly successful program in India that funds low cost housing for first-time home owners.

5. A graded capital gains on short term investments inversely proportionate to the length of investment will redirect finance from speculation to investment in the real economy.

6. System Change Investment in USA and Europe designed to motivate corporations to promote systemic changes in law and public policy that support public welfare and sustainability. (see box below)

7. Central Bank Digital Currency created in parallel to conventional currency and applied by government directly for financing the SDGs. (see box below)

8. Regional Payment Systems applied in Europe to contain money flow within regions with negative interest rate, high velocity, local use as an effective means to stimulate regional economies and moderate the drain of consumption and investment capital to metros and international markets.

9. Six Capital Model for evaluating investment opportunities and performance that takes into account the full positive and negative impact of economic activities on people, society and the environment.

10. Integral Investment Strategies for SMEs based on an integral investment model to increase the flow and reduce the risks of investment in small business with maximum potential for job creation and innovation, taking into account both objective factors related to business, society and environment sustainability combined with the values and human capacities needed for accomplishment.

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**Cadmus**

Cadmus is a biannual print and electronic journal focusing on economy, security and global governance. It is a journal for fresh thinking and new perspectives that integrates knowledge from all fields of science, art and humanities to address real-life issues, inform policy and decision-making, and enhance our collective response to the challenges and opportunities facing the world today.

**Eruditio**

Eruditio is a biannual electronic journal for examination of ideas and perspectives focused on the social consequences and policy implications of all forms of knowledge on a global basis. The vision of the e-journal complements and enhances the Academy’s focus on global perspectives in the generation of knowledge from all fields of legitimate inquiry.

Click here to subscribe to free electronic versions of **Cadmus & Eruditio**
Focusing on root causes and system change is essential for achieving the SDGs. System Change Investing (SCI) is a total systems approach focusing on changing the underlying systems and addressing the root causes which encourage harmful corporate behavior. SCI is powerful and relatively easy to implement, and provides a practical and profitable way to engage the corporate and financial sectors in system change. It is based on the same model as Socially Responsible and ESG investment strategies, but goes further to address root causes. Its ease of implementation is because it involves indirect instead of direct system change, and it is based on widely adopted practices. SCI strongly incentivizes companies and investors to do so. It also builds on existing corporate and financial practices. The method has strong potential to increase investment returns.

The introduction of a parallel electronic currency specifically designed to finance global commons and human-centered economy would provide a systemic non-linear and complex approach to create the necessary resources to achieve the UN SDGs and address asymmetric shocks (COVID-19, among others), while stabilizing the existing monetary system. Leading central banks around the world are actively studying the potential application of this approach to directly inject purchasing power without dependence on the banking system to finance the huge multi-trillion-dollar annual investment requirements for achieving the SDGs, with special emphasis on investments in human resources and environmental protection. A full report (The Tao of Finance) is under preparation by a WAAS expert group.

The COVID-19 pandemic, mass protests and other disruptions show that systems are in the process of changing. A whole system approach is essential for large scale system change such as economic reform.
Business and Finance

Businesses manage a large portion of global resources. Rather than take an adversary approach to business, we can ask ourselves how best to use business resources to meet social and environmental goals. Major structural changes are needed in two sectors: i) business and finance, and ii) business education, in order to find ways to finance the SDGs and ensure sustainable development.

Youth and civil society movements around the world show us that our youth are more aware of and dedicated to various social causes such as human rights, environmental protection and equality. It is our responsibility to create new curricula in economics, social sciences, and management so our education provides our youth the academic support needed to translate their ideals into action and accomplishment.

We need a new theory of the firm, and a new economy that considers social and environmental issues. Systems that compel companies to put profits ahead of everything else unintentionally impact the environment, life support systems, communities and cultures. This leads to legitimate grievances and even violence. When businesses understand the peace benefits and the long-term advantages of building up communities, business, business education, and sustainable development can be integrated to build a better world and ensure greater human welfare and wellbeing. A shift in content is no longer enough, we need a shift in context. Incremental change will not do, what is needed is a transformation. By moving from an ego-centric to an entho-centric period on the planet, and acquiring a global centric view, businesses can shift focus to mutual beneficacy, and pave the way for financing the SDGs.

COVID-19, Trade and Leadership

International Trade Centre supports developing enterprises and transition economies connected to the global markets for trade and investment. The COVID-19 pandemic has caused significant disruptions, requiring a remodel of the supply chain by shifting emphasis on resilience. Restrictions by some countries on exports of critical supplies and relaxations by others for the same supplies show that there needs to be a system in place for market transparency and policy response in trading essential supplies. Such initiatives can be seen in smaller countries in the Asia Pacific Region. These countries have plurilateral agreements, work together and do not impose export restrictions. On the other hand, larger countries have failed to take multilateral action. Globally SMEs employ roughly 70% of the labour force and around one-fifth risk bankruptcy due to COVID-19. This can be averted with initiatives like ITC’s global trade help desk organized jointly with the World Bank, UNCTAD and WTO. This initiative would provide SMEs access to information relevant to their business and market. As the big powers turn towards self-sufficiency, small and developing countries that rely mainly on imports will be deprived of essentials. The value of a resilient future with better distribution of risks and a coordinated approach to solving problems in trade is an important lesson to be learnt from the current pandemic.
Approximately 11% of the world’s population numbering 820 million suffers from malnutrition arising from food insecurity. COVID-19 has further aggravated the problem by impacting food prices, supplies, and cancelled school lunch programs. Most malnutrition is due to lack of income and effective distribution systems, not lack of food availability, which underlines the close linkage between employment and food security. Migrant labourers in the informal sector are particularly vulnerable.

High levels of food wastage along the food chain—estimated at 40% in developed nations—are also a major contributor. The removal of agricultural subsidies resulting from neoliberal trade policies has heightened the problem. Variable weather symptomatic of climate change poses an even greater threat in the years to come.

SDG 2 is dedicated to ending hunger in the world. Food security requires cooperation, coordination and leadership at the global level. Today the world possesses the capacity to produce more than sufficient food to feed its burgeoning population. But mere production of more food is not sufficient to eradicate hunger. In most countries access to gainful employment is now the single greatest challenge to achieving food security. Even in the most prosperous nations, employment opportunities and income security are subject to market forces and cannot be considered a source of absolute security.

Unless the right to food is legally enshrined and enforced, the specter of insecurity will remain. The right to food must be considered as a basic human right. Security implies protection of that which has been acquired supported by an organization for emergency relief in the face of any contingency. True food security is not just a state of capacity for production or economy where-with-all to purchase. It is, in essence, a psychological state of confidence in which the very possibility of deprivation has been removed. Such a state is difficult to conceive in the world today, but that does not mean it is unachievable.

Food shortage on an abundant planet is a matter of distribution issues of a food system run by special interests, speculations, and lack of consideration for the overall human security. Developed countries thrive on fluctuating export prices of their food production in surplus and are driven by a vested interest in reducing or eliminating food subsidies to developing countries. Strong coalitions of producers will be needed to counter the dominant influence of huge multinationals and regulate speculation in commodity markets.

The competitive food security model leads to wasteful over-production, widely fluctuating and unremunerative prices, sustainable subsidies and ecological practices. It needs to be replaced by a cooperative food security system at the local, national and international level. Achieving the SDGs will require actions on the agriculture and food security fronts, and such actions should be at local, national, regional and global level through a well monitored and coordinated approach. We need to strike a balance between market forces and global guarantees.

The UN Food Systems Summit in 2021 will be a major opportunity to craft a well-organized global effort to address these challenges. To ensure that the best practices of a few become the standard practices of the many, and that real partnerships for implementing actions on the ground are forged between all governments and regional banks, bilateral agencies, the private sector, NGOs, and the international organizations to support farmers and consumers in all countries.

The creation of an international organization for food security to stabilize supply and prices will not eliminate healthy competition. Indeed, it will foster it. But it will provide all players with access to the essential information required to make intelligent decisions regarding what and how much food to produce to meet projected demand nationally and globally. It can substantially reduce the risks of agriculture as a business, thereby encouraging banks and insurance companies to extend the credit and insurance coverage needed to protect producers, while ensuring stable supplies and prices for consumers.
An effective organization for food security would necessarily require the opening of markets and elimination of export subsidies by industrialized nations.

Global food security requires the capacity to produce a physical abundance of food; the capacity to create a responsive organization to link production, distribution and consumption; the capacity to create an integrated communications network for information and transactions; and the capacity for legal enforcement.

The world possesses all these capacities at the present moment. But to achieve world food security, they must be founded on and driven by the global recognition of food security as a fundamental and inviolable human right and the enshrinement of that right in law and treaty.

The world community possesses the technological, financial, organizational and human capabilities required to eradicate world hunger and assure a modicum of real food security to its entire population within a decade. It is not a matter of charity or aid. As in the case of universal education, it is a question of ensuring to all citizens the essential requirements for self-reliance and self-development.

It requires a shift in emphasis from managing food to developing human beings.

The success of Green Revolution, which raised India’s food grain production by 50% in five years and 100% in ten and made the country food self-sufficient, is mainly attributed to the introduction of hybrid varieties and chemical intensive cultivation methods.

The remarkable organizational innovations that accompanied the introduction of advanced technology are usually overlooked or discounted. But without them, it is very unlikely the program would have succeeded, as the failure of technology alone in some African countries confirms.

The full strategy included the creation of a host of new organizational mechanisms—an agricultural prices commission and floor price to ensure farmers received a remunerative price for increased production:

• A national demonstration program including 100,000 plots on farmers’ own lands;
• A national fertilizer corporation, warehousing corporation, and seeds corporations; and
• The revamping and centralized coordination of agricultural research. But the most important innovation was the establishment of the Food Corporation of India to ensure a market for crops in food surplus regions for marketing in deficit areas at affordable prices and for building national buffer stocks as insurance against severe drought and crop failures.

The world lacks effective global institutions to correct structural imbalances and prevent speculation in food prices. The establishment of an International Food Corporation could serve a similar purpose today in reducing price fluctuations and ensuring food security through effective marketing and distribution systems. While the largest food exporting countries may shun participation, an alliance of other countries could still establish the model as a group insurance program against local and regional crop failures due to erratic weather and a shared buffer stock as a strategic food reserve system.

We live in a society of super abundance. But the super abundance is very unevenly distributed. We have in some areas a huge excess of capacity that is not being utilized and in other areas unmet social needs.

– Garry Jacobs
WAAS President & CEO
Climate research has established beyond doubt that burning fossil fuels is the main cause of global warming. Its impact can be disastrous, such as a major and rapid rise of the sea levels, drowning coastal settlements of more than a billion people.

The world needs to accelerate the transition towards energy efficiency and replacement of fossil fuel with renewable energy. The cost of the transition to a low-carbon world is actually much lower than it used to be.

Achieving the goals is easier now. A five-fold increase in energy efficiency is possible.

Some of our options to confront global warming are:

- Decarbonizing energy consumption and choosing renewable energies
- Decoupling well-being from energy consumption
- Carbon capture and storage (CCS) and carbon capture and use (CCU) methods to reuse CO₂ that is generated

There has been enormous resistance to accepting the realities of climate change because some countries and industries have grown rich because of fossil fuel, and do not want to give up the resultant economic and political power. What we really need is a coming together of the best possible expertise we can get within a policy framework that recognizes the real risk implications of what we now have to address. There is a dire need for a paradigm shift in the parameters we use to measure progress. COVID-19 has given us an opportunity to come together and collaborate to address this global problem.

Germany’s Renewable Energy Act

The Renewable Energy Sources Act (EEG) is a series of laws adopted by the German Parliament to encourage the generation of renewable electricity. EEG initiated the first green electricity feed-in tariff scheme in the world, making it profitable for photovoltaic power to be produced and fed into the public grid with a cost covering compensation. It resulted in a rapid uptake of wind power and photovoltaics and is regarded nationally and internationally as an innovative and successful energy policy measure. The Act also covers biomass, hydroelectricity and geothermal energy.
The International Union for Conservation of Nature (IUCN) brings together over 1400 government and civil society organisations with the aim of conserving nature and accelerating the transition to sustainable development. By harnessing the experience, resources and reach of more than 15,000 experts, IUCN is a global authority on the status of the natural world and the measures needed to safeguard it. One of the ways in which IUCN engages to help address ecological challenges is its Nature-based Solutions. Nature-based solutions are actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.

Some of the solutions include the **Bonn Challenge** that addresses the issues of land degradation and carbon emission; the **European Union’s Green Deal** to make food systems fair and environment-friendly, and protect and restore degraded ecosystems in land and sea; **Global Peatlands Initiative** to improve the conservation, restoration and sustainable management of peatlands, mires and related ecosystems; and various **water conservation** and **sustainable farming** practices that restore degraded land, protect forests and water resources, improve farmers’ income, diversify employment, and improve people’s economic outlook and mental and physical health.

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**Bonn Challenge**

The Bonn Challenge is a global effort to bring 150 million hectares of the world’s degraded and deforested lands into restoration by 2020 and 350 million hectares by 2030. It was launched by IUCN and the Government of Germany in 2011. The restoration of 150 million hectares of degraded and deforested lands in biomes around the world will create approximately $84 billion per year in net benefits that could bring direct additional income opportunities for rural communities. About 90% of this value is potentially tradable; it encompasses market-related benefits.

Achieving the 350-million-hectare goal will generate about $170 billion per year in net benefits from watershed protection, improved crop yields and forest products, and could sequester up to 1.7 gigatonnes of carbon dioxide equivalent annually.

A survey of the Forest Landscape Restoration process in five countries across the Americas showed remarkable success with additional co-benefits including the creation of an estimated 354,000 jobs, an average investment per hectare of at least $235, and the sequestration of 1.379 billion tonnes of CO₂.

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**Farm-to-Fork Strategy**

The Farm-to-Fork action that is part of the European Green Deal aims to develop a healthier and more sustainable EU food system. Its key elements are to:

- Make sure people have access to healthy, affordable and sustainable food
- Tackle climate change
- Protect the environment and preserve biodiversity
- Ensure a fair economic return in the supply chain
- Increase organic farming

Its targets for 2030 are to

- reduce the use of hazardous pesticides by 50%;
- reduce nutrient losses by 50%;
- reduce fertilizer use by 20%;
- reduce the sale of antimicrobials for farmed animals and in aquaculture by 50%; and
- bring 25% of the total farmland under organic farming.

The action proposes to create a food environment that makes the healthy and sustainable choice the easy choice; add food labels that allow for healthy and sustainable diets; step up the fight against food waste; invest €10 billion in research and innovation related to food; and collaborate with other countries and international actors to promote a global move towards sustainable food systems.
Coastal areas house a high diversity of economic activities. More than half of the world's population lives within a 100 km strip of coastline; by 2025, 75% of the population could live in coastal areas. These areas are also a most fragile ecosystem subjected to different pressures, particularly from anthropogenic activities.

We need formal and non-formal education, supported by the development of specific workshops to sensitize youth on the impact of their actions and develop skills for protecting the environment. Experiential education must be incorporated from the primary school level, exposing students to important resources in the marine and coastal areas. It is important that young people initiate and support movements to amplify the cause and action in a unified manner.

Scientists should interact with the local communities by engaging in research and monitoring, and provide people with information and effective coastal management plans. Community leadership is the key to the conservation and protection of these regions. Communities need to be empowered to understand their own sustainability, take more responsibility and control their own actions in a sustainable manner at the local level.

We need to advocate for the necessary change in environmental legislation that attracts marine-related investment and new technologies. There should be periodic assessment of existing climate-related policies to establish their efficacy and relevance.

C. Sandberg

The main root cause of the problems we face are flawed economic and political systems. These systems put business in conflict with society and humanity in conflict with nature. So improving our systems is the most important action needed to achieve the SDGs.

– Frank Dixon
Founder, Global System Change; WAAS Associate Fellow

We have enough money. We have enough ideas. The problem is we have not invested at the core of the education system in building real humanity. Our whole system is designed to pass a series of tests that are systemically designed to get us to the next stage.

– Ketan Patel
Founder & Chief Executive Officer, Greater Pacific Capital

L. Sandberg

It is necessary to avoid the main legacy of neoliberal capitalism—benefiting a small portion of society, while causing many environmental, social and economic problems. To achieve this, regulation is critical. New systems must overcome the “virus of neoliberalism”.

– Dragan Djuricin
Professor of Economics, University of Belgrade, WAAS Fellow

J. Scorse

M. Lopez

A. Hanhaussen

N. Muñoz Sevilla

S. Benjamin

V. Wade

WATCH VIDEO

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We have a tremendous responsibility towards younger generations, to impart skills and show them the education and work opportunities available and emerging. There is currently a wide mismatch between the skills and knowledge imparted by education, and the requirements of industry and the corporate world.

Companies do not need academic knowledge or expertise so much as people who can communicate well, solve problems, think creatively, and satisfy customers.

Society needs dynamic and young business leaders who can create jobs, add value and contribute to the community. We need an education that can nurture innovative, cooperative and energetic people. We need to engage with the youth, speak their language, understand their way of thinking, and guide them to become entrepreneurs.

No one organization can bring the diversity of thought, age and culture that is required to bring real systems change. So it is essential that we collaborate with diverse groups. In order to include everyone in the transformation we wish to implement, we need to ensure that education is affordable and accessible to children of all sections of society. Equity funding to support the development of the education system that is inclusive is essential. Digital learning and online educational resources are no longer just an option, the pandemic has made them a necessity; it has forced the world to make tremendous strides online. This has opened up new and broad opportunities in education. We need to ensure that this development reaches all sections of society, including the most underprivileged.

Legal institutions in Bahia, Brazil, including the Academia de Letras Jurídicas of Bahia and the Federal University of Bahia, promoted a series of virtual seminars on Fundamental Rights and Duties in Times of Pandemic.

The series brought together more than 60 speakers to discuss all aspects of the COVID-19 pandemic and its impact on all fields. The special all-English 11th session held on June 10, 2020 was co-moderated by Saulo Casali Bahia. Heitor Gurgulino de Souza spoke on the subject of “Education and COVID-19”, and Garry Jacobs on “Education for Global Leadership.”
Education is a remarkable organization that transmits the essence of humanity's cumulative past learning to future generations in a systematic and condensed form. It is a catalyst for conscious social evolution, key to overcoming the many unprecedented problems we face today and converting them into opportunities. The challenges confronting global society will not lend themselves to resolution by piecemeal sectoral strategies. A new paradigm in human development must be founded upon a new paradigm in global education. Paradigm change is not only possible, it is inevitable. Today we witness levels of social awareness and activism among youth not witnessed in the past half century. We need a human-centered educational system that aims for the fullest development of the capacities of each individual. The world’s leading academies need to break down disciplinary silos and institutional boundaries between research, policy making and implementation in a collaborative global effort.

Traditional institutions and forms of education cannot keep pace with the rate of change in knowledge today. 129 million books were published in five centuries since printing began. Today, we are adding 2.2 million a year. The internet has grown to more than one billion websites in 3 decades. More than two million patent applications are filed annually. Anywhere between 50% and 80% of the jobs that will be created by the 4th Industrial Revolution do not exist today. So the only way to prepare our youth for a future that we do not know about is to teach them how to learn.

The prevalent model of education in which the teacher transfers information in a classroom lecture, and requires students to memorize facts and reproduce them in the exam is an anachronism. Information is ubiquitous today. We need education that develops in youth the capacity to correlate and synthesize, to place isolated pieces of information within a cohesive framework of thought, to think independently from first principles, to integrate abstract thought with the world we live in, and apply it for the development of all.

Future education must meet the sophisticated demands of the global labour market, and the growing shortage of attitudes and skills needed to promote entrepreneurship and full employment. Academic knowledge and technical skills are not all that employers look for. Career advancement depends on one’s social skills, character and personality. Businesses want educational institutions to educate the whole person, and create people with social, interpersonal, leadership, problem-solving and entrepreneurial skills.
Knowledge is no longer in the possession of a group of people or organizations. The whole world is a university. Digital learning resources and platforms have exponentially increased access to knowledge. We have to conceptualize a new system that accesses knowledge from different sources and stakeholders. By separating learning from certification and accreditation, students will become free to acquire knowledge from any source. The rich formal, informal and non-formal sources of knowledge can be tapped. Independent global certifiers can be empowered to issue certificates, thereby separating certification from the source and delivery system of education. Such a development will truly democratize education and make it more accessible to all.

At the moment humanity is on the cusp of a major transition in education. The coming revolution in global education spurred by a breakthrough in online learning has made all of these goals achievable. A values-based, integrated, evolutionary model of education accessible to all can serve as a venue where new knowledge and skills are developed, where the future is prototyped. In this way, education can lead social change.

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We need effective leaders and catalytic methods to cope with the growing complexity of our times and address our present and future challenges. Education is one of the drivers for creating such leaders and methods. A Master’s program on sustainable relationships has been designed with a view to meet such an ideal. This program is developed in collaboration with the Ca’ Foscari University, Venice, Italy, Person Centered Approach Institute (IACP), WAAS, World University Consortium and the University for Sustainability, Santa Fe, New Mexico. Knowing how to manage and promote oneself and one’s relationships in an effective and sustainable way is increasingly a fundamental competence in society. The interdisciplinary Master’s program will foster a holistic understanding of reality based on transparent values and sustainable relationships with ourselves, others and the world. It is designed to meet the needs of people from various cultural and professional sectors who wish to acquire the necessary skills to promote human, social, economic and cultural capital, and devise resilient strategies that take us forward to a more just, peaceful and sustainable society.
The evolution of a complex, highly integrated global society necessitates the development of a more comprehensive and integrated transdisciplinary science of society. This session was organized to conceptualize how the findings and recommendations of the GL-21 project can be utilized as the basis for development and dissemination of transdisciplinary educational programs that foster Global Transformative Leadership.

Effective education is a powerful force for harmonization and unification. The aim of this program is to provide learning opportunities that enhance perception and understanding of the complex interconnectedness of political, economic, social and ecological reality today and equip students with a greater capacity to identify underutilized resources and untapped opportunities, develop innovative solutions to persistent problems, and foster the capacities for independent thinking and creativity needed for accomplishment at the level of social, business and personal life.

The objective of the program is to enhance the capacity of students to view social challenges and business opportunities from multiple points of view, identify all their relevant dimensions and factors and synthesize perspectives as a more effective basis for understanding, decision-making and action. It is founded on the premise that a greater understanding of the interrelationships and interdependence between stakeholders, activities, sectors, levels of society, countries, academic disciplines and concepts will enhance the capacity of individuals, organizations and society to tap opportunities and effectively cope with the challenges generated by resistance and reaction to increasing complexity.

The learning pedagogy for the program will be highly interactive, peer-to-peer, and question-driven. It will be based on the creation of a learning community designed to foster independent thinking and individuality combined with more effective social learning from our collective experience. The focus will be on developing the capacity for understanding, organization, creativity and accomplishment in any chosen field of individual, business or social achievement. The list presented below describes the common features of the course:

- **Goal-oriented**: Focus on practical implications and applications related to the process of human accomplishment.
- **Multi-sectoral**: Applicable to accomplishment in public life, business, civil society.
- **Multi-level**: Applicable to all levels from the individual and firm to the nation-state and global community.
- **Transdisciplinary**: Founded on common principles and processes that underlie and unify disciplinary perspectives.
- **Integrative**: Comprising, synthesizing and integrating multi perspectives and dimensions—individual-institutional-societal-global, political-legal-economic-social-psychological, past-present-future, organizational-technological, subjective-objective, and mental-social-physical.
- **People-Centered**: Focused on the protection and promotion of human capital in person-centered and sustainable ways.
- **Participatory Action Research**: Learning by doing, involving all the stakeholders through empowerment actions.
The pandemic has demonstrated that there are few things more fundamental than human health and wellbeing. It is also a compelling reminder that the wellbeing of each is conditional on the wellbeing of all. We need urgent implementation of an ecological systems thinking in practice and must consider all dimensions of life: physical, biological, psychological, social, cultural and spiritual.

Policies with greater impact recognize that what makes societies prosper and flourish also makes people healthy. Access to education, employment, housing, and security support health. Good health results in increased productivity, creativity, a more efficient workforce, and less expenditure on sickness and social benefits.

The health and wellbeing of the population are best achieved if the whole of government works together to address the social and individual determinants of health. Health performance and economic performance are interlinked—good health can support economic recovery and development.

Potential Solutions

- Establish a definition of well-being that incorporates ethics and individual rights, and is relevant and applicable to any culture and any level (individual, community, society etc.)
- Understand the context and drivers of healthy society, with a holistic perspective and based on the experiences of people
- Identify future leaders and champions of healthy societies and find ways to support them
- Empower students, youth and local leaders to foster a grassroots approach
- Adopt an integral and holistic approach in medicine using the wisdom, knowledge, skills and experiences of all medical systems
- Engage the 193 member states in implementing a common agenda through 17 SDGs and their 169 targets.

Leaders set a vision, encourage and motivate, manage change and inspire. Leadership is, above all, a capability to influence behaviour of people, including their value systems. Leadership is about commitment, and commitment is about values.

– Asim Kurjak
Professor, Sarajevo School of Science and Technology; WAAS Fellow
Universities and regions need each other. Regions are in need of the expertise and consultancy that universities can provide. In return, regions offer “open space laboratories” that universities can use to further their knowledge and expertise. Universities have a prominent role to play in the sustainable development of regions. They can capitalize on and train the available human resources to foster innovation and social change.

The COVID-19 pandemic poses a challenge to the universities as well as all other institutions, industries and areas. A new world order is arising as a result, followed by a backlash of populism, nationalism, and disengagement from major international organizations.

To counter this, social security systems need to be redesigned to protect citizens better.

Healthcare must be reconfigured in alignment with current realities.

Decisions and policies must be based on accurate and scientific information. At the same time, positive, progressive values must be integrated with science. A key player in this equation is academia, which can overcome pressures of time, resources and political climate, and rise to the challenge.

A culture of peace and a truly shared society are needed more than ever before.

– Emil Constantinescu
President of Romania (1994-1998); WAAS Trustee

We have to move our philosophy of thinking from I-centered universe to us, to life-centered universe.

– Remus Pricopie
Rector, National School of Political and Administrative Studies (SNSPA); Chair, ISACCL Advisory Committee; WAAS Fellow
July 9, 2020 marked the 65th anniversary of the Russell-Einstein Manifesto calling for global public action against the threat of nuclear warfare. The manifesto talked of the existential threat posed by nuclear weapons to humanity. It succeeded in generating widespread awareness of the catastrophic dangers of nuclear war, paving the way for the founding of Pugwash Conferences and WAAS, the birth and growth of the nuclear abolition movement, the first treaties banning atmospheric testing, the Nuclear Non-Proliferation Agreement, numerous arms control agreements, and eventually to the elimination of tens of thousands of nuclear warheads and measures to reduce the danger of accidental usage.

A web conference on the Relevance of the Russell-Einstein Manifesto was co-organized by WAAS and NGIC on June 13, 2020 to address the global leadership vacuum by identifying catalytic, collaborative, multi-stakeholder, multi-sectoral strategies to promote effective action on the pressing political, economic, social, technological and ecological challenges confronting humanity today. The conference addressed the following questions: What can be done to educate public opinion and generate political support for multilateral collaboration at the level of nation-states? What can be done to enhance the effectiveness of international organizations? What can be done to strengthen collaboration and build alliances between scientific, education, youth and other civil society organizations to play a more influential and effective role as representatives of the shared values and common goals of all humanity?

ISACCL has launched several projects to study and promote awareness of the cultures and civilizations of the Levant, and conservation of its natural and cultural heritage. Its Great Books of Levant initiative aims to create a library containing the most representative literary and scientific works on the culture of the Levant. The collections will be available for researchers and the interested public. Its Dobrogea, Witness of the Millennial Civilizations of the Levant project promotes scientific research, education, public awareness and legislation in order to protect and preserve natural and cultural sites that are of scientific, educational and cultural significance.

Tara Hațegului Geopark located in the central part of Romania is a UNESCO site containing remarkably geological, natural and cultural wealth. The Geopark is administered by the University of Bucharest, which ensures an integrated management centred on education, protection and sustainable development. The Geopark uses local resources to give communities a sense of identity and generate new employment and income through geotourism. It offers activities in education, research, public awareness, land planning, and nature conservation. Annual interdisciplinary projects are developed by university teachers and students here.
Role of Academies: Addressing Global Social Challenges

Academies are vital civil society institutions that have the credibility to inform the public and policymakers about problems and potential solutions. The InterAcademy Partnership (IAP) is a network of more than 140 national and global academies that work together to find scientific, evidence-based solutions to the world’s problems. IAP harnesses the world’s scientific expertise to launch and support several successful initiatives for global social transformation in the fields of Agriculture & Food Security; Biotechnology & Biosecurity; Energy; Environment & Climate; Health; Policy for Science and Sustainable Development Goals.

Climate Change & Health

IAP’s inter-regional project Climate Change and Health focuses on climate change adaptation and mitigation strategies that bring health co-benefits. There are many direct and indirect pathways for the impacts of climate change on health. The project explores solutions for its mitigation and adaptation. It will culminate in reports that present science-based recommendations, providing advice for decision makers for implementation at global, regional and national levels.

Food & Nutrition Security

IAP’s Food and Nutrition Security and Agriculture project takes the broad view that apart from agriculture, food and nutrition security also relies on physical, biological, socio-political and economic environments. It focuses on food production issues, the need to reduce food loss and waste, and the impact of changing food preferences and dietary composition. The project has produced reports that offer recommendations for implementation at global, regional and national levels.

The Role of Academia in the Implementation of the SDGs through the COVID-19 Crisis

The COVID-19 pandemic poses formidable obstacles to the implementation of Agenda 2030. WAAS partner NGIC conducted a conference on June 3, 2020 exploring ways to mobilize a wide range of stakeholders to construct viable pathways for implementation of the SDGs. It raised questions such as:

How can we prevent the pandemic from turning into a major economic and financial crisis? How can we restart the economy in a more sustainable way? What are the ways to mobilize our scientific data, models and capacity for the implementation of the SDGs? How can SDGs become our moral basis and strategy for growth? Why was academia not able to highlight the deficiencies in the economy so it would translate into a precautionary policy at the government level? What role can academicians play in future? What is the role of the SDGs in mobilizing the recovery from the pandemic?
The tremendous advance of science, engineering and technology must be used primarily to serve the good of all human beings. Our schools foster technological innovations, but falter in producing social innovations and societal renewals. This is the result of an education that is monocultural and degree-oriented, keeping students ignorant of the complexity of social issues. Our science education needs to be transformed from an objective content-driven pedagogy to a contextual, human-oriented one. The pursuit of science is essentially a human activity with its own technological, sociological, cultural, mental, and psychological dimensions. We need to build alternative environments and learning ecologies that harness the capabilities of science and technology to accelerate the emergence of dynamic leadership to solve social challenges and benefit from untapped opportunities.

We are unable to solve many of our existential challenges because of old legacies, vested interests, and unreal assumptions. Human life cannot be wholly understood in terms of generalizations, facts and statistics alone, we need to consider the role of conscious individuality in human affairs. Human accomplishment is the product of subconscious sensations, emotions, feelings, conscious perceptions and forces that are influenced by past events, present perceptions, and future possibilities. The reunification of these three dimensions of time into a triple-time-vision will mark an important contribution to the emergence of the Anthro-Scientific Method for the new civilization, based on collective intelligence, collaborative innovation, and multilateral cooperation.

Civilizations of the past emphasized the figure of the solitary genius in his ivory tower that excluded the human being in the scientific paradigm, thereby producing unbalanced ecosystems under unreal assumptions. The new civilization that will emerge will grow on collective intelligence and collaborative innovation, and include the co-creative agency of the human being in scientific understanding. It will offer a sustainable, circular, and green economy with ethical markets for the common wellbeing of future generations.

The Internet is one of the biggest resources that people rely on for collaborative study and work. However 47% of the world’s population remains unconnected to the Internet. National digital connectedness must be viewed by any government as a basic commodity for all citizens, to offer inclusiveness, equity and transparency. Sustainable digital networking is the basic infrastructure for letting collective intelligence, collaborative innovation, and multilateral cooperation emerge at a social level for common wellbeing.
IEEE Digital Library

IEEE Xplore, the digital library maintained by the Institute of Electrical and Electronics Engineers (IEEE) and its partners, is a powerful resource of scientific and technical content. It contains more than five-million text documents on the subjects of electrical engineering, computer science, and electronics, with some 20,000 new documents added each month. IEEE Xplore's content comprises:

- 195+ journals
- 1,900+ annual conferences
- 9,000+ technical standards
- Approximately 2,400 books
- 485+ educational courses

Global Scientific Collaboration

The European Organization for Nuclear Research, Switzerland (CERN) and the Joint Institute for Nuclear Research, Russia (JINR) are successful scientific and technological organizations that foster international collaboration in science research. Consisting of 23 and 18 member states respectively, CERN and JINR have demonstrated excellence in science and technology at the global level for over 60 years. They have been building cultural bridges between countries and enabling diplomacy through science. Such global cooperation founded on the basis of science and technology demonstrates the possibility of jointly pursuing national and global interests, irrespective of cultural and ideological differences.

Euroscience Open Forum (ESOF) 2020

The International Conference on “Big Bang Data: Leadership for Digital Transformation” was organized by Rotary Trieste Club as the inaugural event for ESOF 2020 (Euroscience Open Forum) Science Week (Sept. 2-6, 2020) in Trieste.

Luigi Cocchiarella of Politecnico di Milano and WAAS Fellow showed how AI can help architectural creations in his presentation on Big Data Technology & Deep Learning; Science and Art. Rodolfo A. Fiorini began with a few historical notes on the Russell-Einstein Manifesto that led to the founding of the Pugwash Conferences in 1957 and WAAS in 1960. He then emphasized the need for sustainable management of uncertainty in all advancements in technology. In his presentation on Big Data analytics vs. Deep Unity Wisdom: Leadership for Digital Transformation, he stated that technology is not just evolving our machines, it is creating a bridge between our machines and us. Biointerfaces are enabling seamless communication between our body, our mind, and machines. In order for these human-made systems to achieve an antifragile behaviour, they must have not only big data analytics proficiency but also the ability to effectively address the problem of global multiscale ontological uncertainty management in an instinctively sustainable way: deep unity and wisdom by design!

The meeting paid tribute to Orio Giarini who had strongly promoted the event in the past.

When you bring in values into education you bring empowerment, transformation, integrity, holistic approach, competence and sustainability.

Obiora Francis Ike

Journalism is telling the truth, testing the arguments and sorting out fact from fiction

Mike Rann
There is a critical need to restore trust, credibility and reliability to the media as an essential underpinning for democracy and effective decision-making. Journalism, especially in the West, used to be synchronous with freedom, free access to information and choice of stories. But there is a significant decline in the trust in media of late and we need to develop strategies to restore that trust.

Civilians, due to their distrust of media, shirk all responsibility towards being media literate. Discrimination in identifying with the right media sources, avoiding fake news and being informed about what happens in the world around us are as important as not being fed partisan information.

There have been several remarkable advancements in recent times in the dissemination of information and the use of media. Web-based podcasts are rediscovering the value of radio broadcasting that is uncensored and value-based. Journals and newspapers today support social causes and raise awareness among people. Self-publishing both on the internet and outside is breaking the monopoly of large publishing houses to determine what we read. Youth are active on social media platforms to advocate various social causes. At the same time, some media platforms make victims of crime the victims of media intrusion and polarization as well. This and other issues are essentially due to a lack of professional ethics in this sector. Hence, a self-regulatory ethical framework is needed more than ever before. Ultimately, a new benchmark of ethics needs to be established in the media sector the world over to restore trust.

New forms of media have played vital roles in movements such as the Arab Spring, Occupy Wall Street, Me Too and Fridays for the Future. New and traditional media can serve as complementary forces that reinforce each other for local and global communication services. History shows that real protection from a pandemic or any threat comes from sharing scientific information globally. Access to reliable, unbiased information is critical today, as humanity faces an existential threat.

Transformational Strategies

- Communication must be made simpler
- Capital needs to drive demand for ethical media and values-based education
- Invest in ed-tech, bring together media and technology, teach civil society how to identify bias and discern fact from fiction and opinion
- Shift power to civil society to shape demand
- Improve diversity at the journalistic, editorial and board level to have fairer representation and broader range of perspectives
- Develop strategies to prevent harm and improve social equity
- Critical thinking skills for communities and in education for children must be improved
- Experts need to be challenged on their own biases
- Move towards international legal frameworks for global topics; introduce regulatory framework for media that protects both the rights and interests of journalistic integrity and the rights and interest of the public to live in a society free from harm.

Exponential growth is basically at the foundation of exponentially growing technology. And this is happening whether we like the conversation or not. The intention should not be the mere achievement of SDGs but achieving them within planetary boundaries.

– Mariana Bozesan
Co-founder and President, AQAL Capital, Germany; WAAS Fellow
The Value of Disseminating Information & Raising Awareness of Best Practices

Accurate information obtained from experts, clear communication and consistent cooperation can strengthen us in handling the pandemic. COVID-19 has shown us how closely interconnected we all are. The effective way in which democratic leaders and inclusive governments have handled it has shown that greater empowerment at the grassroots level is a catalytic strategy to bring about global transformation.

Grassroots Level Activism

The state of Hawaii illustrates this idea in several ways. The UN SDGs have been embraced locally as part of a multi-stakeholder coalition. Politicians, business leaders and members of civil society have come together to create Aloha+ UN SDGs. When the US President announced withdrawing from the Paris Climate Agreement, Hawaii was the first US state to recommit to the agreement. Since then 23 other US states have followed. So lack of strength or commitment at the national level can be compensated by effort at the local level. Hawaii was also the first state in the US to commit to 100% renewable energy by 2045, a third of the national population is now similarly committed at the level of the city or state.

WE Empower

Women Entrepreneurs Empower UN SDG Challenge is a global business competition for women entrepreneurs and social entrepreneurs who are advancing the UN SDGs and inspiring communities.

The WE Empower initiative honours innovative women entrepreneurs, supports sustainable business practices by providing access to seed capital and training, enables networking and capacity building, provides visibility and credibility for the work, and increases awareness among a global community of stakeholders of the valuable contribution women entrepreneurs can make in meeting the SDGs.

Some of the projects recognized by WE Empower are Peru’s Wasi Organics aims to connect 5 million indigenous farmers to global supply chains that are ethical, fair trade and regenerative; Water Access Rwanda provides people access to water, and has trained and employed disadvantaged youth in the process; ECOncrete in Israel produces ecology-friendly concrete that is a carbon sink.

Arizona State University Global Futures Laboratory

ASU has been a global leader in sustainability efforts, asking the question “Rather than solving problems after they arise, what if we could anticipate them in advance and avoid them altogether?”

It founded the Julie Ann Wrigley Global Futures Laboratory in order to harness the intellectual capacity we possess to ensure a habitable future on our planet.

The lab has designed several implementable options to sustain global habitability and improve wellbeing for all. One such is the mechanical tree that can draw down CO₂ from the atmosphere.

It has also designed in partnership with the Peace Corps an online solar powered library to help people with no access to the internet to be connected with curated material, and pursue their education.

There are several such incredible people and initiatives that can provide scalable, sustainable solutions to many of our challenges.

Collaborating with these groups and scaling up their initiatives, we can build up the transformative global leadership we need.
Annexure A: Phase 1 Research Proceedings

Art, Civilization and Culture

Art for the World: If a prospect is not a prophecy, it is a view

Panel moderated by Adelina von Fürstenberg, President of ART for The World, NGO associated with the UNDPI with the participation of Denys Zacharopoulos, Art Historian and International Curator, the artists Sheba Chhachhi living and working in New Delhi and Matt Mullican living and working in New York and Berlin.

ART for The World creates cultural projects for large audiences, with contemporary artists and filmmakers from all the horizons. It’s latest film production *Interdependence* by eleven international filmmakers raises awareness on Environment and Climate Change by underlining the concept of interdependence between Humans and Nature. The sphere of art is not only limited to beauty but embraces everything which is shared in life—such is the content of art and science, as mentioned in the Art. 27 of the Universal Declaration of Human Rights.

Denys Zacharopoulos developed the panel’s title inspired by Oppenheimer’s text “Prospects in the Arts and Sciences”, where the scientist raised the question of singular views of the world which offer awareness of people’s lives, intuition and imagination. For Zacharopoulos the prospect to move from an Ego-logical world to an Ecological one is what an artist can offer as a means to accept positively what we don’t know and transform criminal ignorance into positive awareness. Art can offer a little space that remains always outside the map, the list, bureaucracy and institutionalization, giving the power to surprise a person and allow for him or her to be surprised.

Matt Mullican presented his universe where he embraces all the elements of our daily life, city, nature, arts, sports, politics, life, death, etc. In today’s world we are living in a pictured universe of the internet and the Iphone, our Temporal Experience of the world is not physically in front of us any more. It is on a screen. The difference between the Pictured Reality and Objective Reality is becoming less and less important. What is more important is how we feel toward what see. We want to feel good when we look at a picture. Even if it’s not there!

Sheba Chhachi showed excerpts from her large scale immersive installations on issues of ecology, which take on new significance in the pandemic today. The pandemic has made transparent the critical structuring principle of our planet: interdependence.

Socially Transformative Impact of the Arts

For sustainability to be meaningful, it needs to be practiced as an art and it needs to engage arts as an integral transformative strategy for systems change. Arts are the deepest, most perceptive means to read what is embodied and embedded in the larger social order. Therefore, it is of profound importance that we engage arts to cultivate new values.

Arts and culture can issue a call to action for a momentous collective breakthrough—rising to higher values for a global movement for fairness, peace, sustainable fulfillment of human needs and the creative expression of human spirit.
The ideal of the emerging new civilization initiative is a shift towards sustainable and equitable human wellbeing within and at peace with the biosphere. Such a shift requires deep changes in the way we understand the world and deal with ourselves, others, and nature. The choices we make must be fundamentally different from the ones we have taken so far. Cultural transformation is the cornerstone of the ideal. It requires adopting new epistemologies and world views, and a transformation of the elements of our culture.

The challenges we will face in the process are complex and intertwined. To explore the pathways of the emerging new civilization, we need to unlearn some of what we have learnt. For instance, we define economic value in a way that destroys the values we cherish the most. We need to question the existing model of knowledge creation. We need to rid ourselves of what clutters our imagination and burdens our thinking. This is possible only when we identify our blindspots.

Everyone must change in order to be part of the emerging new civilization. We need to engage in inter-generational conversations. These engagements must happen in our preschools, classrooms, religious and spiritual conversations, and in our work and play. These interpersonal, intercultural and inter-generational engagements will create the pathways that lead to the emerging new civilization, as we all come together, be it at the level of little villages or at the level of the global village.

ENCI, the Emerging New Civilization(s) Initiative of the Club of Rome in partnership with WAAS, aims to catalyze new and deeper processes of learning by reconnecting with the hopeful message of the CoR report “No Limits to Learning” (1979). This requires knowledge creation to overcome the fragmented nature of disciplinary agendas and the lack of connection with communities facing real collapse in concrete territorial and cultural contexts.

Knowledge frameworks need to go beyond mechanistic perspectives towards richer approaches based on life principles, and recognize emergence from emergency as the sign of life. The short-term aim is to host a large number of new dialogues and processes in a global, inter-generational and inter-cultural platform of safe spaces for mutual and deeper learning on the concrete pathways to human wellbeing within a healthy biosphere. The platform is expected to grow exponentially and reach 10,000 communities around the world in 2 to 3 years.
Civil Society and Youth

New Strategies for Transformative Impact

Civil Society and Youth organizations (CSOs) need to collaborate more closely and catalyse broad and inclusive social movements for transformation from the bottom up, by engaging more strongly at a local level and mobilising the general public.

Transformative digital technologies can revolutionise decision making in CSOs and are greatly expanding the reach of CSOs, while also creating new risks such as surveillance.

The relationship with academia could be closer and more productive, with education used as a tool for raising public awareness of pressing issues. Such long-term strategies are needed, despite all urgency, lest CSOs become trapped in the problems and struggles of today.

CSOs must include youth in decision making and give them opportunities, lest they become the next ‘lost generation’, like the youth of the 1920s. Youth themselves must stand up and demand their rights and prepare for taking the lead. CSO leadership training is lacking but programs by youth for youth could be very effective. Overall, CSOs need to reinvigorate political debate at a time when politics has been undermined by powerful interests, and is failing to regulate for justice and sustainability. CSOs should also reach out directly to other stakeholders such as corporates and the media.

On 11 May 2020, the World Academy held a historic first Global Youth Leaders Workshop with participants from all over the world. Africa, Asia, Europe and the Americas were all well represented with over one hundred registrations and peak simultaneous participation of 67 persons. The aim of the one-day workshop was to build a network of youth leaders to collaborate with the Academy in its major project of 2020, the congress at the UN office at Geneva on ‘Global Leadership for the 21st Century’. The initiative seeks to fill the current global leadership vacuum that is preventing humanity from addressing today’s escalating socio-ecological crisis and securing a future for the next generation. Young people are most affected by the prospect of an ecological collapse and the reduction of social mobility in ever more unequal societies. Leadership is needed at all levels in all fields, but young leaders are the ones to whom the future belongs. Their courage, idealism, visionary ideas and awareness of untapped opportunities will produce different outcomes and have the best chance to fulfil the rising aspirations of global society as a whole.

The Workshop on Global Leadership examined what transformative changes will be required for a just and sustainable future for all. A lively exchange took place in the context of a program focused primarily on interaction and discussion. Participants expressed their desire to work more closely with the scientific community, and their hope that we can help them gain access to high level fora, such as the UN and other WAAS partners. The general feeling shared was that the time was right for this initiative, and that we have much to gain from collaboration. To ensure this collaboration will commence immediately, a strategic planning session was held to allow youth leaders to discuss their contribution to the program of the WAAS e-conference in June and the Geneva congress later in 2020. The workshop was the beginning of what we trust will be a longer-term strategic partnership between youth movements and WAAS as a peak science organization. Youth movements have stood behind the science on climate change, for example, and it is important that youth and scientists with shared aspirations come to collaborate more directly and coordinate their efforts to achieve common goals.
We need to open up a space for youth to discuss the changes needed to create a better future. The biggest barrier to solving many problems today is that organizations and governments hear, but do not genuinely comprehend. In order to address this, youth must be empowered and included in decision making processes. To make the inclusion truly effective, youth must be raised to systemic, not just advisory positions of power.

Digital platforms that connect youth with organizations can be created and empowered. This will help build an empathetic, collaborative, inclusive and transformational model of leadership. People in positions of power at the national and regional levels can i) develop democratic and participatory youth policies that are relevant to the state’s current situation and ii) identify and empower smaller youth movements with less access to resources, so that they can be empowered and made more effective.

The pandemic has pivoted the anthropocentric dialogue and reinstated focus on climate action, coexistence with nature, social and economic equity and human rights. It has revealed mankind’s fragility and vulnerability, necessitating that society develop not just resilience, but move beyond to a state of “anti-fragility”. There is a need for a strong leadership headed by youth.

Education and self-motivation can create resilient leaders who will serve as role models for the rest of society. Social connections, cross-learning through sharing of projects, and listening to each other are absolutely imperative. A smarter, greener and sustainable future can only be built with strong local networks and collaborations which are constantly complementing and listening to each other. Initiatives at the local level by grassroots organizations cause a ripple effect influencing human actions and behaviors. In order to strengthen these actions, strong governance, communication networks, and stakeholder participation are needed. Conversations need to be facilitated between adults, youth, scientists, and global leaders. It is important to be truly inclusive in one’s approach towards leadership. Incorporating environmental education in school curricula and utilization of social media platforms for activism to share ideas and solutions are some key measures that can be taken to create awareness amongst youth.

**Youth Leadership Development for SDGs & Climate Action with respect to COVID-19**
Empathy and respect for our fellow humans and for all life forms on the planet is the process and the product of a resilient and sustainable life affirming way of living. To promote peace, we first need to make peace with ourselves and resolve internal conflicts. We will then be better equipped to foster peaceful relationships with other people and all forms of life on the planet. In order to promote a sustainable, peaceful way of life we need:

- to foster a new psychological literacy for billions of people, a sort of psychological compass, a new way of being to navigate the rippling currents of change
- to promote a new socially compelling, forward-looking vision of evolution that brings together the worlds of science and spirit, evolutionary theory and developmental psychology
- an updated recipe for resilience on how to think, feel and act outside the present obsolete mechanistic box
- to become aware of the fact that we live in a complex web of relationships and that to be blind to the world of relationships has dire consequences
- to facilitate the capacity for safe and productive emotional bonding with other fellow human beings and all life forms.

The People Centered Approach (PCA) is a scientifically validated, systemic/holistic, interdisciplinary and intersectoral approach designed to promote sustainable change, to foster the protection and promotion of human capital and at the same time assure the maximum level of effectiveness in protecting and promoting human ecologies and natural ecosystems.

PCA is a values-oriented approach based on Equal Rights, deep respect for all life forms, cultures and traditions. It promotes empathic understanding, mutual respect and effective communication and collaboration among different stakeholders with actions of empowerment & resilience.

The application of PCA has been producing effective results in many fields in different parts of the world, promoting sustainable relationships in all sectors of life. One such initiative is that of the Interparliamentary Coalition for Ethics and Peace that has been working to promote a culture of peace in five continents.

The World Humanitarian Forum (WHF) is a medium where world leaders, thought influencers, and global executives connect directly with people, to deliver their message without intermediaries and enable the audience to see the world through their point of view. On Sept 22-23, 2020, WHF launched a digital event on International Development to encourage cross-sector dialogue and partnerships to shape the future for a better tomorrow. The Academy was represented by Alberto Zucconi who addressed the question: How can stakeholders make up lost ground in the pursuit of SDGs owing to unforeseen circumstances like COVID-19, and what lessons can they learn from the MDGs in pursuit of the SDGs?
LIST OF SPEAKERS

1. Tedros Adhanom Ghebreyesus, Director-General, World Health Organization
2. Grethel Aguilar, IUCN Acting Director General
3. Esther Ajayi, Founder & President, Esther Ajayi Foundation
4. Olga Algayrova, Exec. Secretary, UN Economic Commission for Europe
5. Carlos Álvarez Pereira, ExCom member, Club of Rome; WAAS Fellow
6. Abdulaziz Altawaijri, former Director General of UNESCO
7. Vanessa Anaí Hermández Vázquez, Youth Mentor, Protect Our Planet (POP) Movement
8. Gabriela Arenas, Executive Director, Taap Foundation & Director, Art & Wellbeing
10. Jessica Artiles, Founder and Chief Design Officer, DARTE Design
11. Nadia Balgobin, Senior Associate, Globethics.net
12. Luc Bas, Director, IUCN European Regional Office
13. Shoshana Bekerman, Director, IPCGE
14. Summer Benjamin, Co-founder, Eco Eaters; POP Movement
16. Olivia Bina, Principal Researcher, University of Lisbon; WAAS Fellow
17. Lotta Björklund Larsen, Independent Researcher; Post-Doctoral Research Fellow, Univ. Of Exeter Business School
18. Jonathan Blackwood, MD and global entrepreneur
19. Nadine Bloch, Training Director, Beautiful Trouble
20. Zbigniew Bochniarz, Professor, Kozminski University, Poland; WAAS Trustee
21. Jennifer Bonine, Co-founder & CEO, PinkLion.AI; Leader, GlobalMindED
22. Laszlo Borbely, Babeș-Bolyai University, Cluj-Napoca; State Counselor, Department of Sustainable Development, Romania
23. Lidiya Grigoreva, Head of the NGO Liaison Unit, UNOG
24. Mariana Bozesan, Co-founder and President, AQAL Capital, Germany; WAAS Fellow
25. Oana Brânda, Titu Maiorescu University, Romania; Expert at ISACCL
26. Olivier Brechard, Director Learning Planet & CRI Leadership Team, France
27. Kevin Brown, Founder & CTO, Great Ball of Light, USA
28. Stefan Brunnhuber, Medical Director, Diakonie Hospital, Germany; WAAS Trustee
29. Tatjana Buzeti, Senior Policy Officer, WHO European Office for Investment for Health and Development
30. Carol Carter, President & CEO, GlobalMindED
31. Hilkem Cetin, Minister of Foreign Affairs of Turkey 1991-1994; Deputy Prime Minister of Turkey 1995; WAAS Fellow
32. Sheba Chhachhi, Artist, India
33. David Chikvaidze, Chef de Cabinet of the Director-General of UNOG, Geneva
34. Jon-Hans Coetzter, Coordinator, Online Learning & Education Pillar, UNITAR
35. Emil Constantinescu, President of Romania (1996-2000); President of the Institute for Advanced Studies in Levant Culture and Civilization; WAAS Trustee
36. John Crowley, Chief of Section for Research, Policy and Foresight, UNESCO
37. Gabriela Cuevas Barron, President of International Parliamentary Union (IPU)
38. Jodi Cullity, Libreum Research Institute (NY)
39. Robert D. Cavey, Partner, Praxis Inc., Washington DC, USA
40. Antonio de Araujo Freitas, Provost, FGV for Research and Graduate Studies
41. Frank Dixon, Founder, Global System Change; WAAS Associate Fellow
42. Sandrine Dixson-Declève, Co-President, Club of Rome
43. Dragan Djuricin, Professor of Economics, University of Belgrade; WAAS Fellow
44. JP Dorgan, Growth Director, Tink and Grow Ltd.
45. Dina Dragija, UCL, London; Youth Leadership Network
46. Yannick du Pont, CEO, SPARK, Netherlands
47. Neven Duić, President, SWEDES, Croatia; WAAS Fellow
48. Ian Dunlop, Independent advisor on climate change & energy governance; Member, Club of Rome
49. Amanda Ellis, Ambassador; Director, Global Partnerships ASU, Global Futures Laboratory; Professor of Practice, Thunderbird School of Global Management.
50. Maria Espinosa, Member, World Future Council; President, 73rd UN General Assembly, Ecuador
51. Azadeh Farajpour, Scientific Associate, FAW/n (Research Institute for Applied Knowledge Processing), Germany
52. Robin Fears, Biosciences Programme Director, EASAC
53. Alexey Fedoseev, CEO, Kruzhok movement, Russia
54. Catherine Fiankan-Bokonga, Vice-President, Geneva Press Club
55. Rodolfo Fiorini, Emeritus Prof., Politecnico di Milano Univ.; WAAS Trustee
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56. **Lawrence Ford**, Founder and CEO, Conscious Capital Wealth Management, USA; WAAS Fellow
57. **Bruce Friedrich**, Co-Founder, The Good Food Institute
58. **Téa Garcia-Huidobro**, IUCN Special Advisor to the Acting Director General
59. **Faris Gavrankapetanović**, Professor, University of Sarajevo, Bosnia & Herzegovina; WAAS Fellow
60. **Mihai Gîrțu**, Vice-rector, Ovidius University of Constanța, Romania
61. **Daniele Giovannucci**, President and Co-Founder of The Committee on Sustainability Assessment (COSA)
62. **Camila González Colistrp**, Youth Leader, Fridays For Future Movement
63. **Nathalie Goulet**, Member of French Senate
64. **Jonathan Granoff**, President, Global Security Institute; WAAS Fellow
65. **Lily Gray**, UNESCO Liaison officer
66. **Oliver Greenfield**, Convenor, Green Economy Coalition
67. **Dan Grigorescu**, Scientific Director, ISACCL, Romania
68. **Neha Grover**, South Asia Regional Head, Private Equity, IFC
69. **Ameenah Gurib-Fakim**, former President of Mauritius
70. **Antonio Gutierrez Limones**, Chairman, Spanish Senate Committee of Foreign Affairs
71. **Ana Hanhausen-Doménech**, Plastic Oceans, Mexico
72. **Valerie Hannon**, Co-founder, Global Education Leaders Partnership
73. **Christian Hansmeyer**, Lead Research and Risk, Greater Pacific Capital
74. **David Harries**, Principal Investigator, S&S Guide; WAAS Fellow
75. **Elena Helerea**, Transylvania University, Brașov
76. **Hazel Henderson**, Founder of Ethical Markets Media, USA; WAAS Fellow
77. **Sue Henderson**, President, New Jersey City University, USA
78. **Sheryl Hendriks**, Head of Department & Professor, University of Pretoria
79. **Bernard Hoekman**, Robert Schuman Centre for Advanced Studies; Dean, External Relations, European University Institute
80. **Robert Hoffman**, President, whatIf? Technologies Inc; WAAS Fellow
81. **Rebecca Hueting**, Activist, Extinction Rebellion; Dissemination Specialist, Deep Blue
82. **Obiora Ike**, Executive Director, Globethics.net, WAAS Fellow
83. **Mladen Ivanić**, Chairman of the Presidency of Bosnia and Herzegovina (2016-17; 2014-15)
84. **Garry Jacobs**, President & CEO, WAAS
85. **Amanda Janoo**, Knowledge & Policy Lead, Wellbeing Economy Alliance
86. **Marion Jansen**, Chief Economist & Director, Div. of Market Development, ITC
87. **Peter Joseph**, American Musician; Filmmaker; Author & Social Activist
88. **Christine Kaddous**, Director, MEIG, University of Geneva
89. **Yehuda Kahane**, Chairman & Co-founder, YKCenter; WAAS Trustee
90. **Prakash Kannan**, Chief Economist, GIC
91. **Zhíbek Karamanova**, Young lawyers and businessmen association, Kazakhstan
92. **Mats Karlsson**, Director of Swedish Institute for International Relations and former Vice President of World Bank for External Affairs and United Nations Affairs
93. **Şiir Kılkuş**, Advisor to the President of TÜBİTAK
94. **Donato Kiniger-Passigli**, Vice President, WAAS; Adviser to UNITAR
95. **Witold Kinsner**, Vice President, Educational Activities, Life Member, IEEE
96. **Khalid Koser**, Executive Director, Global Community Engagement & Resilience Fund
97. **Pheobe Koundouri**, Professor of Economics, Athens Univ. of Economics & Business; Pres., European Association of Environmental and Resource Economists
98. **Radha Kulkarni**, Resource Mobilization Manager, Generation Unlimited, USA
99. **Asim Kurjak**, Prof., Sarajevo School of Science and Technology; WAAS Fellow
100. **Flore Layafe de Micheaux**, IPBES Senior Programme Officer
101. **Zlatko Lagumdžija**, Prime Minister of Bosnia and Herzegovina (2001-2002); Deputy Prime Minister, Minister of Foreign Affairs(2012-2015); WAAS Fellow
102. **Grazyna Łebkowska**, Professor, Warsaw School of Economics, Poland; WAAS Associate Fellow
103. **Margaret Ledwith**, Emeritus Professor, University of Cumbria
104. **Maria Lettini**, FAIRR, UK Investment Group
105. **Lennart Levi**, Emeritus Professor, Karolinska Inst., Sweden; WAAS Fellow
106. **Adam Levinson**, Co-Founder of Gama
107. **Hong-Mei Li**, International Association for Human Values, Art of Living Foundation; UNMGCY; University of Pennsylvania
108. **Alexander Likhotal**, Prof., Geneva School of Diplomacy & Int. Rel.; WAAS Fellow
110. **Audrey Lobo-Pulo**, Founding Director, Phoensight; Founding Board Member, Open Data Australia
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<td>Founder &amp; Director, Global Education Futures initiative</td>
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<td>Senior Project Manager, The Mother's Service Society, India</td>
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<td>Luvuyo Maseda</td>
<td>Social Entrepreneur; Executive Director, ReimageSA, South Africa</td>
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<td>Philo Magdalene</td>
<td>Youth Mentor, POP Movement</td>
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<td>121</td>
<td>Cathy Malchiodi</td>
<td>Director, Trauma Informed Practices &amp; Expressive Arts Therapy Institute, USA</td>
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<td>Karin Markides</td>
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<td>Toi Massey</td>
<td>Founder &amp; Executive Director, JEKL Foundation, Inc, USA</td>
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<td>Federico Mayor</td>
<td>Director General UNESCO (1987-1999); WAAS Fellow</td>
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<td>John McClintock</td>
<td>Co-Founder of ACTION for a World Community for Food Reserves</td>
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<td>Peter McGrath</td>
<td>Coordinator, Inter Academy Partnership</td>
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<td>Director, Transcendent Media Capital; WAAS Associate Fellow</td>
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<td>Komal Mittal</td>
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<td>Dele Momodu</td>
<td>Publisher, Ovation International Magazine</td>
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<td>Atiya Mosam</td>
<td>IAP Young Physician Leader</td>
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<td>Zineb Mouhji</td>
<td>co-founder, Weaving Lab, and Policy Partnerships Development Officer at World</td>
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<td>136</td>
<td>Amre Moussa</td>
<td>Secretary General, Arab League (2001-2011), Minister of Foreign Affairs, Egypt</td>
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<td>Matt Mullican</td>
<td>Artist, Berlin, Germany</td>
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<td>David Nabarro</td>
<td>Former Candidate for DG of WHO, Special Representative of the United Nations</td>
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<td>Theoretical Physicist; Secretary General, WAAS</td>
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<td>141</td>
<td>Bujar Nishani</td>
<td>President of Albania (2012-2017)</td>
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<td>Sarai Nuñez-Ceron</td>
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<td>Jacqueline Olang Kado</td>
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<td>Sergey Ordzhonikidze</td>
<td>Director-General, UNOG (2002-2011)</td>
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<td>Ash Pachauri</td>
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<td>CEO and the founder of Greater Pacific Capital</td>
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<td>President, Climate Change Council, Mexico</td>
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<td>Pascal Petit</td>
<td>Director of Research Emeritus, CEPN Centre d’économie de Paris Nord, WAAS Fellow</td>
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<td>Lisa Petrides</td>
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<td>Chair, WAAS Nominations &amp; Evaluations Committee; WAAS Fellow</td>
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<td>Gareth Presch</td>
<td>Founder &amp; CEO, World Health Innovation Summit</td>
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<td>Remus Pricopie</td>
<td>Rector, SNSPA; Chair, ISACCL Advisory Committee; WAAS Fellow</td>
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<td>Janani Ramanathan</td>
<td>Sr. Research Analyst, Mother’s Service Society, India; WAAS Fellow</td>
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<td>Mamphela Ramphele</td>
<td>Co-President, Club of Rome; WAAS Fellow</td>
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<td>Mike Rann</td>
<td>Premier, South Australia (2002-2011)</td>
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<td>159</td>
<td>Thomas Reuter</td>
<td>Professor, University of Melbourne, Australia; WAAS Trustee</td>
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<td>Cyril Ritchie</td>
<td>First Vice-President, CoNGO</td>
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<td>Douglas Roche</td>
<td>Former Canadian Senator, Founder and Chairman Emeritus of the Middle Powers</td>
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<td>Norman Roesch</td>
<td>Former MD, Goldman Sachs and Ambassador, Credit Suisse</td>
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<td>Petre Roman</td>
<td>Prime Minister of Romania (1989-1991)</td>
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<td>Tal Ronen</td>
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<td>Tiahoga Ruge</td>
<td>Film Maker; WAAS Fellow</td>
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<td>Jeffrey Sachs</td>
<td>Director, Center for Sustainable Development, Columbia Univ.</td>
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<td>Mustapha Sadni-Jallab</td>
<td>Head of Training and Research Division, UNECA</td>
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<td>Bogdan Salii</td>
<td>Youth Leadership Network</td>
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<td>169</td>
<td>Caroline Sandberg</td>
<td>USA</td>
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170. Lauren Sandberg, USA
171. Jason Scorse, Associate Professor; Program Chair, International Environmental Policy; Director, Center for the Blue Economy
172. Sandeep Sengupta, Global Coordinator, IUCN Climate Change Portfolio
173. Ismail Serageldin, Vice-President, World Bank (1992-2000); Co-Chair, NGIC; WAAS Fellow
174. Julene Siddique, Socio-Systemic Impact Specialist, Laszlo Institute; Composer & CEO, Nada Brahma Ltd
175. Faye Simanjuntak, Ruma Faye, Indonesia
176. Robert Singer, Chair & Board of Trustees of World ORT
177. Ivo Šlaus, Honorary President, WAAS
178. Michael Smith, Chair Furaxa, Inc., Sr. Advisor, IEEE Brain Initiative; WAAS Associate Fellow
179. Carol Spalding, President, Rowan-Cabarrus Community College, USA
180. Jessica Spencer-Keyse, Facilitator, Weaving Lab
181. Luíza Spiru, President, Ana Aslan International Foundation
182. S.S. Sreejith, Founder & CEO, GIIMS, India; Director, WUC; WAAS Associate Fellow
183. Dorota Stanczyk, Transformational Artist; Founder, S.T.A.R.T. Transformational Art org., Colombia
184. Teresa Stoeppler, Executive Director, IAP Policy; Member, Global Young Academy
185. Samantha Suppiah, Sustainability strategist, Urban Doughnut, Philippines
186. Monica Răileanu-Szeles, Director, Research & Development Institute, Transilvania University of Brașov
187. Vishal Talreja, Co-founder, Dream a Dream
188. Anjalee Tarapore, General Manager, HDFC
189. Pavlina Tcherneva, Associate Professor and Director of the Economics Program at Bard College
190. Dorothy Tembo, Acting Executive Director, International Trade Center
191. Volker ter Meulen, President, Inter Academy Partnership
192. Mariana Todorova, Assistant Professor, Bulgarian Academy of Sciences; WAAS Fellow
193. Tibor Tóth, Ambassador, Exec. Secretary Emeritus, CTBTO; WAAS Trustee
194. Lilijana Trajkovic, Professor, Simon Fraser University; PP IEEE SMC, IEEE Fellow
195. Tatiana Valovaya, Director General, UNOG
196. Henk van Arkel, CEO, Social Trade Organization (STRO)
197. Marcel van de Voorde, Professor, University of Technology Delft; WAAS Trustee
198. Sesh Velamoor, Director of Programs, Foundation for the Future; WAAS Fellow
199. Vaira Vike-Freiberga, President of Latvia (1999-2007), Co-Chair, NGIC; WAAS Fellow
200. Marco Vitiello, Youth Leadership Network, WAAS Junior Fellow
201. Adelina von Fürstenberg, President & Founder, ART for The World
202. Ernst von Weizsäcker, Honorary President of Club of Rome; WAAS Fellow
203. Dusan Vujović, World Bank Expert; Minister of Finance, Serbia (2014-18); Professor of Economics, FEFA, Belgrade
204. Isabelle Wachsmuth, Project manager, WHO; WAAS Associate Fellow
205. Veta Wade, Ocean Advocate & Founder of Fish ‘N Fins Inc.
206. Alyn Ware, World Future Council Member, WAAS Fellow, Coordinator of Parliamentarians for Nuclear Non-proliferation and Disarmament (PNND)
207. Lilac Wasserman, Co-founder, Mifras & Global Collaborations
208. Ding Wei, CEO, CICC Capital
209. Benno Werlen, UNESCO Chair, Global Understanding for Sustainability, WAAS Fellow
210. Jerry White, Professor, University of Virginia
211. Randall Wray, Professor of Economics, Bard College
212. Lourdes Xitumul Piox, Former Secretary of Peace, Guatemala
213. Osamu Yamamoto, Partner, Unison Capital
214. Stephen Yong-Seung Park, Prof., Kyung Hee University; WAAS Associate Fellow
215. Muhammad Yunus, Nobel Peace Prize Laureate (2006); Founder, Grameen Bank
216. Kateryna Yushchenko, First Lady of Ukraine 2005-2010; Head of the Supervisory Board, The Ukraine 3000 International Charitable Foundation
217. Denys Zcharapoulous, Art Historian and Art Critic, Greece
218. Alberto Zucconi, President, IACP, Italy; Chair of the Board of Trustees, WAAS; Secretary General, WUC
219. Ibon Zugasti, Mondragon Cooperative, European Foresight Network

WAAS NEWSLETTER

WAAS publishes periodic Newsletters reporting on WAAS activities. To get free access to the WAAS newsletter and several articles and papers, please visit the WAAS Publications page.
The COVID-19 pandemic has already changed our world. And it is still underway, expected to continue over several years—or longer. Despite some 165 vaccines currently in accelerated development or in early trials, a quick tech fix is unlikely, especially for all nations.

Some countries have been cautiously re-opening after lockdown, but still finding outbreaks. Other countries are facing a sharp upswing in infections, e.g. Brazil, Mexico, Russia, Pakistan, and especially India. In the US, new infections were at a plateau of 40,000 new cases and about 1000 deaths per day in mid-September, nearly twice the number of deaths per week as the total deaths from the 9/11 terrorist attack in 2001. And Europe is now “bracing for a second wave of coronavirus...and re-imposed restrictions” (Guardian Weekly, 31 July, p18; also see The Economist, 1 August, p41).

Public health experts have already issued several dozen brief reports on how local, state, and national governments can best deal with the crisis. Economists, political scientists, and journalists are thinking about the profound impacts on security and sustainability of communities, schools and colleges, hospitals, industries (food, airlines, travel), small business (notably restaurants), state and local governments, and international relations. Many individuals are distressed not only by hospitalization and loss of loved ones, but by unemployment, uncertainty, hunger, and quarantined confinement. For example, a third of Americans had signs of clinical anxiety or depression at the end of April. US scientists now have “a pervasive sense of sadness and exhaustion” (New York Times, 30 July, p1). The Times announced that in the US “Virus Wipes Out 5 Years of Economic Growth” (31 July, p1), and that Latin America has been “plunged... into the deepest recession in its history” (30 July, p11).

**SSG Report on COVID Reports.** The Security & Sustainability Guide is compiling a listing of online COVID-relevant reports, as well as other new evidence-based reports by scientists and other experts on all aspects of security and sustainability. See [https://securesustain.org/covid-19-reports/](https://securesustain.org/covid-19-reports/) for the Sept 11 version that briefly annotates 60 reports, while providing links to the original documents and longer “Read More” annotation for many. Nearly all of these reports were published in the April-August 2020 period. More have yet to be identified, and more will be issued, notably by the newly formed Lancet COVID-19 Commission. Most of the reports were published by US-based organizations, although many of them may offer useful guidance for most countries. [Readers of this essay are encouraged to provide information on relevant reports from other countries, especially reports that have made a difference.]

All COVID reports are free online, and are generally brief and clearly written. Publishers include several UN agencies, the US Center for Disease Control (CDC), the Johns Hopkins Center for Health Security, the University of Minnesota (CIDRAP), the Columbia University Earth Institute (NCDP), the Harvard Global Health Institute, etc. (see Organization Index attached below).

**General Topics.** The SSG “report on reports” begins with four daily data updates on cases and deaths in countries and US states. This is followed by six items providing scenarios on the course of the virus and impacts on the world and business, including three scenarios on the UN’s Sustainable Development Goals. [WAAS Fellow Jerome Glenn et al. is preparing three US COVID scenarios to Dec 2021 (due Oct 2020) and a State of the Pandemic Index to Feb 2022 ([www.millennium-project.org](http://www.millennium-project.org)).] General overviews include a March statement by 43 UN organizations on responding to COVID impacts, an April COVID strategy update from WHO, and 13 reports on the difficult task of reopening societies from lockdown, including a remarkable 190-page “Roadmap to Recovery” by some 100 scholars from eight Australian universities.

**Specialized Topics.** Items include the impact of COVID on US workers (up to a third of jobs may be vulnerable), crisis leadership for the pandemic, effective crisis communication, strategic testing, a tailored approach to contact tracing, a strategic plan for COVID research, a framework for early vaccine allocation and distribution when scarce, the increasing depth and breadth of hunger due to COVID, how pandemics increase inequalities for women and girls, the economic impact in Sub-Saharan Africa, the EC’s proposed major recovery plan for Europe, the G40 Mayors’ Agenda for a Green and Just Recovery, a letter to G-20 leaders from 350 medical organizations and >4500 health professional urging a “healthy recovery” and a healthier society, and a “global women’s appeal” on International Women’s Day urging “Human Security for Public Health, Peace, and Sustainable Development.”

**Pre-COVID-19 Warnings.** Many reports, briefings, and novels previous to the COVID pandemic have warned of the potential security threat of pandemics. Three still-relevant reports conclude SSG’s initial mapping. The Oct 2019 Global Health Security Index provided 195 country profiles across six categories and 34 indicators, concluding that “national health security is fundamentally weak about the world” and that “no country is fully prepared.” A 2018 report from Harvard describes how to prevent the next pandemic by global monitoring of disease outbreak preparedness. And a 2006 report warns that serious disease outbreaks are becoming more common due to population growth and globalization, with environmental and climate change acting as a “risk multiplier.”
What Impact of These Reports? And now the question in the title of this essay: have online reports such as these, by epidemiologists and other experts, made a significant difference in taming or eliminating the COVID monster? And viewed together, can 60 reports on various COVID topics (or 80 or 100) be of much help? The answer is probably very little.

Some of these reports, and others like them, have already found their way to appropriate decision-makers and made a difference in policy. Secondly, some state and national leaders have already made up their minds, and no amount of reasoned argument will change their desire to prematurely lift lockdown, avoid optimal testing and contact tracing, and prohibit crowds of unmasked people. Thirdly, some decision-makers may welcome the COVID reports, but do not know about them, which raises questions about whether these reports are adequately publicized. Still, if this SSG report results in just one of the 60 items making a difference in just one country or city, it will at least have been a modest success!

What Can We Learn? The most obvious takeaway from this initial report is that there are a lot of COVID reports—a blessing in that there is much readily available information to choose from, but a burden in searching for the most appropriate but often competing report(s).

Less obvious are three tensions that must be recognized: 1) between optimism and pessimism (hopes for vaccines and therapeutics vs. fears that far worse may be ahead); 2) between lockdown vs. re-opening schools and businesses; 3) between returning to “normal” vs. “the new normal” (which has several definitions that have yet to be sorted out).

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