



PROMOTING LEADERSHIP IN THOUGHT
THAT LEADS TO ACTION

THE WEALTH OF NATIONS REVISITED

CADMUS

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OUR VISION

The world is in need of guiding ideas, a vision, to more effectively direct our intellectual, moral and scientific capabilities for world peace, global security, human dignity and social justice. It needs evolutionary ideas that can spur our collective progress without the wake of destructive violence that threatens to undermine the huge but fragile political, social, financial and ecological infrastructures on which we depend and strive to build a better world. History has recorded the acts of creative individual thinkers and dynamic leaders who altered the path of human progress and left a lasting mark on society. Recently the role of pioneering individuals is giving place to that of progressive organizations inspired by high values and committed to achievement of practical, but far-reaching goals. This was the intention of the founders of the World Academy of Art & Science when it was established in 1960 as a transnational, transdisciplinary association to explore the major concerns of humanity. No single organization can by itself harness the motive force needed to change the world, but a group of like-minded organizations founded with such powerful intentions can become a magnet and focal point to project creative ideas that possess the inherent dynamism for self-fulfillment.

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NEW PERSPECTIVES ON MAJOR GLOBAL ISSUES

Special Issue on Human Security

Volume 5, Issue 1

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Special Issue on Human Security
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Cadmus Special Issue on Human Security

Inside this Issue

The multidimensional crises confronting humanity today defy solution through existing policies, strategies, institutions, theoretical knowledge, education and ways of thinking. We are called upon to conceive and strive to realize a new paradigm in thought that leads to action. Many long cherished ideas must be challenged, reformulated, discarded or replaced. Among these is the conventional idea of security as it has been dominating the thinking and action of nation-states for centuries.

It is ironic that in an age of unprecedented knowledge, technology, economic development and financial capacity, a growing sense of insecurity seems to pervade and permeate the lives of people around the world. The COVID-19 pandemic, the sudden outbreak of war in Europe, the resurgence of fears of nuclear war, and the ever more threatening threat of catastrophic climate change are among the most apparent causes and expressions of this rising insecurity. But the roots lie still deeper in rising threats to democracy, the growing polarization of societies, growing inequality and a rejection of the universal values which have guided global progress since the founding of the United Nations. The security of national boundaries is no doubt as important as it has been in the past. But it is no longer a sufficient standard by which to govern relationships among this increasingly interconnected and integrated global community. The \$2 trillion in annual military spending is not enhancing the security of the world's people, even in the militarily strongest, most prosperous nations.

The security humanity seeks today is not merely for the preservation of national boundaries and the integrity of nation-states, which have very often left individuals and communities within their borders oppressed by war, violence, famine, poverty, social and cultural discrimination. People around the world aspire for security at the personal level as well as the national—security that addresses the needs and aspirations of every individual. Today the world yearns for Human Security.

The concept of Human Security as a seminal and essential element of human development was set forth by the UNDP in its landmark 1994 Human Development Report, which broadened the concept to include seven dimensions—food, health, economic, political, ecological, community and individual. It was later affirmed by the establishment of the United Nations Trust Fund for Human Security in 1999, an independent Commission on Human Security in 2001, a report by the Secretary General in 2010, and a General Assembly resolution affirmed by more than 190 nations and a second report by the UNSG in 2012.

The essential elements of Human Security are set forth in detail in the 17 Sustainable Development Goals and 169 targets unanimously adopted by 193 UN member states in 2015. Human Security embraces all the SDGs and integrates them under a single comprehensive umbrella. But in addition, it emphasizes the individual as well as the collective dimension of security, by focusing on prevention and protection as well as relief from threats, the right of each individual to choose, and the empowerment of each individual to pursue security. Furthermore, the human security approach recognizes that security is a subjective as well as an objective phenomenon which cannot be assured by exclusive concentration on achieving certain quantitative goals such as per capita income, life expectancy, years of

schooling or CO₂ emissions. It depends very largely on creating a safe and secure social environment which assures to each individual the right to live in freedom from fear, want and indignity.

This special issue of Cadmus is published in support of the HS4A global campaign on Human Security for All launched in January 2023 by the United Nations Trust Fund for Human Security and the World Academy of Art and Science. The intention of the report is to foster awareness and understanding of the concept of human security from a multitude of perspectives and different dimensions at the local, national and global level.

The views expressed in these articles represent those of their authors and do not necessarily reflect those of HS4A, Cadmus or the World Academy of Art & Science. We hope this issue will prompt many readers to seek further information on this topic on the [UNTFHS](#) and [WAAS](#) websites, to monitor and support the activities of HS4A as they unfold during the year at [Campaign on Human Security for All](#), to reflect on how a shift in thinking to human security can and should promote changes in higher education, and to identify ways in which the organizations to which readers are affiliated can actively advance a new paradigm on human security both in thought and action.

We hope you enjoy this issue.

Editors

A Global Movement to Promote Human Security for All

Garry Jacobs

President & CEO, World Academy of Art and Science; Chairman of the Board & CEO, World University Consortium; President, The Mother's Service Society, India

Abstract

Humanity confronts complex, multidimensional challenges to the security of the people and the planet we live on. These threats continue to defy resolution by means of the existing policies, institutions and actions of nations around the world. In spite of unprecedented and remarkable achievements, our sense of insecurity continues to rise. A fundamental change is needed in our conception of security and the strategies, policies and institutional framework by which we seek to achieve it. The human security approach was first advocated by the United Nations in 1994 and has since been applied in hundreds of programs around the world. This article calls for adoption of the human security approach at the global level as a comprehensive, integrated strategy to meet global challenges by addressing both the objective and subjective factors required for their resolution. It broadens the concept of security by placing the security of each and every individual at the center. It calls for a global campaign to generate awareness and elicit active support and participation from all major sectors and sections of global society in an unprecedented effort to release and mobilize the untapped energies and capacities of humanity in pursuit of human security for all.

1. Meeting Global Threats to Human Security

Today humanity confronts multidimensional challenges of unparalleled reach, magnitude, and complexity. The threats that we face in the Anthropocene impact all dimensions of our lives. The COVID-19 pandemic, the war in Ukraine, the looming climate crisis, rising inequality, economic insecurity, political instability, a renewed arms race and return to Cold War mentality respect no borders or class divides. They impact human beings everywhere. They are also inextricably interconnected with one another so that each impacts the others in unexpected ways. War in Europe has resulted in rising food scarcity in Africa, energy shortages in Europe and spiralling inflation in America.

These challenges are not new. They have only resurfaced in new forms which defy resolution by existing policies and institutions. The efforts that humanity and countless organizations the world over are taking to address these challenges are not new either. The world has made enormous progress over the last century in promoting peace, stability, human security and welfare when compared to any previous period in history.

The Universal Declaration of Human Rights was adopted in 1948 by 48 nations. It was the first time in history that a vast majority of the countries of the world united to affirm the universal rights of every human being. The UDHR pronounced high ideals, but it was not

backed by the legal status or means of enforcement to support its good intentions. It was only 67 years later that 193 nations of the world unanimously adopted the 17 Sustainable Development Goals (SDGs) and 169 targets. Never before have the nations of the world joined together to recognize and affirm both in idea and action the universal right of every human being to human security.

During the last half century humanity has made tremendous progress on many fronts. Nation-states, business and civil society organizations, and individuals around the world have deeply committed themselves to address the multiplicity of threats confronting humanity. The United Nations and other multilateral organizations have played a leading role in building acceptance and commitment to shared universal values and goals. Yet at the same time the sense of disquiet and anxiety seems to be even greater than before. For all our collective progress, the pace of global social evolution is moving faster than humanity and its social institutions have been unable to respond and adapt. The resulting awareness, commitments, strategies, policies and institutional capacities have been insufficient to meet the magnitude of the challenges confronting humanity. Something more is needed. That is why it has become essential to project Human Security for All as an overriding and integrating objective for all people and nations to embrace.

2. Objective and Subjective Dimensions of Global Society

Over the last seven decades, unprecedented progress has been made in extending life expectancy, improving health, reducing violence, enhancing human rights, promoting freedom and greater social equality, and protecting the environment. But these gains have been insufficient to meet the challenges humanity confronts. These efforts have largely been driven by national governments and international organizations. That is not sufficient. The magnitude of the effort involved requires much more. All nations and all sections of society locally, nationally and globally will have to lend their support. We need the involvement of organizations in all sectors, including business, civil society, education, scientific research, the arts and cinema, youth, the media and many others.

The SDGs focus naturally on practical actions to be taken and quantitative goals that need to be achieved. They draw support from science, technology, businesses, financial institutions and public policy makers to achieve concrete, measurable changes in the world—in CO₂ emissions, poverty levels, hunger and malnutrition, unemployment, education, healthcare, infant mortality and life expectancy, and so on. These are among the most prominent and important objectives of global society today. They are tracked and measured in terms of numbers of people saved, goods produced, and the quantum of money spent. They represent the objective dimension of human life and global society.

But we know that human development is not just about statistics, public policies, institutional reform, the discoveries of science and technological innovations. In addition to this objective dimension, there is also a subjective dimension, which is equally or even more important. It is the subjective dimension that reflects human aspirations, values, beliefs and attitudes which motivate human beings to recognize the challenges we face, to understand, commit and invest their energies to address them.

These subjective factors are the principal domain of other social organizations and activities which are also critically important, because they embody and give expression to humanity's aspirations, values, beliefs and commitments to action. They remind us that getting the facts right on paper, adopting practical policies and laws, and allocating huge sums of money for investment in the SDGs are not enough. We also need to reach out with a message that will win the minds and hearts of countless individuals around the world, fully release and mobilize their energies and generate commitment at all levels and in all fields in a concerted effort to achieve these goals. Nothing less will be sufficient. Religious and inter-faith groups, cultural organizations, the arts, cinema, and all forms of media represent sections of global society which can play an essential role in global progress. Their organizations span humanity from the local and national to the global level. They can reach out to and mobilize vast numbers of people.

3. Integrated Approach to Human Security

The SDGs define 17 important goals for the collective survival and progress of humanity. But taken together, these goals add up to something far greater than the sum of their parts. When taken together and viewed as aspects of a greater whole they constitute the central pillars of the intrinsic concept that we call human security. For the fulfilment of human life, it is not enough that we make progress on some of these goals. In order to be truly secure, it is essential that we achieve them all. It does not matter whether a person lacks food, water, employment, clean air, freedom and equality, peace and dignity, safety or good health. All are essential for the security and wellbeing of each and every one of us. Some people may lack only food, or freedom or access to healthcare. But regardless of which one is missing, they cannot feel fully secure.

The concept of human security communicates the comprehensive nature of all these dimensions—food, health, economic, political, environmental, community and individual. It also embodies the sense of the integrality of all these dimensions. For all are interconnected and interdependent on one another. The absence of food or clean air and water undermines health security which in turn affects our capacity for productive work. Without freedom from fear and want we cannot live in dignity.

We all know that the challenges humanity faces are interconnected. But our way of studying them is fragmented into innumerable specialized disciplines. The formulation of policy is conducted by experts knowledgeable about specific issues but rarely equipped with the knowledge needed to understand the interdependencies or with the authority to address them comprehensively. Moreover, the implementation of these policies is assigned to specialized agencies with narrow fields of action. As a global community, we have organized our knowledge, thinking and action in that way. We have divided an integral reality we call life into innumerable parts and address them piecemeal. But human life cannot be so readily divided. Each of us has security needs belonging to each of these sectors and we necessarily strive to meet them all at the same time. Meeting each depends on meeting the other needs as well. All of them depend on the establishment of peace, the protection of human rights, and prevention of environmental destruction.

This fragmentation of knowledge, policies, and actions is no longer sufficient in these challenging times of rapid change on multiple fronts. We need a vision that sees the whole picture, evaluates every step and dimension based on how far it impacts and enhances human security for people everywhere. Regardless of how good our overall statistics are, until we ensure inclusive, sustained human security for everyone, we will continue to have unstable conditions in which we are not able to achieve the peace, democracy, human rights and progress that we need for sustainable development of ourselves and our planet.

“The ultimate goal of the HS4A Campaign must be nothing less than to mobilize global society for rapid social transformation of our values and our actions to achieve human security for all.”

4. Empowering Individuals

Human beings are not merely statistics. We are each an individual. The SDGs rightly focus on the collective needs and goals of the entire human collective. Human security focuses on the aspirations and needs of each and every single individual. It starts with the individual and what it means for each person to be safe and secure. It means security from harmful disruptions and calamities—in our homes, our jobs, our communities, and our environment. It is about our personal needs and hopes and the opportunity to develop our full potential as human beings.

The collective needs of humanity can only be met by the commitment and concerted action of national and multilateral institutions to establish shared objectives, global systems, a level playing field, ground rules, exchange of information, and collective effort. But to reach down to each individual top-down initiatives is not sufficient. We also need to engage, energize and unleash the capacity of individuals in communities around the world.

Development is not a program of government. It is a social process that depends on the awakening, engagement and active participation of people at all levels of society and all fields of activity. Governments alone cannot develop humanity. People must be encouraged and helped to develop themselves. Human security is about empowering individuals and communities of individuals to participate in making choices on how they can be most secure and resilient in face of current and future risks. Freedom of thought and action as well as access to healthcare, technology, reliable information and quality education are catalysts and drivers to awaken aspirations and unleash the energy of people to strive for their own development.

5. Global Campaign on Human Security for All

It is for these reasons that the World Academy of Art and Science has joined in partnership with the United Nations Trust Fund for Human Security to launch HS4A, a global campaign

on human security for all. The concept of Human Security advanced here was first projected by UNDP in its landmark 1994 annual development report. It led four years later to establishment of the UN Trust Fund for Human Security, which has since then supported the human security approach in more than 295 programs in 135 countries around the world. In 2012 it was reinforced by a resolution of the UN General Assembly supported by 193 UN Member States, which affirmed their common understanding of human security: “The right of people to live in freedom and dignity, free from poverty and despair. All individuals, in particular vulnerable people, are entitled to freedom from fear and freedom from want, with an equal opportunity to enjoy all their rights and fully develop their human potential.”

HS4A is an attempt to provide support and momentum to supplement the efforts so far taken by so many governments and organizations around the world. It seeks to awaken and engage the understanding and active support of the entire global community. NGOs, universities, research institutions, businesses, governments, religious and inter-faith groups, artists, filmmakers, cultural groups, and all forms of media—every section and sector of global society has a vital and unique contribution to make to this endeavour. Every individual strives for human security, and it will require the combined efforts of all humanity to achieve it for all.

We recently witnessed the potential power and impact of this message on business and technology at the Consumer Electronics Show 2023 held in Las Vegas, US on January 5-8, 2023. CES is the world’s most important gathering and exhibition of technology and technology companies. This year’s event attracted more than 120,000 business leaders and technology experts. For the first time in its 50-year history, CES adopted a theme for the event and that theme was human security for all.

CES projected the theme that technology is a powerful instrument for addressing human security needs. Rightly utilized, it is potent force for good. CES2023 highlighted both the opportunities and responsibility of business to apply this powerful instrument for the good of all humanity. It projected the message to business and technology companies and their leaders to direct their efforts to address the fundamental challenges to human security which the world faces.

The response of participants in CES2023 provided a clear demonstration that the human security approach is already recognized and embraced as mainstream by leading technology companies. It also highlighted the potential role which the private sector can play in addressing these critical challenges if their incredible capacity for technological innovation and deployment can be fully harnessed in support of the SDGs and human security.

Following CES, we also saw evidence of the enormous receptivity of religious and faith-based leaders and their organizations in support of human security. At the 9th International Annual Symposium held in January 2023 on the Role of Religion and Faith-based Organizations in International Affairs, leaders from a wide range of organizations representing people around the world convened in New York in collaboration with UN agencies to discuss the importance of human security and their role in promoting it.

Technology and faith are complementary powers. One objective, the other subjective, both essential for human accomplishment and fulfilment. Technology bases itself on scientific knowledge and human ingenuity. Faith bases itself on the importance of intangible universal values. These values represent the quintessence of knowledge that transcends the range of the senses and the logic of physicality. All accomplishment is based on faith, and achieving human security is no exception. Faith is a reflection of the soul's deepest and highest knowledge as reflected in the mind. It is not merely wishful thinking or blind superstition. It wells up with compelling force from our deepest aspirations and highest intuitions. Human security encompasses both the objective and subjective dimensions of our lives. The business and technology organizations that presented at CES are among those which project the objective measurable dimensions of reality. Faith-based groups affirm the subjective dimension based on culture, values, emotions, ethics, beliefs, aspirations and commitment. It is only a marriage of these two complementary aspects of reality that can provide true human security.

A peaceful and secure world is not only about secure borders. Security must necessarily address people and their personal needs. It is time to unite around a shared vision and program of action to ensure human security for all. Such a vision must encompass all dimensions of human security. It should involve an integrated approach—person-centered, context-specific and prevention-oriented.

The Human Security for All campaign calls upon business and technology leaders with the resourcefulness to evolve better solutions to the problems we face and religious leaders who think beyond national and religious boundaries to awaken the aspiration and instil the values needed to achieve freedom from fear, freedom from want and freedom to live in dignity for all. In a similar fashion, we need to bring representatives from all other sectors of global society and from all over the world to join together in commitment to this overriding objective. The ultimate goal of this initiative must be nothing less than to mobilize global society for rapid social transformation of our values and our actions to achieve human security for all.

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Enhancing Human Security by Transforming Education Through Science, Technology, and Innovations*

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Abstract

This paper provides in-depth critical analysis and reflections on how technology, innovation and digital literacy can help to bring awareness on the need for a new dimension and approach to foster a transformational attitude towards education. Learning drives change, and if the aim is to make an impact, there is a need to enable collaboration between different disciplines so that new transformative educational models can emerge. The analysis identifies the role of pedagogy and how it can contribute to put forward humans as central and critical actors in using science, technology, and innovations (STIs) to foster human security. It explores the critical role of Higher Education Institutions (HEIs) and their engagement with science, technology, and innovation in the search for educational transformation that supports multicultural, diverse and inclusive learning environments within the tenets of social engagement and cohesion that guide us towards the principles of human security.

The first academic articles examining the neologism *human security* appeared over two decades ago, representing a breakthrough in security and human studies. The concept endeavoured to find a new way to engage with security issues in a broader context not limited to the military defence of states' interests and territories.[†] After a few years of discussion and debate, the human security framework has been mainstreamed as a general policy reference in International Relations, nonetheless without creating controversies around its complex implementation. In 2005, the World Summit Outcome adopted by all United Nations (UN) heads of states endorsed for the first time the concept of human security and one of its main

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[†] Paris, R. Human security: paradigm shift or hot air? *International security*, 26(2), 87-102, 2001.

components, the *responsibility to protect*,* which interrelated to the former, takes the need to protect human life as its centre stage in order to act preventively. The acceptance of the right of people to live in freedom and dignity, free from poverty and despair, and the responsibility of the state and the international community to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity seemed the right path to be followed.† This agreement attests to the centrality of human security on the international agenda and the need to act conclusively to achieve it. By taking a human security lens approach, one should widen the concept to those threats to the fulfilment of fundamental values in people's lives by understanding that societies and countries should work towards securing the basic needs of ordinary people.‡ This is where education could play a role in ensuring individual development and the right to secure, peaceful living conditions. The adoption of the General Assembly resolution 66/290 on 10 September 2012 is considered a significant milestone for the application of human security. In paragraph 3 of the resolution, it was agreed by consensus that “*Human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people*” (General Assembly resolution 66/290).§

However, at the time of writing, we seem far away from the basic tenets of human security, and there is an imperative need to reflect profoundly on the meaning of education and how it can enhance human security. In addition, we can explore a different perspective on how human security can secure education and human development. We are facing significant challenges due to growing levels of conflict across nations and mounting environmental pressures derived from human economic and business activities and their harmful impact on our planet. We are immersed in ongoing wars and heightened conflicts affecting the stability of our global society and impacting our socio-economic, political, and environmental systems. We are undoubtedly facing a significant threat to global stability and peace due to human environmental intervention and continuous wars threatening our survival. Moreover, the educational literature has revealed a positive correlation between lower levels of education and increasing levels of violent conflict. Researchers argue in favour of reconfiguring educational systems to promote peace and social transformation. The literature provides significant evidence on how countries with higher levels of horizontal inequalities in terms of mean years of schooling generally experience higher levels of violence. The close association between education, conflict, and peace is closely connected to regional disparities in education within nation-states, a robust indicator of high levels of conflict in regions characterised by lower access to education.¶

* Edson, S., *Human Security: An extended and annotated international bibliography*. Common Security Forum, Cambridge: Centre for History and Economics, King's College, University of Cambridge, 22 November 2022

† Mugurusa, C.C. (2007) *Human Security as Policy Framework: Critics and Challenges*. Institute for International Law of Peace and Armed Conflict. University of Bochum, Germany. *Anuario de Acci'on Humanitaria y Derechos Humanos*. Year book on Humanitarian Action and Human Rights. *Deusto Journal of Human Rights*.

‡ Des Gasper & Oscar A. Gómez (2015) *Human security thinking in practice: 'personal security', 'citizen security' and comprehensive mappings*, *Contemporary Politics*, 21:1, 100-116, DOI: 10.1080/13569775.2014.993906

§ United Nations Trust Fund for Human Security (2016). [Human Security Handbook](#).

¶ Pherali, T. (2021). *Social justice, education and peacebuilding: conflict transformation in Southern Thailand*. *Compare: A Journal of Comparative and International Education*, 1-18. DOI: <https://doi.org/10.1080/03057925.2021.1951666>

Furthermore, we are facing enormous economic challenges due to significant pressures on commodities and natural resources that contribute to widening the gap between the world's most prosperous and poorest economies. Our countries' political, economic, and business leaders' decision-making processes are significant contributors to exacerbating existing conflict situations and creating new ones. The outcome is that our societies have weakened, the environment has deteriorated significantly, and unfortunately, it continues its degradation in a swift and unstoppable manner. Moreover, our societies, defined by critical socio-economic and political imbalances, are growing apart as we face significant problems in fostering the coexistence of diverse and inclusive societies. At the global level, our leaders cannot find a united front and committed approach to address the challenges associated with climate change and unfolding socio-economic dynamics.

“We need educational models that acknowledge the complexity of our cultures and social interactions if we wish to engage in comprehensive and context-specific solutions.”

We have yet to find the compass that guides us towards more equal societies that are balanced and strive to offer the same opportunities to everyone. In this paper, we argue that education is our vital compass in our search for meaningful change and in enacting required transformations. The global political and economic agenda does not acknowledge the seriousness of the economic and environmental threat and the significance of equity, diversity, and inclusion to help us move forward. Once more, economic agendas and political interests are at the centre of discussion, and we have forgotten that the lack of action and failure to commit and acknowledge responsibility are not options anymore. We do not have time to wait for the environmental crisis to fix itself. We need to be proactive and make an effort to drive real change. It is time for a strong and determined intervention from every country to ensure that we progress and place human security at the top of our political and economic leaders' agendas. To secure transformation in conflict areas and extended-lasting peace contexts in human-secured scenarios, we must understand the significance of peace and human security and its implications for political stability and economic development. Within the outlined context, education emerges as a critical tool that can contribute to our understanding of the seriousness of the situation and the need for immediate action. But to progress, we must carefully rethink how educational models and, in particular, how HEIs need to be transformed so that we can drive needed changes.

Technology and innovation are critical actors that will enable us to bring a different approach to our educational models and drive actions focusing on real change and impact. This paper offers insights into how education is the way forward in our quest to minimise and manage conflict and to enhance human security. Our analysis reflects on the need for a new pedagogy that helps us to move forward and the significance of education to empower inclusion as a tool to minimise and manage situations that can lead to conflict and confrontation. We reflect on the significance of Society 5.0 and the complexities that emerge

between human interaction, technology, and innovation as we develop connections with the need for educational models that innovate, foster change, and have an impact.

1. Education and Pedagogy to Enhance Human Security

A *human-centred* and *human-first* approach towards education is essential to create awareness of humans' critical role in managing situations of conflict. Deep societal divisions are strongly connected to societies' educational levels. Therefore, developing, shaping, and reshaping educational models is vital to enhance human security as part of the curricula. We need to consider different viewpoints towards managing conflict; such as, education for human security should be fully understood and contextualised.

“Human security needs to be contextualised as part of existing educational models so that they can contribute to strengthening actions taken by educational institutions and their respective communities.”

We desperately need actionable knowledge that helps us navigate the complexities of human relationships, interactions with society, and its implications for our understanding of sustainability on its multidimensional and multifaceted framework. Only humans can create new ideas and visions for the future, but humans are also quite predisposed to situations of dispute and confrontation. In our search for knowledge, we are prone to forgetting that we need to work together to embrace the wealth of sharing different views, opinions, and ways of doing things. Diversity and inclusion are critical elements to support our societies and help them to thrive and prosper. Still, at the same time, they are a significant source of conflict and differences. If we aspire to grow, develop, and progress as a global society, we must share ideas by enabling learning environments that promote cultural integration, diversity, and inclusivity. We must encourage open dialogues, be ready to engage with difficult questions, and be open to different views, opinions, and ways of doing things. Only in this way will we be able to co-exist and work together towards minimising conflict. We need to be open to supporting the development of ideas that challenge existing knowledge and the status quo, and we cannot be afraid of the power of different viewpoints.

We need learning environments that help us to be free, feel safe and welcome when sharing our vision and ideas as we dare to challenge and deeply question the status quo. As a global multicultural society, we are challenged with managing complex processes subject to uncertainty and continuous change. In their different dimensions, science, innovation, and technology are intrinsically connected to humans and are poised to play a critical role in how societies evolve and develop. However, at the centre of the process, we find economic and political agendas frequently lead to hostility and disunity that severely endanger our societies. Therefore, we require new and innovative pedagogies that enable the integration and promotion of human security as part of our learning and developmental process.

Human security is commonly understood as prioritising the security of people, especially their welfare, safety, and well-being, instead of a state-centred approach. Proponents of human security argue that poverty, population displacement, hunger, disease, environmental degradation, and social exclusion, for example, all bear directly on both human and global security. However, in the academic and specialised fields, the definitional scope of human security remains a subject of much debate based on the so-called narrow and broad approaches to human security. Each approach emphasises a different goal of human security, where the broad one refers to *freedom from want* and can be framed within a development agenda. The narrow one concerns *freedom from fear*, which is articulated in the domain of human rights.*† As we reflect on the significance of human security, it is possible to articulate its essential role as it can serve and act as a guiding analytical lens and a programming framework that complements and enhances mechanisms to attain the United Nations Sustainable Development Goals (SDGs). An important aspect to reflect upon is how human security initiatives engage closely with people and communities to uncover their specific needs and vulnerabilities and propose policies and actions based on their priorities, resulting in sustainable development gains across and within countries.

As essential priorities, we need to work towards ending exclusion, isolation, marginalisation, and all forms of violence. Our societies must cherish human security by promoting, creating, facilitating, and protecting safe and appropriate learning environments that nurture open dialogue, cooperation, knowledge exchange and critical debate. The learning process should consider human security as integral to existing educational models and developmental paradigms. We need to be able to address the root causes of social exclusion by bringing forward the significance of promoting peace and sustainable economic development, where our society makes an effort to address a very diverse range of issues. Undoubtedly, our contemporary educational models are not fit for purpose, and our educational systems need to transition towards actionable pedagogies that acknowledge all forms of discrimination and deprivation and that should not be limited to specific forms of violence or environmental degradation. We need educational models that acknowledge the complexity of our cultures and social interactions if we wish to engage in comprehensive and context-specific solutions. Our educational models and modes of learning, teaching, and doing research should promote actionable change and be active in creating safe spaces for human development and critical inquiry. Researchers and academics need to consider how pedagogy can relate to human security and examine to which extent it might be possible to integrate the application of human security principles as part of the learning process. Our students should be able to play a part in the application of human security, and our academics need to take an active role in reimagining and questioning existing learning, teaching and research environments and processes to enable the transition towards actionable pedagogies.

* Mugurusa, C.C. (2007) Human Security as Policy Framework: Critics and Challenges. Institute for International Law of Peace and Armed Conflict. University of Bochum, Germany. *Annuario de Acci'on Humanitaria y Derechos Humanos. Yearbook on Humanitarian Action and Human Rights. Deusto Journal of Human Rights.*

Des Gasper & Oscar A. Gómez (2015) Human security thinking in practice: 'personal security', 'citizen security' and comprehensive mappings, *Contemporary Politics*, 21:1, 100-116, DOI: 10.1080/13569775.2014.993906

United Nations Trust Fund for Human Security (2016). [Human Security Handbook](#).

† General Assembly (2005) 2005 World Summit Outcome 2005, A/60/150. 15 September, pp. 143

Human security needs to be contextualised as part of existing educational models so that they can contribute to strengthening actions taken by educational institutions and their respective communities. Students, teachers, and researchers should be able to actively contribute to realising the transformative promise of the UN's 2030 Agenda and the SDGs as we acknowledge our social failure to commit to this ambitious agenda. Thus, based on its central aim to achieve freedom from fear, want, and indignity, human security can help address challenges stemming from and resulting in persistent conflicts, marginalisation, and abject poverty. Therefore, programmes and learning outcomes need to focus on setting priorities and achieving integration by emphasising the triangular relationship between peace and security, development, and human rights by highlighting their vital connections.

Within this context, we can consider the multiplier effects associated with poverty reduction strategies. Without a doubt, poverty, inequality, and economic imbalances can be identified as the root of extreme violence and many other forms of human fragility. Therefore, education needs to be attuned to root causes and remedial solutions if we aim to achieve inclusive and sustainable development. Therefore, a new, focussed pedagogy is needed to recognise that development, peace, security, and human rights are interlinked and mutually reinforce the central objective of human security—that is, the security of people.

2. A New Educational Paradigm – Transforming Education to Empower Inclusion and to Minimise Conflict

We live in a hypercomplex environment that is affected by high levels of uncertainty and interconnectedness, in which we have to deal with unknown challenges as we try to find a balance.* A significant body of literature highlights these immense challenges, and HEIs are crucial in creating open, transformative, and transnational environments across countries. In order to achieve a sustainable balance between economic, social and ecological challenges, we must examine how digital and technological advances can provide support amidst a climate crisis and rising levels of economic and political instability.† To a different extent, technological developments are changing lives and disrupting labour markets.

Democracy and political systems are under significant pressure, and we must find ways to manage unprecedented political and socio-economic disparities. We are witnessing a significant erosion of the public debate through worrying levels of misinformation. The world order is changing rapidly, and research, innovation and education have become increasingly important factors contributing to exacerbate social disparities and demographic changes in many countries. Our social systems are under severe pressure that has been aggravated by the impact of the 2020 global health crisis, which led to the acceleration of change.

In order to be open, transformative, and transnational, we must create an open physical and virtual space in which students, teachers, and researchers should work together assuming interchangeable roles to promote sustainability, diversity, and engagement as recommended

* UNESCO (2021). UNESCO Science Report: *the Race Against Time for Smarter Development*. S. Schneegans, T. Straza and J. Lewis (eds). UNESCO Publishing: Paris.

† EUA (2021) European University Association (February, 2021). Universities without walls. A vision for 2030 available at: <https://eua.eu/downloads/publications/universities%20without%20walls%20a%20vision%20for%202030.pdf>

in the *University without walls* document (2021). Sustainability comes to light as the answer to inequities in the economy, society, and environment, and through this worldview, we should promote solutions considering the needs and idiosyncrasies of societies and cultures. In this context, diversity must be valued in the first place and must be considered as a source of supporting the development of societies. In this regard, HEIs should welcome students and teachers from all backgrounds without differentiation. However, this is not an easy process, even if it is done naturally and in alignment with many theoretical studies in this prolific area of research. The extant literature advocates for the need to design learning and research environments according to diverse students' and staffs' needs to ensure a broad knowledge base for society through curiosity-driven research. However, real-life learning environments are quite far from achieving this for two main reasons: i) diversity is not easy to accept, implement and value; we are driven by an individualistic culture where we keep competing for ideas and resources, as we seek to achieve and secure personal development, status, and prestige; ii) we keep separating education from research or research from education. As such, the teaching and learning process is detached from research activities, which leads to disruptions in the knowledge flow, simultaneously creating significant barriers in the knowledge-sharing process and in our understanding of the circular dimension of the student-teacher-researcher roles.

In our competitive societies, it is challenging to accept diversity and promote inclusivity and equity in all activities and spheres. However, the problem is not limited to the educational context, where we have a significant body of research where the concepts are presented and discussed beautifully.* Relevant concepts consider the importance of social justice and the distribution of rights, resources, and power between individuals and the society.† Even if inclusion, equity, and diversity are hot topics on the political agenda and we have the legislative framework for implanting and promoting this concept, we cannot ignore the gap between this beautiful and stringent global direction and its detachment from real life. And these are concrete aspects reported in the latest reports presented by the European Commission.‡ At this point, we would like to raise the following questions: Why is it so difficult? What is failing? Unfortunately, responding to these questions is complicated because we live in complex environments with many variables interacting simultaneously, leading to the generation of diverse and compounded scenarios. Still, we can presume that the core element for changing the present situation is to challenge our way of thinking about ourselves, about the world and about life itself. Even if we are aware, our worldview, defined as the set of core beliefs, guides our actions, influences, and moderates our daily choices and decisions. We are creating and recreating the reality based on this worldview that started developing during our early developmental stages and is affected by biological components and by continuous interaction with the environment.§ Having this in mind, according to Kuhn,

* EHEA (2020), EC (2020), UNHCR (2019) European University Association (February, 2021). Universities without walls. A vision for 2030 available on <https://eua.eu/downloads/publications/universities%20without%20walls%20a%20vision%20for%202030.pdf>

† European Commission/EACEA/Eurydice (2022). European Commission/EACEA/Eurydice, 2022. Towards equity and inclusion in higher education in Europe. Eurydice report. Luxembourg: Publications Office of the European Union

‡ European Commission/EACEA/Eurydice, 2020a, European Commission/EACEA/Eurydice, 2018, European Commission/EACEA/Eurydice, 2015, European Commission/EACEA/Eurydice, 2012; European Commission/EACEA/Eurydice, 2020b).

§ Denzin, N. (2008). The new paradigm dialogs and qualitative inquiry. *International Journal of Qualitative Studies in Education*, 315–325. Disponibil la <http://in.bgu.ac.il/icqm/DocLib/Pages/2008/Norman%20K.%20Denzin.pdf>.

a paradigm is a universally recognised scientific achievement that, for a period of time, offers problems and models solutions to a community of practitioners.*† From Kuhn’s point of view, paradigms are resistant to change because they are deeply rooted in our educational models and in existing teachers’ practices, perceptions, and ways of seeing the world around us. This paradigm can be changed only by personal or professional interventions that significantly impact our ways of seeing the world and by identification of anomalies (strange facts) until we realise the shift in paradigms in the way we think, act, and feel. When Kuhn developed his contributions, neuroscience did not have much power to support his vision. Still, nowadays, we are not fully aware of the impact of the models in developing the brain structure, how it functions, the potential implications for future generations, and how they engage with the learning process.‡§

“We are in need of learning, teaching and research environments that nurture and foster the significance of human security as part of our education and development process that turns us into global and sustainable conscious citizens.”

Considering the gap between the different branches of knowledge and the incontestable data from existing research studies, we need to reconsider education as a critical tool that can help us face challenges and manage present inequities that are a significant source of conflict. Educational systems should be able to empower educators, researchers, and students by fostering inclusion and minimising levels of conflict at all levels of human existence. We need to develop a sense of belonging in which people can feel safe and valued regardless of individual peculiarities. Only in this way will we be able to value humankind’s immense potential. We need a new educational paradigm that will allow us to live better, feel safe and secure with ourselves, others, and the environment, and better understand the universe around us. In this regard, we strongly advocate for the need to innovate and bring forward new educational models and pedagogies supported by innovation and technology to help us create and bring change to existing learning environments. We are in need of learning, teaching and research environments that nurture and foster the significance of human security as part of our education and development process that turns as into global and sustainable conscious citizens.

3. Society 5.0: Challenges to Education and Human Security

The development of human civilisation is linked to changing economic formations, and the current social and economic situation is influenced by how technology and innovation

* Kuhn, T. (1970). *The structure of scientific revolution*. Chicago: University of Chicago.

† Guba, E. (1990). *The Paradigm Dialog*. Sage Publication.

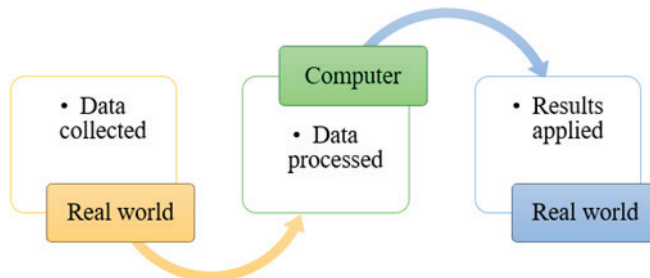
‡ Banich, M.,T., Compton, R., J.,(2018). *Cognitive neuroscience*. Cambridge: Cambridge University Press.

§ World Bank (2018) *World Development Report 2018: Learning to Realize Education’s Promise*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1096-1. License:Creative Commons Attribution CC BY 3.0 IGO

are used to help people in their daily lives and to advance society, not to replace the role of people. While interactions, interdependencies and interrelationships are facilitated by digital platforms of the fourth industrial revolution, we need to move forward in understanding how technology and innovation can foster human security. The era of Society 5.0 allows technology to create a new multidimensional learning environment. Our educational systems and models must integrate new values that eliminate social, age, gender, and language inequalities. Therefore, technology and innovation are expected to provide products and services specially designed for various needs to solve humanity's problems, such as social inequalities and security, ensuring that a clear contribution is made to improve the quality of people's lives.* As such, technologies and innovation can create optimal conditions for human security. We acknowledge that technology and innovation can also contribute to instability, conflict, and destruction, but this happens if education fails to provide adequate conditions for human interaction with innovation and technological progress.

Society 5.0 has been initiated by the Japanese government and has been conceived as a people-centred society that will ensure an equilibrium between economic development, social problems, and quality of life. The basic scheme of it is depicted in Figure 1 below, and it is built on the idea that computers and the results of process data taken from the real world are provided back to the real world.†

Figure 1. Society 5.0's Data Stream. Source: Deguchi et al. (2020)



Society 5.0 uses Artificial Intelligence (AI), the Internet of Things (IoT), Big Data, Autonomous Robots, Simulation, Horizontal and Vertical System Integration, Cybersecurity, the Cloud, and Augmented Reality (AR) to solve social problems. The primary purpose is to use and integrate digital systems in virtual and real space—a working environment that requires higher-order thinking skills, the acquisition of which is a challenge and an opportunity for society. The new working and learning environments offer unlimited possibilities to learners to improve their problem-solving, critical thinking and social creativity skills. The overall purpose is to enhance learning capacities that lead towards the development of the

* Tavares et al., 2022 Tavares, M. C., Azevedo, G., & Marques, R. P. (2022). The Challenges and Opportunities of Era 5.0 for a More Humanistic and Sustainable Society—A Literature Review. *Societies*, 12(6), Article 6. <https://doi.org/10.3390/soc12060149>.

† Deguchi, A., Hirai, C., Matsuoka, H., Nakano, T., Oshima, K., Tai, M., & Tani, S. (2020). What Is Society 5.0? In *Society 5.0: A People-centric Super-smart Society* (pp. 1–23). Springer. https://doi.org/10.1007/978-981-15-2989-4_1.

capital of the future.* The dynamics of the content and the range of diverse personalities of the learners represent real challenges in the metamorphosis circuit of the educational process. It is particularly important that trainers focus their preparation and vision on the future and the facilities offered by new digital technologies. An easy and beneficial way of engaging in the circularity of teaching-learning-research revolves around the competence to adapt the educational content, developed by technical support, and aimed at maximising and motivating the learning process. The strength of new IT tools and artificial intelligence can drive approaches that manage, transfer, and share knowledge from and to society. Education 5.0 is a response to the needs of Society 5.0 where humans and robots work together to find solutions, face problems, and identify innovative possibilities for current human life. Therefore, HEIs can respond to social needs through different types of community engagement, through living labs approaches, where science education and stakeholders interact to define and shape their research and education agenda. HEIs should support the research of a high social impact and open ways to social innovation that responds to public and private values and needs while keeping open lines with technologies, innovation, and social advancements.† To accomplish these goals, HEIs should focus on promoting transdisciplinary research that permeates the educational offerings. We need to work towards the integration of the tenets associated with multicultural and plurilingual societies that embrace collaboration and knowledge exchange through open and constructive dialogue within collaborative learning environments. Promoting transdisciplinary research between areas of cognitive interest of different scientific disciplines highlights the importance of an education that could provide solutions for human security. The educational system needs to evolve towards greater inclusion of people, increasing the need to create new learning systems that are flexible, inclusive, accessible, and adaptable for all. The design of new curricula focusing on the digital skills needed to ensure the effective and appropriate use of AI and the choice of responsible pedagogical initiatives in research and innovation can expand human capabilities on a larger scale, with the opportunity to transfer power to communities and people, as well as to institutions working to ensure human security. The transformation of education through technological advances gives substance to high expectations for a broad spectrum of intelligent applications to support and enhance human competencies, whether in direct interaction with learners or autonomously to perform tasks. In this way, it becomes one of the pillars of human security. All the described actions can be observed in Figure 2 and interpreted as insights into our vision of how we can articulate human security. At the core of our approach is the need to promote balanced learning, teaching and research environments that bring together technology and innovations where students can thrive as they advance their learning processes, while taking different roles as students-teachers-researchers. This is our vision of a circular pedagogy for higher education that can contribute to bringing educational innovations.‡.§

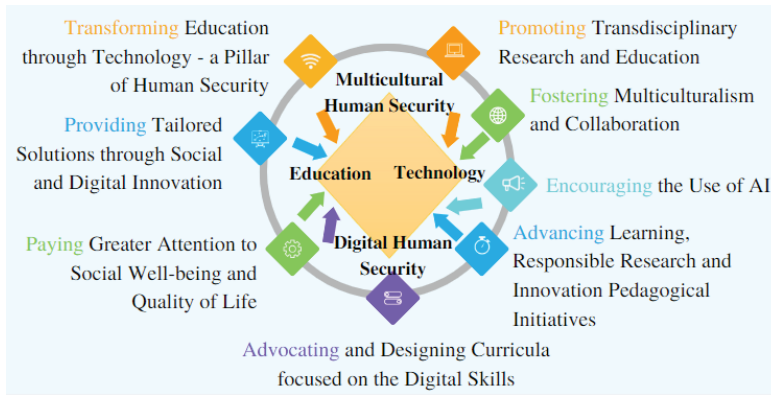
* Mytra, P., Wardawaty, W., Akmal, A., Kusnadi, K., & Rahmatullah, R. (2021, September 27). Society 5.0 in Education: Higher Order Thinking Skills. Proceedings of the 2nd Borobudur International Symposium on Humanities and Social Sciences, BIS-HSS 2020, 18 November 2020, Magelang, Central Java, Indonesia. <https://eudl.eu/doi/10.4108/eai.18-11-2020.2311812>

† Carayannis, E. G., & Morawska-Jancelewicz, J. (2022). The Futures of Europe: Society 5.0 and Industry 5.0 as Driving Forces of Future Universities. Journal of the Knowledge Economy. <https://doi.org/10.1007/s13132-021-00854-2>

‡ Pop, L., Barkoczi, N., Morales, L., Coetzer, J-H., Marian, C., and Flynn, P. (2022). Circular Pedagogy for Smart, Inclusive and Sustainable Education. EU+ ELaRA Working Paper Series. Available at: <https://unitar.org/sustainable-development-goals/peace/our-portfolio/research-publications>

§ Morales, L., Coetzer, J-H., Barkoczi, N., Pop, L., Marian, C., and Flynn, P. (2022). A Circular Pedagogy for Higher Education. Available at: <https://unitar.org/sustainable-development-goals/peace/our-portfolio/research-publications>

Figure 2: Educational actions for keeping pace with technological advancements to ensure human security. Source: Authors (2022)



This type of innovative pedagogical strategy would enable the learner to acquire the skills to adapt and embrace a changing environment, to create new sustainable values and services for the benefit and equilibrium of the entire society. Era 5.0 is concerned with how ideas will influence everything around institutions and societies, adding a more humane and sustainable vision to social processes. This new kind of society aims to put people at the heart of innovation, explore the impact of technology, and integrate technology to improve the quality of life, social responsibility, and sustainability. Moreover, it is crucial to identify commonalities with the sustainable development goals (SDGs) and how they can be framed around human security.

4. Humanity's Complex Interactions with Innovation and Technology – Implications for Human Security

Innovation is the foundation of a knowledge-based society, and higher education plays a pivotal role in generating innovative ideas and fostering a culture of innovation-oriented generation of graduates. HEIs' responsibility to learners, educators and society is to provide an environment where established knowledge is acquired and used in innovative ways to generate further innovation. However, intellectual property, patents, and ideas need to create an impact that leads to socio-economic development and stability. Consequently, HEIs have established technology transfer mechanisms to commercialise intellectual property as well as measures to widen their academic entrepreneurial practices. Once university technology transfer mechanisms are in place, university research can contribute to the creation of economic value. Technological inventions which have the potential to drive economic growth are more and more the result of research within or supported by HEIs. University technology transfer allows many tech-reliant companies to reduce their own internal research and development and learn more by collaborating with higher education through these technology transfer

mechanisms.* However, this path of academic entrepreneurship must be more ambitious, beyond economic gains, if it wishes to engage in societal change and contribute to human security by ensuring equitable access to innovation outcomes. Studies in innovation research in higher education highlight two streams: one that focuses on the concept of disruptive innovation and the second one which involves more pro-society innovation.†,‡ The first stream has been defined as research that leads to innovative products or services capitalising for monetary gains and disruptive innovations. Although they are ground-breaking and contribute to new technologies, they are mostly exploited for their economic value and are geared towards creating financial gains. A different stream of research has emerged where innovation can be harnessed to solve pressing societal challenges and to find solutions to use technology to address specific societal objectives.§ In this view, academic entrepreneurship includes promoting not only patentable financial rewards generating innovative research but also innovation that leads to social welfare, human security, and positive societal development.¶

Universities are working towards more complex ways of building an entrepreneurial environment so that they can better deliver their mission of knowledge exchange in a broader sense.** With processes involved in transferring innovation from university research centres to society, the patent-centric linear model has been criticised for limiting the roles students can take in the process of knowledge creation and technology transfer. Collaborative models of innovative research, where students as additional stakeholders get involved, can lead to a more inclusive emerging academic ecosystem, reducing entry barriers for young scientists who consider engaging in technology transfer activities.†† Thus, universities contribute to innovation and the entrepreneurial environment, serving all stakeholders and positively impacting society. Viewed from the perspective of innovation created by research in HEIs, the complex interaction of technology and society can be harnessed to focus primarily on providing human security and inclusive and equitable development. It starts with reshaping the boundaries of academic staff and student roles so they can better contribute to the University's third mission and credit them as academic entrepreneurs. Existing research offers interesting insights that show that such reconceptualisation of academic entrepreneurship (AE) and university technology transfer would mean *demonstrating [that] social impact is becoming a key indicator for measuring AE performance as an important aspect of universities' third*

* Liang W., Scott Elrod, Daniel A. McFarland, and James Zou (2022). 'Systematic analysis of 50 years of Stanford University technology transfer and commercialization' Patterns 3, 1-9. <https://doi.org/10.1016/j.patter.2022.100584>.

† Boni, A. A., Cunningham, T., & Sloat, J. M. (2018). 'Bridging theory and practice for commercialization and innovation e a market-centered perspective for cross-industry applications'. *Journal of Commercial Biotechnology*, 24(1), 7-36. <https://doi.org/10.5912/jcb850>

‡ Algieri, B., Aquino, A., & Succurro, M. (2013). 'Technology transfer offices and academic spin-off creation: the case of Italy'. *The Journal of Technology Transfer*, 38(4), 382-400. <https://doi.org/10.1007/s10961-011-9241-8>

§ Franco-Leal, N., et al. (2020). 'The role of social and institutional contexts in social innovations of Spanish academic spinoffs'. *Sustainability*, 12(3), 1-24. <https://doi.org/10.3390/su12030906>

¶ Abreu, M., & Grinevich, V. (2013). 'The nature of academic entrepreneurship in the UK: widening the focus on entrepreneurial activities', *Research Policy* 42(2), 408-422. <https://doi.org/10.1016/j.respol.2012.10.005>.

** Amry D.K., A.J. Ahmad and D. Lu (2021). 'The new inclusive role of university technology transfer: Setting an agenda for further research'. *International Journal of Innovation Studies* 5, 9-22. <https://doi.org/10.1016/j.ijis.2021.02.001>

†† Giones, F., Kari, K., and Silke, T. (2022). 'Students as scientists' copilots at the onset of technology transfer: a two way learning process'. *The Journal of Technology Transfer* 47, 1373-1394. <https://doi.org/10.1007/s10961-021-09880-3>.

mission.* Moreover, they state that by including more innovations that are perhaps less patentable and, hence, financially less interesting in the mainstream university technology transfer, *university research of all types can result in societal-based innovations that will lead to increased social value*.† Therefore, there is a need to recognize the importance of involving multiple stakeholders in the existing academic entrepreneurship and technology transfer models. With academic staff and students at one end of the innovation creation process and the users at the other, universities are well placed to best contribute to societal changes. The user-stakeholders should not be seen only as passive recipients of university innovation but rather as co-creators and partners in a *meaningful dialogue about potential hazards arising from new science and technology*.‡

“More efforts are required to promote the value of education and the importance of taking the United Nations 2030 Agenda seriously if we wish to enhance peace, minimise conflict and support the transformation of our societies.”

5. Conclusions and Critical Reflections

Overall, the world’s political and economic agendas are a primary source of instability. We must turn our eyes towards education to help us better understand how we can navigate the challenges associated with the human security paradigm. Overall, human security is based on the fundamental recognition of people’s different capacities, needs and circumstances to develop their lives and participate in civil society and governments. As such, we must understand the dynamics and complexities associated with the learning process. Only in this way, we will be able to understand how we can engage in the development and implementation of participatory solutions that protect and empower all people as change agents that embrace human security at the core of their activities and secure their personal development. Unfortunately, our educational models are not upto the challenge. We urgently need innovative pedagogies that embed the stated human security principles and the UN 2030 Sustainable Development Goals (SDGs) from an actionable paradigm. Our students live in a connected society but are not equipped with the necessary skills to be active drivers of change. On a positive front, education has begun to reconfigure itself on the dynamics of society. To some extent, the educational environment is adopting initiatives that have arisen from technological changes that capture attention, connect people, and develop more skills playing an essential role in promoting and strengthening the culture of human security. Our educators and educational leaders must be able to bring together the academic and research community to emphasise the central objective of pedagogy within higher education

* Abreu, M., Demirel, P., Grinevich, V. (2016) ‘Entrepreneurial practices in research-intensive and teaching-led universities’. *Small Business Economics* 47, 695–717. <https://doi.org/10.1007/s11187-016-9754-5>.

† (idem)

‡ (idem)

by acknowledging the significance of human security and its implementation in learning curriculums. The academic and research community need to take a more active role in contributing to a world free from fear and violence. More efforts are required to promote the value of education and the importance of taking the United Nations 2030 Agenda seriously if we wish to enhance peace, minimise conflict and support the transformation of our societies. There is no question regarding the economic and political implications of implementing the ambitious SDGs. Still, the world's inability to take the agenda seriously endangers our ability to co-exist and live in more balanced and equitable societies. As a result, we are on a path towards a significant increase in uncertainty resulting in human insecurity that can be readdressed by devoting more attention to our educational models and pedagogies guided by science, technology, and innovation.

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Human Security, Culture and Protection of Humanity's Heritage

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Abstract

WAAS should be credited for its contribution to promoting integrated, multidisciplinary approaches to tackling global problems, emphasizing the importance of science, education and culture in their entirety, and recognising their close interdependence and interconnection. In the Millennium Development Goals and in the Human Development concept before, there was one missing link—the recognition of culture and heritage protection as critical for human development. This recognition was finally made in 2015 with the adoption of the UN Agenda 2030, which emphasized that while safeguarding and promotion of heritage and culture is an end in itself, at the same time it contributes directly to many of the SDGs—safe and sustainable cities, decent work and economic growth, reducing inequalities, protecting the environment, promoting gender equality, peaceful and inclusive societies. It represents a true shift in the understanding of how much the issues of identity and belonging, diversity, culture and heritage are critical for sustainable development. The launch of the campaign on Human Security for ALL with the support of UNTFHS goes to the heart of such an understanding and approach. Placing culture at the heart of development policies does not mean to confine and fix it in a conservative way, but on the contrary—to invest in the potential of local resources, knowledge, skills and materials to foster creativity and sustainable progress. Recognition and respect for the diversity of cultures also creates the conditions for mutual understanding, dialogue and peace.

Concern with the issue of human security runs indeed throughout the history of the World Academy of Art and Science. For more than 60 years, the Academy has served as a global platform for intellectual debate, fostering partnerships, encouraging the creation of knowledge and launching new global ideas—from the warning of the imminent danger of catastrophic nuclear war, to the existential threat of climate change and the environmental degradation, and today, the Human Security for All campaign.

In the last few decades, WAAS has influenced immensely the shift in understanding development beyond economic growth, expanding the richness of human life rather than simply the richness of the economy. Thus, WAAS's advocacy for focusing on people, their opportunities and choices as a measurement of humanity's progress, is a critical and timely idea. It was first embraced by the United Nations, which resulted in the publication of the Human Development Reports in the 90s and which subsequently led to the launching of the Human Development Index.

WAAS has been strongly engaged in supporting the elaboration and the adoption of the UN Agenda for Sustainable Development 2030, which has been a new major step forward in the deeper and comprehensive understanding of human development and human security that represents a true blueprint for the future of humanity and the planet.

The current crises of unprecedented intensity—the COVID-19, the war in Ukraine and the climate change—brought about the imperative to mobilise decision-makers, institutions and the general public around the world to promote a comprehensive, integrated, person-centred approach to enhance the security, human rights and sustainable development of people everywhere and to address all critical issues confronting the world today, including peace, human rights, inequality, health, food, education, jobs, safe communities and personal safety, energy, pollution, biodiversity and, of course, climate change.

Such a highly humanistic approach, which has marked the history of WAAS, cannot be implemented and consequently achieved without taking seriously cultural approaches that respect diversity and the common heritage of humanity, deeply rooted in the respect and the knowledge of other societies and cultures.

This is the idea of humanism, expressed by the spirit of Ubuntu, “human kindness” in the African language and the culture Bantu, by Confucius, by the 19th century Indian humanist Swami Vivekananda, and so many others.

Humanism is also the conviction that every woman and man can become everything they aspire to—what Michel de Montaigne, the French Renaissance thinker, called “*la hauteur extrême de l’humaine nature*”, “the highest expression of human nature”. But although it seems individualistic, it is at the same time a belief in a single humanity, embodied by each and all of us.

In his novel “Anthills of the Savannah”, the late Nigerian writer Chinua Achebe wrote:

“You must find a way to accept something, however small, from the other to make you whole”—a wonderful way of expressing our common humanity.

A similar humanist conviction guides UNESCO, the UN Agency that was forged with the belief that peace must be defended by new ways, ways that start in the minds of women and men. This is as relevant now as it was in 1945, the year of its creation. And even more relevant today during the current multiple crises with unprecedented consequences—political, economic, social, humanitarian and ethical.

The need for “a human security approach” is an expression of the same humanistic approach, which is more than urgent today, when decades of efforts to reach and implement important international agreements are under threat of getting lost—the Agenda for Sustainable Development 2030 and the Paris Climate Agreement.

During the last session of the UN General Assembly, the UNSG António Guterres launched an alarming alert—the world may be going back almost 25 years in its development and many achievements will be pushed back. The multiple crises show once again how

interdependent the world is today and how much humanity needs multilateral platforms to look for common solutions. They have served as a wake-up call for putting human security and wellbeing to the forefront of public policies, for investing in people, in economies and societies so they become cleaner, greener, healthier, safer and more resilient.

In the Millennium Development Goals and in the Human Development concept before, there was one missing link—the recognition of culture and heritage protection as a critical link for human development. This recognition was finally made in 2015 with the adoption of the UN Agenda 2030, where Goal 11 on inclusive, resilient and sustainable urban development, calls for strengthening efforts to protect and safeguard the world's cultural and natural heritage.

WAAS should also be credited with its contribution to promoting integrated, multidisciplinary approaches to tackling global problems, emphasizing the importance of science, education and culture in their entirety, in recognising their close interdependence and interconnection.

UNESCO's strong advocacy in the run-up to the adoption of the UN Agenda for Sustainable Development in 2015, brought about a historic result—culture was integrated for the first time in such an important strategic vision for the planet and humanity. Agenda 2030 emphasized that while safeguarding and promotion of heritage and culture is an end in itself, at the same time it contributes directly to many of the SDGs—safe and sustainable cities, decent work and economic growth, reducing inequalities, protecting the environment, promoting gender equality, peaceful and inclusive societies. It represents thus a true shift in the understanding of how much the issues of identity and belonging, diversity, culture and heritage are critical for sustainable development.

I have always insisted that if the purpose of the Agenda 2030 for Sustainable Development is an agenda of the people, by the people and for the people, then culture and heritage should play a central role. All the more, the SDGs enshrine a conceptual shift in thinking about development beyond economic growth—envisioning a desirable future that is equitable, inclusive, peaceful, and environmentally sustainable.

Our notion of culture has broadened significantly over the decades. The 2001 UNESCO Universal Declaration on Cultural Diversity compellingly states that “cultural diversity widens the range of options open to everyone and that it is one of the roots of development, understood not simply in terms of economic growth, but also as a means to achieve a more satisfactory intellectual, moral and spiritual existence.”

Today, a comprehensive set of International Conventions protects every kind of tangible and intangible cultural heritage and the diversity of cultural expressions:

- 1954 Protection of Cultural Property in the event of Armed Conflict
- 1970 Fighting Against Illicit Trafficking of Cultural Property
- 1972 Protection of World's Cultural and Natural Heritage
- 2001 Protection of Underwater Cultural Heritage

- 2003 Safeguarding the Intangible Cultural Heritage
- 2005 Protection and Promotion of the Diversity of Cultural Expressions

These Conventions represent a solid basis for understanding the role of culture and heritage in the contemporary world. Balancing the benefits of integrating into a globalized world against protecting the uniqueness of local culture requires a careful approach. Placing culture at the heart of development policies does not mean to confine and fix it in a conservative way, but on the contrary to invest in the potential of local resources, knowledge, skills and materials to foster creativity and sustainable progress. Recognition and respect for the diversity of cultures also create the conditions for mutual understanding, dialogue and peace.

“Protection of culture and heritage is vital for ensuring human security in all its multifaceted dimensions.”

The launching of the WAAS-UNTFHS campaign on Human Security goes into the heart of such an understanding and approach. All the more, it coincides with an important anniversary—50 years since the adoption of the UNESCO Convention on the Protection of the World’s Natural and Cultural Heritage—one of the most visionary and transformative ideas of the last century.

Culture and heritage are not about bricks and stones—they are about identities and belonging, it is about humanity’s diversity, and it gains meaning when it is inscribed in the lives of people and local communities. It is our bridge from the past to the future. It is also a tool for reconciliation in many parts of the world today. Heritage can give confidence and help reconcile individuals with a globalizing world. Heritage is about the past as much as it is about the future.

This is the meaning of the 1972 UNESCO Convention on the Protection of the World’s Cultural and Natural Heritage, based on the respect and recognition of the “outstanding universal value” of monuments, sites, temples, historic cities and landscapes that embrace all the diversity of humanity. Cultural heritage is our most democratic resource and every time it is destroyed, a precious link with our past, our history and our identity disappears.

As the Cambridge University Heritage Research Centre rightfully states:

“Where history is the study of the past, heritage is the many ways the past is used in the present. Heritage can be understood as an active, dynamic relationship between then and now, formed through an on-going process of renegotiation, reconstruction, and recreation of what we choose to take from the past with us into the future.”

Today, the World Heritage Convention, with its 193 States Parties, is a universally ratified International Convention. As of 2022, there are 1154 sites in 167 countries on the World

Heritage List, which is an open book of humanity's diversity, of creativity, of memory, of aesthetics and of imagination.

Many of the sites on the World Heritage List teach us a lesson—there is no “pure culture”, no culture has ever flourished in isolation. In the long thread of history, cultures have always mingled, enriched and influenced each other, flowing into the same river of human civilization.

There is a very fine line between pride in one's culture and intolerance towards what is different. And in order to walk on this fine line, we need understanding and knowledge about the other. Many of the answers come through education.

This requires education systems founded on inclusive principles that combat stereotypes and prejudice. We need to foster education for cultural literacy, education for mutual respect and international understanding. We need to foster Global Citizenship Education that UNESCO included in SDG 4 on Equitable, Inclusive and Quality Education and Life-Long Learning for All.

Against this background, one of the answers to the global challenges today is the urgent need to promote the field of humanities. It is through humanities, unfortunately neglected for quite a long time, that we understand the social transformation of our societies and the way to manage it for the benefit of all, it is through humanities that we understand and get to know the history of others, it is through humanities that we understand better the challenges of globalization, it is through humanities that we can understand and embrace cultural diversity as a strength and not as a threat, it is through humanities that we can foster new global citizenship in an era of diversity. And last, but not least, it is through humanities that we can understand and find the right answers to the challenges of how to bridge the gap of inequalities.

Teaching philosophy or history or arts is fundamental for the opening of young minds towards the diversity and the “other”. It is the constant challenge of the present that can make it difficult to imagine and reinvent the future. A book can or a lesson of history or philosophy may change the perception of the world, may instil empathy and the sense of belonging. Knowing one's own history, culture and heritage creates a sense of belonging. Knowing others' history, culture and heritage creates a sense of “sharing” and solidarity.

There are many challenges today when it comes to the protection of heritage—unsustainable urbanization and mass tourism, natural disasters, lack of capacities and funding to preserve heritage. There is a need to forge new funding models, new management approaches, new ways to ensure that all actors, especially local communities, feel responsible for the collective preservation of cultural heritage. We need to share best practices to protect monuments as well as complex properties including cultural landscapes, historic cities and transboundary sites.

But two among these threats are of particular importance—conflict and climate change. And both are highly relevant to the all-embracing concept of human security.

We have all seen in recent years how heritage came to the frontline of “modern” conflicts by extremists in Mali, Syria and Iraq, who operated with the aim of erasing histories and identities. Bamiyan Buddhas, Palmyra, Mosul, the mausoleums of Timbuktu bear the scars of deliberate and barbaric attacks. Looting of sites and illicit trafficking of antiquities deplete people and communities of their identities. We have come to understand better that attacks against culture are attacks against the very identity of communities and peoples. They lead to devastation that can be irreparable, making reconciliation all the more difficult.

“By launching the Human Security for All campaign, WAAS is again true to its ideals of stirring intellectual, humanistic and academic debate about human development in a world of profound change, and also in making a strong case in the understanding that human security is about preservation of the common heritage of humanity, respect for diversity and promotion of culture.”

We have seen also how much cultural heritage is vital for peace, for reconciliation, social transformation and part and parcel of efforts to safeguard peace. Often the first victim of war, culture can restore ties that have been broken. Because culture heals, protecting cultural heritage is not a luxury that can be left for better days.

When a World Heritage site is destroyed anywhere in the world, we are all diminished, even if it is from another region, another period, another culture, or another religion.

When we visit a World Heritage site anywhere in the world—in Jerusalem or Istanbul, from the streets of Warsaw to the mountains of the Machu Picchu—we see how cultures influence each other, how they are irresistibly intertwined. We must show how all cultures are intertwined, how all have been enriched by mutual exchange, fashioning complex identities, and producing multiple sources of belonging.

Protecting heritage in conflict requires thinking and acting outside the “culture box” by building broad coalitions, by connecting the dots between humanitarian, security and cultural imperatives which is what is needed today. The adoption by the UN Security Council of several Resolutions on the link between peace, security and the protection of heritage, most particularly Resolution 2347 of March 2017, made history. No doubt this was a landmark decision as it recognised for the first time that safeguarding heritage and diversity are key to maintaining peace and security, that they heal and reconcile and give confidence to people. Thus, protection of culture and heritage is vital for ensuring human security in all its multifaceted dimensions.

And the second major threat to heritage protection is climate change. In recent years, it has been recognised by the World Heritage Committee and by the expert community as the fastest growing threat to World Heritage. When the UNESCO Convention on the Protection

of Cultural and Natural Heritage was adopted, there was no knowledge about the link between the climate change and World Heritage preservation.

According to UNESCO, “Climate change is a defining issue of our time, and among the greatest threats facing cultural and natural heritage today. One in three natural sites and one in six cultural heritage sites are currently threatened by climate change. In recent months and years, we have seen cultural and natural heritage sites, including many UNESCO World Heritage sites, threatened by wildfires, floods, storms and mass-bleaching events, among many climate change-related impacts. We have also seen how climate change puts cities and living heritage – oral traditions, social practices, festive events and traditional knowledge – at risk. As climate change leads to displacement and forced migration, entire ways of life risk being lost forever”.

The striking examples of Venice, the Great Barrier Reef, Yellowstone and other iconic World Heritage sites, ring the alarm of the extent of the threat. Natural World Heritage sites are not just iconic places with exceptional nature, they also provide benefits that contribute to human wellbeing. They include very large areas: the 241 sites listed for their natural values account for 8% of the total surface covered by all 230,000 protected areas worldwide. Large sites with wilderness values include iconic places such as the Galapagos Islands in Ecuador, Yellowstone National Park in the USA and the Okavango Delta in Botswana, the Great Barrier Reef are providing nature-based solutions to climate change.

Natural World Heritage sites contribute to global climate stability by storing significant amounts of carbon. Forests found in World Heritage Sites in the tropics store 5.7 billion tons of carbon. Two thirds of natural sites inscribed on the UNESCO World Heritage List are crucial water sources and about half prevent natural disasters such as floods or landslides.

Albeit all these compelling facts, culture still is the missing link in the climate debate. There was some progress at the last COP 27 in Sharm-el-Sheikh in recognising the link between culture and heritage and adaptation, loss and damage and urban climate action. The conclusions admitted that, filling this gap can help get back on track a global system of climate policy and deliver transformative adaptation, especially for the most vulnerable.

By launching the Human Security for All campaign, WAAS is again true to its ideals of stirring intellectual, humanistic and academic debate about human development in a world of profound change, and also in making a strong case in the understanding that human security is about preservation of the common heritage of humanity, respect for diversity and promotion of culture.

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Human Security: Concepts and Measurement

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Abstract

The notion of Human Security has regained traction in the public domain, mostly following the disruptive impact of the global pandemic and the geopolitical tensions in Eastern Europe. The concept, however, was molded during the second half of the twentieth century, as scholars, policy makers and the public became ever more disillusioned with the focus on national security that dominated the public domain. The pressing issues of climate change, health challenges and human rights violations in the 21st century have resulted in elevated policy attention and resources for these issues in the form of targeted reports, concepts, metrics, empirical and theoretical research. The introduction, monitoring and implementation of the SDGs within the UN 2030 Agenda are inherently related to the concept of Human Security and its components. This paper attempts to briefly present the various metrics and reports germane to Human Security. We undertake a general-to-specific approach to identify the measures, variables, and indicators, which are relevant to the concept of Human Security and its sub-categories. These variables and indicators derive from selected Indicators and Trends from UNHDR, Fragile States Index (FFP), Corruption Perception Index (Transparency International), Biodiversity Habitat Index and CO₂ exposure (Environmental Performance Index), Ecological Threat Index (Institute for Economics and Peace) and Healthy Life Expectancy (WHO). Then, we conceptually map the indicators to the measurement and implementation of the Sustainable Development Goals (SDGs) using data available from the UN SDSN Sustainable Development Report.

1. Introduction

The notion of Human Security has regained traction in the public domain, mostly following the disruptive impact of the global pandemic and the geopolitical tensions in Eastern Europe. The concept, however, was molded during the second half of the twentieth century, as scholars, policy makers and the public became ever more disillusioned with the focus on national security that dominated the public domain. The concept of 'Human Security' marks a paradigm shift generalising wellbeing at the national level to analysing the wellbeing of individuals by extending the scope beyond physical violence and destruction (Gasper, 2008). Given the multifaceted nature of the concept there is no consensus on the definition of Human Security, which is often a source of criticism of the concept.

According to the UNDP *Human Development Report* (1994) Human Security encompasses the broader concepts of: “freedom from want” and “freedom from fear”. More specifically, the report states that: “Human Security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, disease, and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life—whether in homes, in jobs or in communities.” Such threats can exist at all levels of national income and development. According to former UN Secretary Kofi Annan “Human Security, in its broadest sense, embraces far more than the absence of violent conflict. It encompasses human rights, good governance, access to education and healthcare and ensuring that each individual has opportunities and choices to fulfill his or her potential. Every step in this direction is also a step towards reducing poverty, achieving economic growth, and preventing conflict. Freedom from want, freedom from fear, and the freedom of future generations to inherit a healthy natural environment—these are the interrelated building blocks of human—and therefore national-security.”* In their seminal contribution, MacFarlane and Y. F. Khong (2006) underscore that the concept has placed human beings at the core of security and removed the state’s privilege over the individual and has emphasized the human-centric impact of violent conflict. The concept of Human Security is not spared of criticism. A recurring theme among the critics is that the notion of Human Security lacks the necessary clarity and precision in order to constitute a meaningful concept amenable to measuring and policy targeting.† In addition to being vague, the concept is also criticized for giving equal weightage to different aspects of insecurity and threat, thus dividing the attention of policy makers.

The paper attempts to briefly present the various metrics and reports germane to Human Security. We undertake a general-to-specific approach to identify the measures, variables and indicators which are relevant to the concept of Human Security and its sub-categories. These variables and indicators derive from selected Indicators and Trends from UNHDR, Fragile States Index (FFI), Corruption Perception Index (Transparency International), Biodiversity Habitat Index and CO₂ exposure (EPI), Ecological Threat Index (IEP) and Healthy Life Expectancy (WHO). Then, we conceptually map the aforementioned indicators to the measurement and implementation of the Sustainable Development Goals (SDGs) using data available from the UN SDSN Sustainable Development Report. The next section summarizes the basic concepts of Human Security and the relevant metrics, whereas section 3 briefly summarizes the trends in key indicators for Human Security. Section 4 links the metrics and reports on Human Security to the specific variables measuring progress on SDGs while the final section is the conclusion.

2. Concepts of Human Security, Measures and Publications

2.1. Human Security

According to the Human Development Report (UNDP, 1994), often cited as the original source of the contemporary use of Human Security, as a term (see also Fukuda-Parr &

* Kofi Annan. “Secretary-General Salutes International Workshop on Human Security in Mongolia.” Two-Day Session in Ulaanbaatar, May 8-10, 2000. Press Release SG/SM/7382. <https://press.un.org/en/2000/20000508.sgsm7382.doc.html> 08/27/01

† A prominent example of this literature is Paris (2001) ‘Human Security: Paradigm Shift or Hot Air?’

Messino, 2012). “Human Security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, disease, and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life—whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development.” (UNDP, 1994, p.23)

The report identifies seven classifications of the concept of Human Security, namely:

- i. **Economic Security:** the assured basic livelihood derived from work, public and environmental resources, or reliable social safety nets
- ii. **Food Security:** ready physical and economic access to basic food
- iii. **Health Security:** access to personal healthcare and protective public health regimens
- iv. **Environmental Security:** safety from natural disasters and resource scarcity attendant upon environmental degradation
- v. **Personal Security:** physical safety from violent conflict, human rights abuses, domestic violence, crime, child abuse, and self-inflicted violence as in drug abuse
- vi. **Community Security:** safety from oppressive community practices and from ethnic conflict
- vii. **Political Security:** freedom from state oppression and abuses of human rights

The pressing issues of climate change, health challenges and human rights violations in the 21st century have resulted in elevated policy attention and resources for these issues in the form of targeted reports, concepts, metrics, empirical and theoretical research. The flagship United Nations report on this topic is the annual *Human Development Report* from the United Nations Development Program (UNDP) that commenced in 1994 and is materially linked to Human Security. The report introduced the Human Development Index (HDI), which aims to measure development as the realization of human capabilities inspired by the work of Nobel laureate Amartya Sen. The index was built in order to complement GDP per capita as the sole indicator of economic development and includes the dimensions of leading a healthy life and being knowledgeable on top of standards of living and the HDI is the geometric mean of the three dimensions.* The HDI has been used extensively and has contributed to the distinction between development and growth by broadening the concept of development tailored to human needs. Nonetheless, it is not a direct measure of Human Security *per se* and is best considered within a wider range of indicators and variables.

A recent publication by the UNDP is the Special Report *New threats to Human Security in the Anthropocene – Demanding greater solidarity*, which revisits the global threats to Human Security after the pandemic and the violent conflicts of the past two years to emphasize not only on the need to focus on individual security but also on the interconnected nature of threats to Human Security. In relevance to human development, the report underscores that

* The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita.

the HDI is significantly negatively correlated to the Index of Perceived Human Insecurity (I-PHI).^{*} In the same vein the World Economic Forum's (WEF) *Global Risks Report* deploys a holistic approach to Human Security by addressing issues of economic, environmental, technological, societal, and geopolitical risk and scrutinizes the findings of the *Global Risks Perception Survey (GRPS)*.

The concept of Human Security is directly linked to the global progress towards the implementation of the Sustainable Development Goals as stemming from the *2030 Agenda for Sustainable Development*, adopted by all United Nations Member States in 2015. To this end, the *Sustainable Development Report (SDR)* published yearly by the United Nations Sustainable Development Solutions Network (UN SDSN) encompasses many concepts, measures and indicators which are in concordance with the notion of Human Security. The SDR collects and reports data on 185 variables covering all 17 SDGs and provides a composite index measuring the overall SDG score at the country and regional level. It also computes comparable scoring indices for each of the 17 goals and assesses the progress towards each goal by utilizing a "traffic light" color scheme (green, yellow, orange, and red arrows).

Despite the fact that many relevant reports cover a broad range of concepts and variables germane to Human Security, it is useful to look at targeted research on the 7 aspects of Human Security as defined above (UNDP, 1994).

2.1.1. Economic Security

Dire living conditions and material deprivations are undisputed threats to Human Security and are at the epicenter of any research or policy effort to address the issue. The aforementioned UNDP *Human Development Report* and UN SDSN *Sustainable Development Report* include measures and approaches pertaining to economic security. Nonetheless, a more nuanced approach is taken in UNCTAD's *World Economic Situation and Prospects* which outlines the policy initiatives and growth prospects around the globe with a focus on the implications for the developing world in terms of trade, employment, and cost of living. The UNDP *Global Multidimensional Poverty Index (MPI)* departs from the traditional concept of monetary poverty as measured by certain global or national income and wealth thresholds. The index is calculated by constructing a deprivation profile for each household and person in that it monitors deprivations in 10 indicators spanning health, education and standard of living.[†] The multiple dimensions of poverty and material deprivation are addressed in the *Living Conditions in Europe* by Eurostat, albeit at the European level. The report provides a bevy of variables and indicators that are not irrelevant to Human Security since they cover thematic areas such as income poverty, material deprivation, and housing quality and affordability across the EU.

2.1.2. Food Security

Regarding the dimension of food security, the Food and Agricultural Organization of

^{*} The indicator is compiled by the World Values Survey and consists of three dimensions, namely fear of violent conflict, socioeconomic insecurity, and personal and community insecurity, covering a total of 17 variables.

[†] Health dimension accounts for nutrition and child mortality, the education dimension includes years of schooling and school attendance, and the standard of living dimension includes data on cooking fuels, sanitation, drinking water, electricity, housing, and financial assets.

the United Nations (UNFAO) covers the topic through its annual flagship *The State of Food Security and Nutrition in the World* report, which tracks global progress towards alleviating hunger, food insecurity and malnutrition in all its forms. The report tracks hunger and malnutrition with the construction of indicators on the prevalence of undernourishment (measuring dietary energy consumption) and assesses food insecurity based on the lack of access to food for a household member due to monetary or other reasons (utilizing data from households using the Food Insecurity Experience Scale survey module). Having said that, the World Food Program published the *Global Report on Food Crises* in 2022. The report, published by the Global Network against Food Crises, identifies the forces behind food insecurity in 53 developing economies where the severity of the food crisis exceeds the local resources and capacities and analyzes the impact on malnutrition and health outcomes as a result.

2.1.3. Health Security

Although health issues are directly related to material deprivation, armed conflict, hunger and environmental degradation, specific indicators directly capture the concept of health security through the use of statistical data and projections. The *Living Conditions in Europe* report (Eurostat) includes measures of self-perceived health status for EU citizens, whereas health-related indicators and questionnaire items are included in the *Global Risks Perception Survey* from WEF. However, the most comprehensive data regarding issues attributed to health security comes from the World Health Organization (WHO). The annual *World Health Statistics Report* contains global data on health-related indicators from the SDG framework and selected *Thirteenth General Programme of Work* indicators. The most recent version (WHO, 2022) reports on 56 indicators relying both on primary data as well as comparable estimates for 194 countries.* The comprehensive statistical data cover topics from causes of death to access to healthcare, sanitation and health risks associated with human behaviour or natural disasters.

It must be noted that the concept of a healthy life is almost ubiquitous across the reports and research efforts focusing on Human Security and human development. Life expectancy as a measure of health and wellbeing is one of the pillars of the HDI and SDG 3 explicitly refers to “good health and wellbeing”, with the SDSN HDR providing cross-country statistics on 17 related indicators.

2.1.4. Environmental Security

The issue of environmental security has gained unprecedented traction following the immense impact of climate change and the material role attributed to climate policies over the past 30 years. It is explicitly mentioned in one of the SDGs (SDG 13) and also prevalent in SDG 6, SDG 14 and SDG 15. The most nuanced data can be accessed at Climate Action Tracker (CAT) along with a wide range of reports on the status of environmental resources, environmental policies, and projections. The data cover all sectors including industry, agriculture, transport, energy, and macroeconomic variables. The organization also uses a

* Comparable estimates are achieved by adjusting or modelling country data to allow comparisons across countries and over time (WHO, 2022).

methodology for assessing each country's progress towards the national net zero targets (for the countries committed to doing so in March 2022) by monitoring ten key elements of good practice that governments setting net zero targets should consider.*

An additional source of vital information on climate-related topics and their repercussions on Human Security is the *Environmental Performance Index (EPI)* and the accompanying report compiled by the Yale Center for Environmental Law & Policy and the Center for International Earth Science Information Network of the Columbia University. The composite index is calculated through the assessment of 40 performance indicators across 11 issue categories, covering countries' track record toward improving environmental health, protecting ecosystems and biodiversity, and mitigating climate change. The 180 participating countries are assigned individual scores with separate leaders and laggards in environmental performance and can be used to shape policies towards environmental resilience in the near future.

The *Ecological Threat Report* by the Institute for Economics & Peace (IEP) employs a holistic approach on ecological degradation as environmental adversities are considered in relation to the risks they pose to food security, population growth, and access to clean water at the national and regional level. The report highlights the multifaceted nature of Human Security and jointly assesses environmental and humanitarian risks and aims to create awareness of the cascading health, economic and societal challenges that will emerge unless well-designed action is taken. Finally, the *Global Biodiversity Outlook*, published by the UN Convention on Biological Diversity (CBD), focuses on the issue of biodiversity and the ecosystem services it provides. Through the underlining of the unprecedented decline in biodiversity, the report aims to pinpoint the bold actions required to shape pathways to a sustainable future.

2.1.5. Personal Security

The most clear-cut aspect of Human Security is personal security, that is meeting the basic need for an individual's wellbeing away from violence and conflict. Perhaps the most well-known indicator regarding personal security is the *Fragile States Index (FSI)* compiled by the Fund for Peace (FFP), which assesses the pressures that a state experiences in clear relation to the state's capacity to manage those pressures. The index works as a tool for policymakers to evaluate the coming political risk and acts as an early warning of conflict. The FFP deploys the Conflict Assessment System Tool (CAST) which combines information on quantitative data, qualitative reviews, and content analysis to calculate the composite and internationally comparable FSI. The Institute for Economics and Peace (IEP) provides data and information on personal security through the Global Terrorism Index (GTI) and the Global Peace Index (GPI), which are complemented by the respective annual reports. The GTI uses data from Terrorism Tracker and other sources and produces a composite score (scaled from zero to ten) where a higher score implies a greater terrorist threat. The GPI is composed of three sub-indicators which assign comparable scores to the concepts of

* National net zero targets vary with regards to the target year; what emissions and economic sectors are covered; whether the country intends to use reductions or removals outside its own borders; the role of carbon dioxide removals; whether the net zero target consists of two separate reduction and removal targets; governance and planning processes; and fairness considerations (CAT, 2022).

Societal Safety and Security, Ongoing Domestic and International Conflict and the degree of Militarization in each country. Finally, detailed information on violent conflict is provided in the rich set of datasets and visualizations from the Uppsala Conflict Data Program (UCDP). The data distinguish between one-sided state and non-state violence (Davies et al., 2022) and provide a benchmark on how armed conflicts should be measured.

2.1.6. Community Security

Oppression of minorities or certain community groups not just in the form of physical violence is the focus of a number of reports and is intrinsically related to the concept of community security. As discussed in the previous section, the Uppsala Conflict Data Program (UCDP) is a source of nuanced data on violent conflict and can be utilized to monitor the oppressive forces against minorities or ethnic groups. However, in the sense that community security is a broader concept pertaining to the assimilation and well-being of all society members, one can refer to resources such as Eurostat's *Migrant Integration Statistics*. The report provides comparable statistics on a set of indicators associated with human development and Human Security for EU countries according to the place of birth. These indicators depart from the issue of conflict and cover the areas that define human capabilities and positive peace such as integration in the labor market, social inclusion, active citizenship, access to healthcare and education. It is perhaps safe to say that community security is also about achieving the other six Human Security targets irrespective of the social group within the country or region. In the same vein the biannual OECD publication *Society at a Glance* includes detailed information on the evolution of social measures (education, employment, healthcare, social mobility) with the focus on groups with different demographic characteristics (women, single mothers, members of the LGBTQ community etc.). In addition, the organization produces the *Social Institutions and Gender Index (SIGI)*, which measures discriminatory social institutions across 4 dimensions: discrimination in the family, restricted physical integrity, restricted access to productive and financial resources, and restricted civil liberties.

2.1.7. Political Security

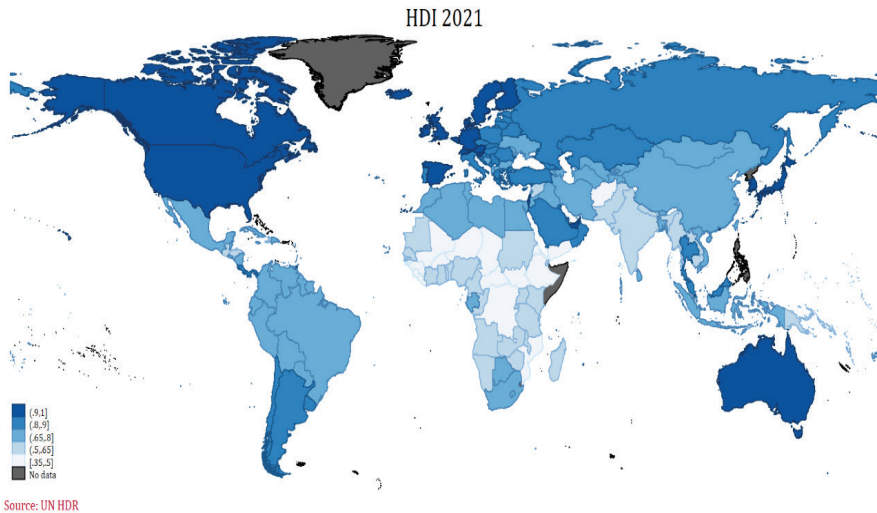
Political security is inherently connected to community and personal security by definition. Nonetheless, sound institutions and the quality of governance are also an integral part of wellbeing associated with political institutions. A traditional source of data on the topic is the *Worldwide Governance Indicators (WGI)* from the World Bank with comparable data from 1996. The indicators are constructed (on a -2.5–2.5 scale) based on 30 underlying variables and cover six dimensions, namely (i) Voice and Accountability, (ii) Political Stability and Absence of Violence/Terrorism, (iii) Government Effectiveness, (iv) Regulatory Quality, (v) Rule of Law, and (vi) Control of Corruption (Kaufmann et al., 2010). The data cover a representative range of pressing issues of political security and are useful for cross-country comparisons, however the evolution of these indicators is more evident on a long-run basis and is not amenable for year-to-year analysis. Political security is conceptually intertwined with democracy and representation in the political sphere. The *Varieties of Democracy Project (V-Dem)* collects and reports data on five high-level principles of democracy:

electoral, liberal, participatory, deliberative, and egalitarian. The annual flagship *Democracy Report* presents indicators on all five principles, which arguably correlate with the aspect of political security but are also tangent to community security. The Quality of Government (QoG) Institute provides more than 80 variables worldwide that cover issues of political freedom, freedom of speech, freedom of the press, economic inequality and many more (Dahlberg et al., 2022). Finally, the prevalence of corruption poses an infringement to the functioning of the government and ultimately threatens political (and community) security. Transparency International publishes the annual *Corruption Perception Index (CPI)* report based on surveys across all stakeholders to create comparable data for cross-country analysis and the evolution of corruption through time.

3. Selected Indicators and Trends

Given the preference for indicators and variables that are germane to Human Security, this section includes a brief overview of the ones most commonly used in empirical research and policy dialogues. According to the latest Human Development Report (UNHDR, 2021) cross country deviations persist and sub-Saharan African economies continue being laggards in the global context (Figure 1).

Figure 1: Human Development Index 2021

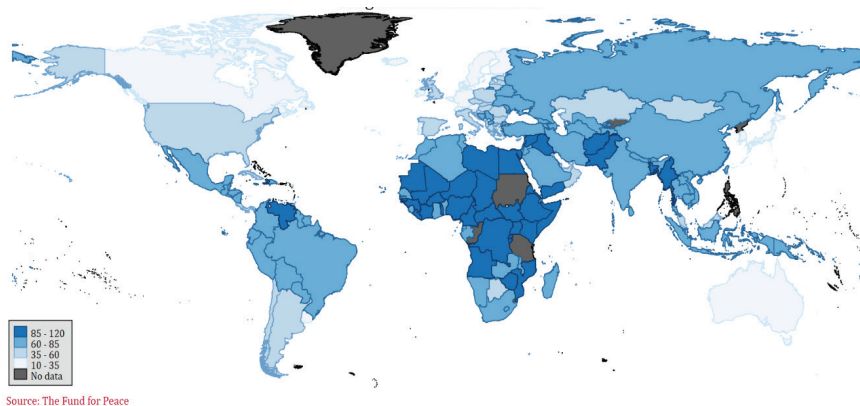


The slight majority of countries marked an improvement compared to 2020, overcoming the first year of the pandemic. Considerable variation is evident not only in GDP per capita, but also in average years of schooling (western economies exceed 12 years and sub-Saharan countries record less than five on average) and life expectancy (above 84 years in Australia, Japan, and Hong Kong and less than 55 in South Sudan, Central African Republic, and Lesotho). It is not worthy that some success stories in the front of economic growth are still lacking in providing their individuals the capabilities for development. Botswana and

Equatorial Guinea are 43 and 47 positions lower in rank when one considers HDI compared to GDP per capita.

The latest *Fragile States Index Report (FFP, 2022)* underscores that fragility is not given despite the rebound in economic activity in the vast majority of economies during 2021. The report raises concerns for personal security and Human Security in general by highlighting the sharp deterioration in countries like Myanmar, Afghanistan and Lebanon and also the worsening in advanced economies like the United States and Greece (Figure 2). The somewhat surprisingly worsening performance of the United States in the 2009-2021 period was driven to a great extent due to indicators referred to as State Apparatus, Fractionalized Elites and Group Grievance. The latter is evident in the growing polarization of the US society and the events in the Capitol in January 2021.*

Figure 2: *Fragile States Index 2020*



The global divergence in political security is perhaps best described by the cross-country deviation in the Corruption Perception Index. According to the 2021 data, the Nordic countries in Europe are on top of the list coupled with Singapore and New Zealand from the Asia Pacific region. There is only one entry from Sub Saharan Africa (Seychelles) and the Middle East and North Africa region (United Arab Emirates) among the top 25 performers, whereas only one member of the Eastern Europe and Central Asia region (Georgia) has a place in the first 50 countries in terms of tackling corruption. An issue to consider is not only the persistence of deviations across regions but also the steady or declining performance of laggard regions (Figure 3). In the 10 years between 2012 and 2021, SSA performance slightly deteriorated from a value of 33.4 to 32.5, whereas signs of improvement are starting to manifest in the ECA region. Finally, average regional performance can mask important variability as is the case for the Americas and Asia Pacific regions (Figure 4).

* The Fragile States Index is composed by 12 sub-indicators, divided in 5 categories. Category C includes the three dimensions discussed in this section.

Figure 3: Corruption Perception Index by Region 2012-2021

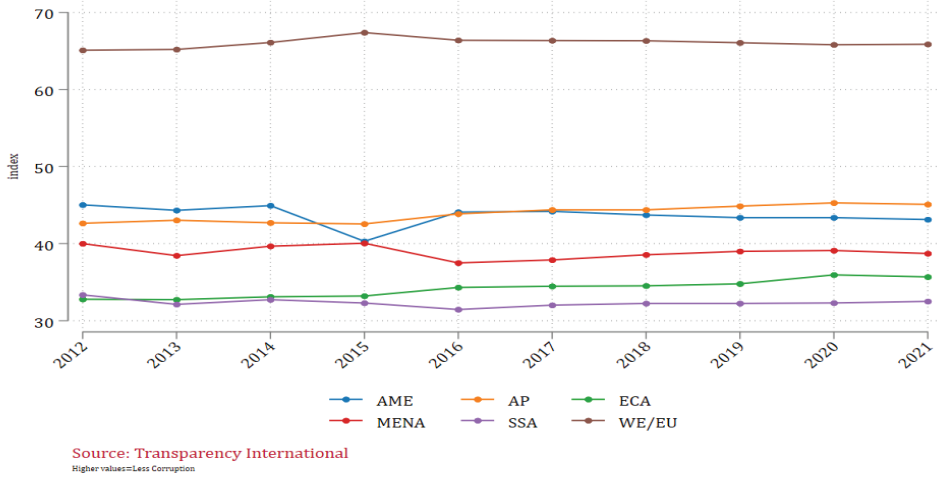


Figure 4: Corruption Perception Index by Country 2021



The World Health Organization provides a rich share of data on health security. Its healthy life expectancy (HALE) complements the life expectancy statistics reported (*inter alia*) in the HDR. Global life expectancy increased from 66.8 years in 2000 to 73.3 years in 2019, as did healthy life expectancy from 58.3 years to 63.7 years. As shown in Figure 5, global imbalances are ever present in the realm of healthy life expectancy underlining the threats to health security stemming from substantial inequalities in access to affordable health care, sanitation, and nutritional intake.* Food Security is intrinsically correlated with health security and patterns of risk across the globe are evident as can be seen in Figure 6. The Food Index component of the Ecological Threats Report (IEP, 2022) links the adverse impact of climate change with challenges for food security. The latest data indicate that the overwhelming majority of African countries faced substantial food insecurity in 2021 (a 4 or 5 score in the 5-digit scale).

Figure 5: Healthy Life Expectancy 2020

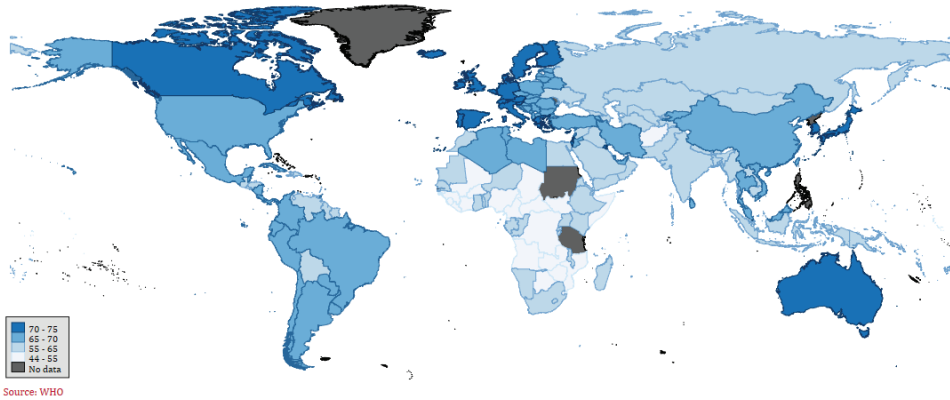
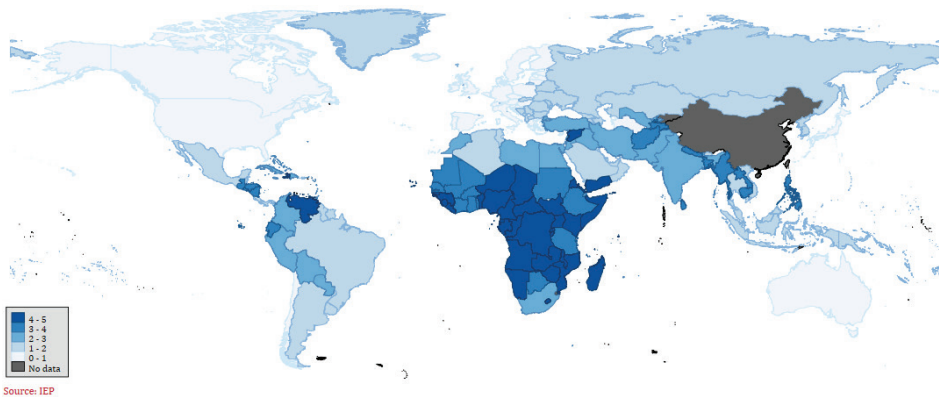


Figure 6: Ecological Threat - Food Index 2021



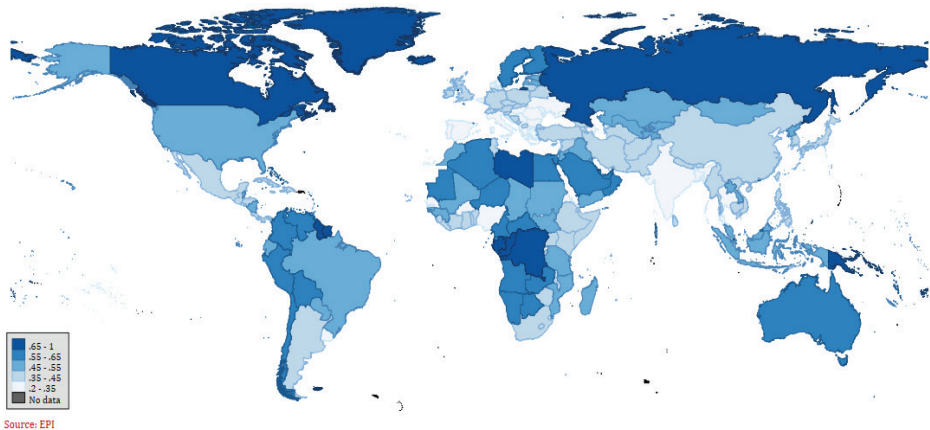
* The share of healthy life expectancy over life expectancy in total is to a large extent concentrated around 85%.

Environmental security is globally under attack and policy action has been underscored ever more in the COP meetings and enshrined in the Paris Agreement and the most recent developments of the European Green Deal and the Inflation Reduction Act in the USA.*†

“The advent of the SDGs has emboldened the importance of Human Security and human development rather than sidelining it.”

The EPI report and the accompanying in-depth data set monitor key variables and indicators pertaining to climate risks, climate adaptation and mitigation, and climate policies. Given the salience of biodiversity for environmental and health security, the report includes a Biodiversity Habitat Index (Figure 7).

Figure 7: Biodiversity Habitat Index 2020‡



According to the latest data the record on biodiversity targets is mixed since 10% of the world’s coastline and marine areas have been preserved, exceeding the Aichi Biodiversity Target 11, whereas the target of preserving 17% of terrestrial areas by 2020 was not met, million square kilometers of protections.

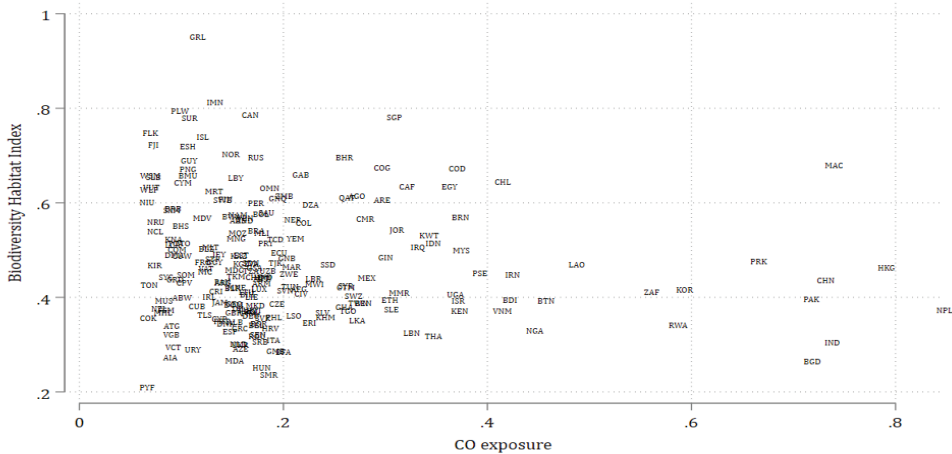
Figure 8 indicates that high-performing Asian economies face substantial risk to Human Security through the combination of substantial biodiversity losses and elevated exposure to CO emissions (bottom-right panel).

* A European Green Deal | European Commission https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

† Here’s what’s in the Inflation Reduction Act, the sweeping health and climate bill passed Sunday | The Hill <https://thehill.com/homenews/3592694-heres-whats-in-the-inflation-reduction-act-the-sweeping-health-and-climate-bill-passed-sunday/>

‡ Higher values indicate greater preservation of Biodiversity.

Figure 8: Biodiversity Index and CO Exposure 2020



Source: EPI

4. Human Security and SDG Implementation

As documented in the previous sections, the introduction, monitoring and implementation of the SDGs within the UN 2030 Agenda is inherently related to the concept of Human Security and its components (as defined by the 1994 HDR). Above all, the *Agenda 2030* is the bedrock for development policies that enable individuals and societies to be safe from violent conflict, hunger, multidimensional poverty, hunger, disease, and oppression for any minority or group. According to the *UN Trust Fund for Human Security* “Human Security serves as both an analytical lens and a programming framework that complements and enriches mechanisms to attain the SDGs. Human Security initiatives engage closely with people to uncover their specific needs and vulnerabilities, and advance policies and actions based on their priorities, resulting in sustainable development gains across and within countries.”* Crabtree and Gasper (2020) argue that the advent of the SDGs has emboldened the importance of Human Security and human development rather than sidelining it, as critics have argued. The authors underscore the improvement of the SDGs concept over prior developmental accords (for example the HDI and the Millennium Development Goals) through the prevalence of interdisciplinary cooperation over fragmentation and policy silos. It comes as no surprise that Koehler et al. (2012) had highlighted the need for the MDGs to be enriched to encompass the concept of Human Security, something that was achieved, to a great extent, three years after their publication.

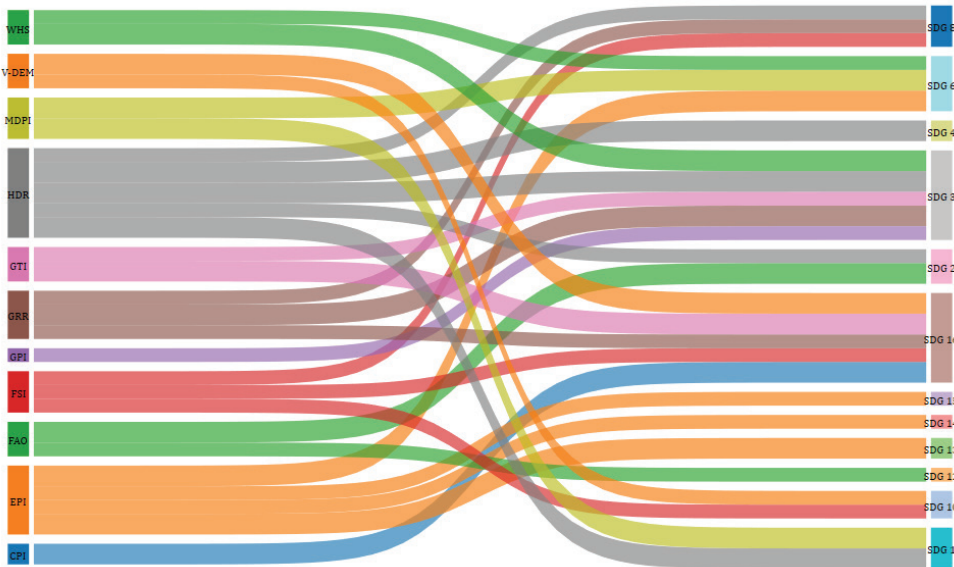
All the reports germane to Human Security and any of its components can be mapped against the 16 SDGs (leaving aside SDG 17—Partnerships to achieve the Goals).† In many

* <https://www.un.org/humansecurity/wp-content/uploads/2017/10/Human-Security-and-the-SDGs.pdf>.

† See Appendix Table 1 for a complete list of the SDGs.

cases, the reports explicitly refer to the SDGs monitored by their content and presented indicators. We attempt to conceptually map some of the flagship reports on the specific SDGs they cover, based on the methodology and specific indicators used in the UN SDSN *Sustainable Development Report*.^{*} Figure 9 proposes a conceptual mapping of the reports and resources for Human Security indicators to the 16 SDGs using self-calculated weights based on the salience of each goal in the respective report. For example, the HDR is associated (at least) with 5 goals, as it considers economic growth, educational attainment, and healthy life in the construction of the HDI. Given the multi-layered approach in the report, we also link it to SDG1 and SDG2, connecting human development to the goals of alleviating poverty and hunger. Following this primary, context-based approach we identify focused resources on Human Security, directly linked to a specific goal, such as the CPI associated with SDG16 and the GPI with SDG3. By contrast, the reports and data from the EPI offer a diverse set of concepts and indicators, which allows for the mapping of four distinct SDGs (Figure 9). The effect of the broader concept covered in some reports is depicted in the cases of both the *Multidimensional Poverty Report* and the *Fragile States Index*. It needs to be noted that the two linkages forged with the V-DEM node refer the institute’s *Democracy Report*, whereas the entirety of resources and indicators available in V-DEM can be associated to more than 5 SDGs.

Figure 9: Mapping Human Security Reports to SDGs



Source: Authors' Calculations

^{*} All reported indicators can be accessed at <https://dashboards.sdgindex.org/explorer>.

5. Concluding Remarks

Human Security is a multifaceted concept that encompasses the notions that matter for the well-being of individuals and the functioning of inclusive societies. Although there exists no single metric and this has been the main point of interdisciplinary critique, there is a battery of indicators, resources and publications that can help us assess the progress towards Human Security. This paper attempts to briefly describe some of them on the basis of relevance to the seven components of Human Security as defined by the United Nations Development Program (UN HDR, 1994). The information available to scholars and policymakers is in the form of hard data, composite indicators, reports, and projections and contributes to the balanced measurement of the progress and risks facing Human Security in a fashion which allows for cross-country comparisons and mapping of trajectories across time.

An important trait of the resources in Human Security is that they can be associated and linked with the Sustainable Development Goals and provide a useful tool in policy design towards transformation and sustainability. This paper introduces a preliminary approach to mapping the Human Security reports to specific SDGs using a conceptual methodology. Using advanced machine learning methods would allow us to form concrete linkages between individual data and indicators on Human Security to the seven classifications of Human Security and also to the 169 indicators underpinning the 17 SDGs.* This can provide a comprehensive set of interdependencies and trade-offs for the design and implementation of the SDGs without neglecting the tenets of Human Security and is definitely a very promising field for future research.

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* For a description of the proposed methodology see Koundouri et al. (2021).

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Appendix

Table 1: Sustainable Development Goals

SDG 1	No Poverty
SDG 2	Zero Hunger
SDG 3	Good Health and Well-being
SDG 4	Quality Education
SDG 5	Gender Equality
SDG 6	Clean Water and Sanitation
SDG 7	Affordable and Clean Energy
SDG 8	Decent Work and Economic Growth
SDG 9	Industry, Innovation, and Infrastructure
SDG 10	Reduced Inequality
SDG 11	Sustainable Cities and Communities
SDG 12	Responsible Consumption and Production
SDG 13	Climate Action
SDG 14	Life Below Water
SDG 15	Life on Land
SDG 16	Peace, Justice and Strong Institutions
SDG 17	Partnerships to achieve the Goals

Human Security: Virtuous, Practical, Urgent, and Necessary

Jonathan Granoff

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Representative to the United Nations of the World Summit of Nobel Peace Laureates

Abstract

Change is urgently needed. Ideas that can generate change are critical at this time and age where humanity is facing complex, multidimensional crises. Human security is that idea that can help us address the crises in their entirety because it's comprehensive, integrative, people-centered and goes beyond conventional disciplines and borders. We urgently need an approach to security which focuses on the well being of the people and the planet, not one at the expense of the other; and, never puts the security of people second to the concept of the security of the state. Continuing without the compelling and the much-needed paradigm change that Human Security is, will only lead to disaster.

Humanity is making itself an endangered species. Change is needed. Human security is the direct, accurate and needed framework to generate that change. Continuing without a paradigm change will surely lead to disaster.

This essay is not framed by the daily news cycle perspective but rather seeks to help set a clear north star for international coordination and focus necessary for human survival. We know that the statement, "All men are created equal", was not nor is an empirical description. When Thomas Jefferson penned it, men without property, women, indigenous people, and people who had been shipped to North America in slavery were not included. But its implicit guiding principle has become the guide for governance and its significance of immeasurable value. Human security is similarly valuable and needed. Although not noticed yet by the public, in the most sober diplomatic and international forums and institutions this need for change is recognized.

Human security does not propose eliminating nations and militaries. For example, military force in defense of the territorial integrity and safety of the people of Ukraine is clearly necessary. However, a disproportionate emphasis on nationalism expressed through military power is not adequate to solve the growing list of global threats that impact everyone's daily lives.

The purpose of all our nations is to meet the needs of how people actually live their daily lives and to achieve that requires organizational arrangements arising from guiding principles

* This article was originally published in the Summer 2022 issue of *Horizons* <https://www.cirsd.org/en/horizons/horizons-summer-2022-issue-no.21/human-security-virtuous-practical-urgent-and-necessary>

that are grounded in today's science and the values inherent in universal human rights. The ideas that worked fine in the 17th century when the creation of the modern nation emerged to end Europe's violent social upheavals have produced horse and buggy road inadequate for today. That road does not necessarily include human rights and the insights of science.

No matter how much is spent on weaponry or how much the economy of a nation grows, if its people are unhealthy, insecure in their livelihoods, persons, or property, security and well-being will evade them.

Today, as never before in human history, the regenerative processes of the natural world are at severe risk. Humanity's impact on the natural world is increasing and accelerating. It is a fact not understood well by the public; we are living in the Anthropocene.

Nations are spending obscene amounts of intellectual, social, and economic capital on expanding arsenals, building new and more destructive weapons of mass destruction, and thereby institutionalizing adversity based on an inadequate approach to achieving security. We need a new direction.

Human security is the necessary framework for preventing pandemics, protecting the climate, rainforests, the health of the oceans, water, and topsoil, stopping the destruction of species and impairing the web of life we call biodiversity. Focusing security primarily on people is the needed focus for eliminating the existential threat posed by nuclear weapons as well as achieving an equitable secure global financial system that does not destroy the regenerative miraculous processes of nature. These challenges require nations to cooperate and minimize adversity. They require a change in thinking and policies grounded in human security.

This change requires enlivened vision.

Dr. Martin Luther King, Jr. stated in his Nobel Peace Prize Acceptance Speech on 10 December 1964: "I refuse to accept the cynical notion that nation after nation must spiral down a militaristic stairway into the hell of nuclear annihilation... I have the audacity to believe that people everywhere can have three meals a day for their bodies, education and culture for their minds, and dignity, equality, and freedom for their spirits." Even today, his profound words resonate and call us to pursue policies that provide human security.

But whose words are guiding the policies of the most powerful nations in their aspiration to fulfill the first duty of every state and make their citizens safe and secure? Perhaps the 4th century admonition of the Roman general Vegetius Renuat, in his landmark treatise *Epitoma Rei Militaris*: "If you want peace, prepare for war." This ancient text guides budgets, strategies, and distorts geopolitics into institutionalized adversity, a view that has led us to the profligacy of military expenditures that hover around \$2 trillion yearly.

Since the nations of the world committed to fulfill the Millennium Development Goals in 2000, in excess of \$32 Trillion* has been spent in the pursuit of security by military means

* <https://www.statista.com/statistics/264434/trend-of-global-military-spending/>

and exceeded \$2 Trillion in 2021.* A small portion of these expenditures could serve many of humanity's needs.†

Chapter V Article 26 of the United Nations Charter directs the Security Council to address this distortion of values:

“In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world’s human and economic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.”

The Security Council has not fulfilled this directive, military expenditures keep increasing, profoundly disturbing new technologies of killing are being invented, and war itself is being pursued. All the while the threat of nuclear annihilation continues to be the preferred expression of maintaining global security by the five permanent members of the Security Council. Ironically, they simultaneously and collectively express publicly that a nuclear war cannot be won and thus must never be fought. This incoherence is both morally indefensible and dangerous.

These expenditures, based on cycles of fear and adversity in derogation of trust and cooperation, are reinforced by values that place national identity before our common humanity.

There are certainly appropriate defensive roles for militaries and proportionate budgets would evidence them, but today's conduct demonstrates a profound distortion of values. As President Joe Biden once said, “Don't tell me what you value. Show me your budget, and I'll tell you what you value.”

The most dangerous and illogical expenditures are for nuclear weapons. Nine nations possess over 13,000 nuclear weapons. If 1% of these devices were to explode millions of tons of soot would be released into the stratosphere, causing such climate disruption that modern civilization, or possibly any civilization, would terminate from lack of agricultural capacity. In other words, starvation on an unprecedented massive scale would impact every person and every nation, including the one that launched the weapons first.

All nations with the weapons are currently either modernizing or expanding their arsenals, or both, at enormous expense. The hypocrisy of the states with nuclear weapons asserting that they are pursuing strategic stability to keep the planet safe is contradicted by their actual expenditures designed to obtain military advantage. This nuclear weapons venture is represented in the words of Dr. King: “So much of our modern life can be summarized in that arresting dictum of the poet Thoreau: ‘Improved means to an unimproved end.’”

* <https://www.sipri.org/media/press-release/2022/world-military-expenditure-passes-2-trillion-first-time>

† <https://www.scientificamerican.com/article/a-small-cut-in-world-military-spending-could-help-fund-climate-health-and-poverty-solutions>

Let us look at the situation through another lens. Suppose the Biological Weapons Convention said that no nation can use smallpox or polio as a weapon but that nine nations could use the plague as a weapon to ensure planetary peace and stability. The absurdity of this proposition underscores the daily life of all of us living beneath a sword held over all our heads by a handful of men committed to pursuing national security by placing the future of humanity in a state of perpetual risk. As of this moment, they refuse to even pledge not to use nuclear weapons first. Such a condition in the words of Senator Alan Cranston is unworthy of civilization.

This unworthy pursuit represents a paradox. The more the weapons are perfected, the less security is obtained. Worse, they institutionalize adversity, making the behavior of nations unable to sufficiently cooperate to meet the needs of their citizens.

We are living in a precarious peace based on illusions of power and unsustainable practices. Our manner of pursuing security is unrealistic. Today, as never before in human history, the regenerative processes of the natural world are at severe risk. The capacity of humanity's impact on the natural world is increasing and accelerating.

Here is some sobering realism.

The rate of the extinction of species today is estimated by experts to be between 1,000 and 10,000 times higher than the natural evolutionary extinction rate.*

Humanity has wiped out 60% of mammals, birds, fish, and reptiles since 1970.†

Deforestation has wiped out 8% of the Amazon rainforest since 2000. That's 513,016 square kilometers—the same size as France.‡

The last decade was the hottest decade since record-keeping began 140 years ago.§

Earth has lost 28 trillion tons of ice since the mid-1990s. In 2017 a single piece of ice the size of Delaware broke off from Antarctica's Larsen Ice Shelf.¶

Since 2000, the global CO₂ average has increased by 12 percent. The atmospheric burden of CO₂ is now comparable to where it was during the Mid-Pliocene Warm Period around 3.6 million years ago.**

We are polluting the ocean with around 12.7 million tons of plastic a year. There are now 5.25 trillion macro and micro pieces of plastic in our ocean and 46,000 pieces in every square mile of ocean.††

* https://wwf.panda.org/discover/our_focus/biodiversity/biodiversity/

† <https://www.wwf.org.uk/updates/living-planet-report-2018> and <https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds>

‡ <https://www.globalforestwatch.org/blog/data-and-research/world-lost-8-percent-of-its-remaining-pristine-forests-since-2000/>

§ <https://climate.nasa.gov/vital-signs/global-temperature/>

¶ <https://www.scientificamerican.com/article/earth-has-lost-28-trillion-tons-of-ice-since-the-mid-1990s/>

** <https://research.noaa.gov/article/ArtMID/587/ArticleID/2742/Despite-pandemic-shutdowns-carbon-dioxide-and-methane-surged-in-2020>

†† <https://education.nationalgeographic.org/resource/ocean-trash-525-trillion-pieces-and-counting-big-questions-remain>

The Great Pacific Garbage Patch is around 1.6 million square kilometers—bigger than Texas. Plastic in the North Atlantic has tripled since the 1960s.*

Research published in May 2022 found the presence of microplastics in human blood.†

6.4 million people have died from the COVID-19 pandemic over the past 2 years.‡

Let us look at this one dynamic a bit closer as an example of how the relationship between modern humanity and the natural world must change and how states' definition and pursuit of security will have to change.

Ocean phytoplankton produces approximately two-thirds of the planet's atmospheric oxygen through photosynthesis. It is fair to say that it is like a third lung for the human family and without it we would die. In other words, each of us could lose a lung and likely live, but if the phytoplankton dies humanity ends.

Also, phytoplankton provides food for several ocean creatures, such as whales, snails, and jellyfish. This makes this species the base of several ocean food webs. It floats in the top part of the ocean where sunlight shines through the water.

The health of the phytoplankton depends on a balance of acid and alkaline in the oceans and in oceanic health in general. For example, a substantial increase in ocean temperatures could disrupt the phytoplankton's photosynthesis process, which could impair its oxygen production. This would likely result in mass mortality in humans and animals. Some scientists predict this could happen within the next century.

Warmer water temperatures (as a result of global warming) slow down phytoplankton's growth, because there is less mixing of warm surface water and cold water below, so there are fewer nutrients in the surface level warm water for the phytoplankton.

There are several credible scientific studies showing that as the climate warms, phytoplankton growth rates go down and along with them the amount of carbon dioxide these ocean plants consume. That allows carbon dioxide to accumulate more rapidly in the atmosphere, which produces more warming.

This simple creature not only helps us breathe. It is also a huge carbon absorber. Additionally, since plankton are significant in so many food webs, fewer plankton will lead to fewer fish, which is a major food source for humans and other animals.

It helps us breathe, it absorbs carbon, and it is essential for the oceanic food chain.

There is presently no international regime designed or capable of protecting this essential living system. No nation or even a group of nations is capable of protecting the health of the oceans, nor from pandemics. Like the air we breathe, the oxygen we need, small viruses do not recognize borders. Nature is not conforming to our ideas of how we should make ourselves secure.

* <https://www.smithsonianmag.com/smart-news/this-new-installation-just-pulled-20000-pounds-of-plastic-from-the-great-pacific-garbage-patch-180978895/>

† <https://www.theguardian.com/environment/2022/mar/24/microplastics-found-in-human-blood-for-first-time>

‡ <https://coronavirus.jhu.edu>

How did we get here? The creation of the modern state system arose to stop the carnage in Europe during the Thirty Years War where Protestants and Catholics were slaughtering each other while debating who had the preferred definition of salvation as taught by Jesus.

“Human Security refocuses the pursuit of security from military nationalism and increased threats, violence, and fear to cooperation in meeting present actual real human needs.”

The ingenious invention of the modern state based on the concept of state sovereignty and political control within borders worked well enough to bring humanity into the modern age. The legal instruments that created the Peace of Westphalia (1648) changed the political architecture of the world. The new system ended the massive slaughters of European Catholics and Protestants fighting over definitions of Christianity and formed the basis of our modern sovereign state system.

That system must now function far more cooperatively to fulfill the vision of the United Nations’ multilateral system. But, because its frame of reference is essentially a horse and buggy road from the 17th Century which is not sufficient to enable the rapid change to stop the rapid downward dangerous spiral arising from the modern technologies of war, commerce and our daily lives. One can lead to a fast burn, nuclear annihilation, the other to a slow ecological burn. We need realism in our thinking and acting.

Is there a way to fulfill the United Nations’ aspiration to ensure freedom from the “scourge of war” based on cooperation amongst nations, commonly expressed as multilateralism? Are there examples of rapid change for the better? What principles allow that to happen? I propose two examples.

When President Reagan and Gorbachev met in the historic summit at the height of the Cold War in Geneva in 1985, they confirmed that no one could win a nuclear war and, of similar import, pledged that neither the Soviet Union nor the United States would seek military advantage over the other. This pledge of common security, the principle of multilateralism that can bring realistic human security exemplified virtue in action.

When WWI ended crushing reparations were leveled on Germany and brought the whirlwind of Nazism. When WWII ended the Marshall Plan brought trading partners, security, democracy, and greater stability.

In one instance the losers were further vanquished. In the second the losers were helped to social, political and economic wellbeing. Again, an example of virtue in action.

Realistic policies arise when virtue and practicality coincide. When selfishness and fear guide and virtue is neglected, illusions become policies. Disaster ensues. When virtue and realism combine, society flourishes. There can be policies which are morally coherent but impractical. They cannot work. Nothing is more dangerous than the consistent pursuit of

policies that are morally incoherent but alleged to be practical. Stability and security are obtained when moral coherence, virtue in action, and what is practical combine. That is what our moment in time compels us to realize. Cynical clinging to dysfunctional systems and ideas will not serve us well.

“Change is needed quickly. Ideas that can generate that change are critically important. Human security is such an idea.”

The ancient Upanishads states: The world is one family. Today as never before in human history the admonition of the wise to see the human family as one and the practical necessity of new levels of cooperation coincide. No nation can fulfill its first duty to meet the well-being and security needs of its citizens without helping to build a global cooperative system to protect the regenerative processes of nature and relinquish the pursuit of security with a disproportionate emphasis on force and violence. Working together to obtain security goals through multilateral cooperation does not diminish sovereignty but is the very tool needed for sovereign states to fulfill their duties to keep their citizens safe and secure.

This change in perspective puts people first. Its expression amongst nations is common security. Its larger expression that includes states and individuals is human security.

Human security focuses on how people live and seeks first to meet their achievable real needs. These include ensuring a clean sustainable environment, useful education, secure jobs, fulfilling culture, stable communities, good health, nourishing food, and the flourishing that comes from freedom of worship, conscience, human rights and the rule of law. These needs require safety in neighborhoods and a culture of peace. Meeting these needs enhances the dignity of each individual. In other words, human security refocuses the pursuit of security from military nationalism and increased threats, violence, and fear to cooperation in meeting present actual real human needs. Today so many of the needs of people and the needs of their governing institutions, states and businesses require global cooperation because the threats before us cannot be adequately addressed at a national level. There is no regime in place to adequately stop pollution of the oceans or the destruction of forests. Our very definition of security cannot ignore these facts any longer.

The myths of infinite growth on a finite planet and the myth that security can be found by increased militarism must be met with the realism of science in understanding our relationship with the natural world and an ever-increasing sense of gratitude for its bounty.

Change is needed quickly. Ideas that can generate that change are critically important. Human security is such an idea.

In 1994, Dr. Mahbub Ul Haq, head of the United Nations Development Programme addressed the question, “What happened to the peace dividend?” in a public forum held at the United Nations. Dr. Ul Haq spoke eloquently of the need for a fundamental transformation in the concept of security, which he described as, “the security of people, not just of territory;

the security of individuals, not just of nations; security through development, not through arms; security of all the people everywhere—in their homes, in their jobs, in their streets, in their communities and in their environment”. This new interpretation, he explained, requires us to regard human security as “universal, global and indivisible.”

Human security starts with the premise that the reality of the natural world must be the foundation of our pursuit, rather than just focusing on human-created institutions. The institution of the state has become an idol, an end in itself, such that we protect it with weapons which if used will kill us all. The state is a tool to address real human needs rather than an end in itself. It is a human creation which means it can be molded to meet our needs.

The myths of infinite growth in a finite planet and the myth that security can be found by increased militarism must be met with the realism of science in understanding our relationship with the natural world and guiding our efforts to fulfill our needs. Human security is the paradigm shift needed now.

To disconnect the regenerative processes of the natural world from our economic system is not realistic. To focus security on the state rather than people is illogical. To fragment the approach to obtain security from sustainable development is dysfunctional. Security is a multifaceted, many leveled right of all people and it involves all aspects of human activity. Just as our personal health involves how we sleep, eat, and interact with one another, just as our bodies are integrated systems, so is our security. Human Security is the integral principle called for today.

Presently the geo-political landscape is framed by notions of sovereignty. The planet and many present threats do not recognize national borders. Humans create these borders. We create nations to serve human needs—both physical and psychological. We create cities, counties, and regions to identify and meet our needs and we create institutions to address those needs. The basis, the legitimacy and stability of sovereign states, do not come from the bureaucracies or family heritage of leaders of states, but from the mandate of those who are governed. States express the moral and practical agency of people.

Today the requirements of that agency can only be met at a cooperative and global level in addressing the most pressing existential threats. Thus, global cooperation to meet the first requirement of every state to ensure the safety and wellbeing of its citizens is required. The state is an expression of an idea. It is a legal entity that we create, distinguishable from natural entities and systems. We do not create trees and forests, ants and ant colonies, or fish in schools. We do create states which are based on ideas expressed by words.

The planet can be understood as one integrated living system. Humanity can be understood as one species in a web of life. We require a new set of ideas in accord with this understanding.

Human Security is rooted in our best science and recognizes that human beings are social entities that require meaning and values in their endeavors. Humans need enabling

*“Human
security is
the paradigm
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now.”*

environments to grow in our most ennobling values and thus policies to fulfill human security needs appropriately must be both practical and morally coherent. Moral coherence requires peaceful approaches amongst peoples and nations and a proper recognition of the requirement of harmony of many cultures as well as many species.

Given how many endeavors have recently gone global, especially finance and commerce, bringing security into coherence with human needs is not only within reach it is both morally compelling and practically necessary.

The fact that today there are severe tears in the fabric of the global community, that a regional war could escalate and that leaders are demonizing each other does not alter one fact stated above nor should it detract the good, wise and practical from pursuing what is needed. It just means we must be more diligent, faithful, and committed.

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Human Security For All*

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Abstract

The recent Consumer Electronics Show (CES) held in Las Vegas in January 2023 was a remarkable event and projected a powerful message to the leading companies in the industry and the rest of the 115,000 business and global press representatives who participated. For the first time, CES 2023 adopted a theme for the conference and projected it to participants through exhibits, innovation awards, Great Minds seminars, video and massive campaign signage. That theme announced the launching of a global campaign on human security—Human Security for All (HS4A)—which is being conducted by the UN Trust Fund for Human Security and the World Academy of Art and Science. CES 2023 showcased the critical role of technology as a catalyst and powerful driver in support of the United Nations’ efforts to advance human security around the world. One of the highlights of CES 2023 was the introduction of a new category of Innovation Awards showcasing technologies that advance human security. The show explored the theme of how technologies like energy conservation, sustainability and resource management, wellness and healthy environments, clean air and water are themselves agents of change in the global struggle for human security. This article shares some thoughts from the show and detailed information about this critical campaign.

1. Human Security is a broad Conceptual Approach applicable to all areas of Development Policy

Humanity is faced with myriad global challenges, from war to climate change, to personal safety and freedom. These challenges can no longer be addressed at the state or national level — they are global in nature and require global reach. Human Security speaks to people about their own personal issues.

This concept of Human Security confronts us all—peace, personal safety, basic human rights, healthcare, food availability, educational opportunities, jobs, energy, climate change and access to the very fundamentals that life depends on: clean air and water. The UN has identified 17 sustainable development goals that everyone can identify with and is rallying

* This article is adapted from an interview of Walt Stinson by Douglas Weinstein published at <https://www.technologydesigner.com/2023/01/30/human-security-for-all/>

widespread support for commitments in all sectors to make the world a safer, better place for all of mankind. These goals were unanimously approved by 193 member states of the United Nations in 2015 and are now shaping the regulatory landscape around the globe. Human security is a comprehensive, integrated approach that encompasses all 17 SDGs.

A comprehensive approach to human security seeks to unify environmental security with societal security. All dimensions from the local to the global, from personal safety and welfare to global environmental sustainability. If we break this down further, we can integrate resource utilization to meet the needs of all humans today and down the road, as well as food security, economic safeguards, and personal security.

The International Institute for Sustainable Development states that a major goal of comprehensive human security is to “transmit practical recommendations to policymakers on how to strengthen human security through better environmental management and more effective natural resource governance.”

2. The Human Security For All Campaign

The Human Security for All campaign’s basic objective is to familiarize the general public with the Human Security concept and encourage companies to apply this approach to develop and apply innovative technologies to meet real human needs.

Human security is based on the individual’s experience of life. Human security at the level of individuals and communities has not received the level of attention and investment required to effectively address humanity’s problems. The concept builds on sustainable development goals developed by the United Nations.

CES 2023 highlighted emerging technologies in the fields of food production, health, education, financial inclusion, and many other areas that demonstrate the potential to use technology as a driver and lever for promoting human security for all.

All of us can contribute to making it happen. Consider the tech revolution that has swept over our industry. Right now, we are not facing so much a tech revolution, but a societal revolution that has been driven by the pandemic, war, financial crisis, and climate change. These are threats that transcend national boundaries and can’t be solved by any one nation. They all impact people on an individual basis. These issues are now major forces driving both the market and regulatory environments. We just needed an overarching concept to pull it all together. Human Security is the “big idea” that encompasses these forces.

Living standards are rising around the world, but surveys indicate that individuals are feeling less secure. This is true in both developed and developing countries. CTA partnered with HS4A to show the world how technology can help solve some of the world’s most pressing issues. Governments have limited scope and capabilities to address these issues.

“The next big thing is not a new technology, it is a new idea. Human Security is that idea.”

Without the involvement of industry, particularly the tech community, we will fall short of achieving the kind of world that we all aspire to.

Human Security is something that every business executive can apply in their own company. Employees these days are demanding a more secure workplace on a lot of different levels. They want more economic security and want to be treated as people. Our attention to human security cannot only help them solve their problems, it can prevent them. Consumers are increasingly directing discretionary spending to companies that align themselves with Human Security pillars.

“The human security paradigm is driving strategic thinking right now because there are two forces at work—regulatory which is pushing companies to address these issues through technology and changing societal aspirations that are bubbling up through the marketplace. These two drivers are coming together right now.”

3. Embracing Societal Changes

If we ignore big technological or societal changes, we do so at our peril. When it comes to business, companies that grow are the ones that adapt to the changing needs of the society around them. Meeting needs that people can relate to.

Many think it is so much easier to avoid change than to embrace change. But that has profound business implications—change occurs gradually and then suddenly. It’s easy to look in the rear-view mirror and see how we got here. It is another thing to look out the front window and perceive the future that is coming. That future is already here in many respects. The implications are profound. Making a move too early costs a lot; too late and the innovation becomes irrelevant. So, we need to strategize and make conscious decisions.

Human Security is not a technology, but it’s helpful to think of it that way. It’s likely to have a powerful influence on our industry segment for the next ten years. Some of our business decisions need to be aligned with Human Security, right down to the system design level. That’s already happening at major corporations around the globe. The keynote by John Deere at the CES event highlighting the impact of technology on the herbicide, fertilizer and the carbon footprint of their new machines is a perfect example. This CES showed us that the next big thing isn’t a new technology, it’s a new idea. Human Security is that idea.

The Human Security concept also includes access to healthcare, economic security, environmental protection including resiliency and sustainability, personal safety and mobility, community security, access to education, broadband access and political freedom. As our populations age and extended family structures break down due to urbanization, questions

like “living in place” are problems that can be addressed by technology. The larger question is, how can we embrace change and do good at the same time?

The world has never changed so rapidly. To bring in young leaders and new strategies is the only way to stay abreast of technological evolutions. One of the keys to success in an innovative industry is not to be afraid of change, but to embrace it. Change is difficult, it requires new ways of thinking.

The human security paradigm is driving strategic thinking right now because there are two forces at work—regulatory which is pushing companies to address these issues through technology and changing societal aspirations that are bubbling up through the marketplace. These two drivers are coming together right now.

The war in Ukraine, the pandemic, and the climate crisis illustrate that these problems transcend borders and are beyond individual governments to address. But they can be addressed by individual companies. That’s what the campaign is all about—it is also about business security. Companies that don’t adapt won’t make it. Clear evidence was presented by HS4A campaign partner, Force for Good, in a landmark study of 100 top global tech companies released at a CES 2023 press conference.*

4. Characteristics of the Human Security Approach

The seven dimensions of human security—environment, economy, health, food, personal, community, and political—are pillars that can guide our efforts. Environmental security is huge. Personal security is a driver. Business opportunities will continue to expand.

The concept is context-specific. We work on and in our local communities, but the rest of the world is different. Different problems in different communities. The issues we face today must be dealt with on a global basis and not just in a local market area. The integrator model is certainly expanding globally.

This is also very people-centered. Architects, builders, designers and integrators can drive the message in a practical way. The concept of human security is people-centered, so we need to look at how people want to live. We should key the collective in on these concepts, because they probably aren’t aware of what’s happening.

Comprehensiveness is another key characteristic—working across trade skills and different aspects of the job—the builder, architect, etc., and integrating design and technology. We can be a leader here. There are tremendous global forces at work here and the moment has come to understand that they are cross-sectoral.

This big picture view presents a lot of potential problems—how individuals and firms adapt to it—but it also represents an explosion of opportunity. The Human Security concept will be an incredible driver across all aspects of society for the next 10 years.

* The report can be accessed online at <https://www.forcegood.org/report-2023>.

5. Concluding Remarks

The last half century has seen tremendous advancement. But the planet is experiencing multi-dimensional threats including war, pandemics, food supply, economic security and personal security. These threats demand a response from every segment of society. The latest technologies can aid this process—from resilient homes to sustainable materials to healthier environments to a low carbon footprint. But to do this effectively, we need to change our viewpoint.

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Key Findings Regarding a Comprehensive Human Security: Envisioning and Building a Better Future

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Abstract

Human security is a comprehensive paradigm to assess and understand the deepest needs of the whole human family. The concept of human security transcends the traditional reduction and limits of security to national security, border security, military security, or cybersecurity, to encompass other incontrovertible aspects and multifaceted dimensions of human existence and environment. They include not only international peace and security as indicated in the first pillar of the United Nations, but also justice and development, the second pillar and incontrovertibly, the third pillar of the UN, human rights, in terms of freedom from want, freedom from fear, and freedom from indignity. Framing international relations, societal and individual interactions through the lenses of human security is long overdue. Its time has come. This is good news for the global community. Without the lenses of human security, global, societal, and individual vulnerabilities would continue to escape the notice and attention of the international community in search of more sustainable peaceful coexistence. A holistic understanding of human security is needed. Human security is an aspiration of billions of people across the spectrum of global faiths and philosophies. Even casual human greetings reveal the deep aspiration of human security in people's daily wishes. This is also true in prayers formulated in all traditions of all faiths. This article highlights the various dimensions of the concept of human security and calls for a global mobilization to protect not only sacred sites but more importantly, human beings who are more than temples, cathedrals, mosques, shrines, and pagodas. The infinite immeasurable value of every human person deserves respect, circumspection, and honor before the mystery of not only consciousness, but of all human beings as conscience bearers. Developing a global culture of human security deserves our best investment, resources, creativity, and plans of action. The peace of our fragile world, challenged by various threats, depends on it.

When it comes to the *époque* defining awareness of the urgency and imperative to address the overarching global issue of human security, the human family needs an unprecedented mobilization for a comprehensive approach and plans of multidimensional actions to secure our survival, wellbeing, comprehensive health, freedom, and peace.

Even a cursory popular search on human security reveals the following:

“Human security means protecting fundamental freedoms—freedoms that are essential to life. It means protecting people from critical (severe) and pervasive

(widespread) threats and situations.” Human security integrates three freedoms: freedom from fear, freedom from want and the freedom from indignity.””

Closer to our context one could add the following:

“As noted in General Assembly resolution 66/290, “human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people.” The United Nations Trust Fund for Human Security calls for “people-centered, comprehensive, context-specific and prevention-oriented responses that strengthen the protection and empowerment of all people.”

Nearly every area of human experience is connected to the undergirding issue of human security.

The list of areas related to human security is broad but specific:

1. Food Security
2. Water Security
3. Economic Security
4. Health Security
5. Gender Security
6. Environmental Security
7. Ecological Security
8. Digital And Cybersecurity

These are concrete domains of human existence and experience. It is not about merely farfetched speculations on possible collusions of asteroids.

We are talking about issues, events, beliefs, and practices that affect people’s lives in negative, harmful, and damaging ways. From threats to personal security, to collective predicaments, to regional, national rifts in human solidarity, to needed global security, human security is in fact a lens through which to look at various aspects of human experience.

Examples related to the issue of human security range from the dumping of toxic waste in so-called poor regions of the world, to wars of annexations, conquests, subjugations, human trafficking, and genocides.

Our era has been called “the age of insecurity.” This is because of the multiple recent crises that have challenged the wellbeing of literally billions of peoples.

I am quoting the following analysis from a recent contribution to the topic:

“The pandemic was, of course, only one of the many things that heightened our anxieties in this age of insecurity. Over the last two decades the world has been subject to many traumatic events—international terrorism, civil wars

*with all their destruction and exodus of refugees, the financial crisis of 2007-2009, the debt and currency crises (particularly in Europe and Latin America), stringent and wrenching austerity policies, deep slumps in many economies, large-scale job losses, technological disruptions, creeping authoritarianism and ethnonationalist excesses, the increasing incidence of natural disasters (probably attributable to ongoing climate change), agro-ecological distress, mass dislocations and a series of epidemics (COVID-19 being the latest). All of this has dangerously exposed the fragility and insecurity of the lives and livelihoods of billions of ordinary people. This has been particularly acute in developing countries, where numerous people live a hand-to-mouth existence even in the best of times, with very little in the form of social insurance or feasible alternative ways to live.”**

It may be perceived as a coincidence but not for us organizers of a symposium every year over the past 9 years. In fact, every theme of the symposia we partner with UN agencies has connections with human security. Human dignity should be the foundation and justification for human security. Peace, violence, migration, an economy of life, racism, slavery, and coloniality, gender equality. All the topics addressed in the partnership of faith-based organizations and UN agencies representing the global community have to do with human security.

“Can we today envision a human security that does not exclude anyone?”

More broadly the pillars of the UN are inseparable from human security. Specifically, it is not by chance that the first pillar of the United Nations is peace and security, then the second justice and development, and then third human rights, in terms of freedom from want, freedom from fear, and freedom violence. All these are predicated under the overarching umbrella of human security.

Specific to security, in 1994, the UNDP provided a meaningful list of protections and metrics needed for human security to be achieved for all. Seven types of protection were particularly listed:

1. Economic Safety Nets
2. Food Security
3. Access to Health Care
4. Environmental Protection
5. Personal Security
6. Community Security and
7. Political Security

* Pranab Bardhan. *A World of Insecurity: Democratic Disenchantment in Rich and Poor Countries* (Cambridge, Massachusetts & London, England: Harvard University Press, 2022), p. 6.

Today faith-based organizations highlight needed dimensions of human security that are necessary to build a better world. In fact, from an aspirational perspective,

Every day there are billions of people praying for human security.

- Muslims pray for protection from the accursed one.
- Christians pray in what is known as the Lord's prayer in which they say. "Deliver us from evil."
- One of the designations and attributes of God among Jews and Christians is "Elohim Amen" the God of Amen. The God of security, that is One you can depend on.
- Buddhists pray the famous **Golden Chain Prayer**.
"We will be kind and gentle to every living thing and protect all who are weaker than ourselves. We will think pure and beautiful thoughts, say pure and beautiful words, and do pure and beautiful deeds. May every link in Amida's chain of love be bright and strong and may we all attain perfect peace."
- In Hinduism adherents speak about mantras of protection.

Security then is not just security from threats of possible asteroids and collisions with planet earth.

It is also beyond metaphysical elucubration. Faith-based actors bring more than prayers. Concrete measurable actions are taken by faith groups, humanitarian organizations, and focus groups on specific aspects of human security.

Security is a daily need for every human being. No wonder all greetings echo the need for human security. Salam, shalom, good morning, bonjour, are most certainly connected to human desire for human security.

What can we do concretely to improve Human Security?

Various Comprehensive Plans of Actions are needed. To this end the following questions are incontrovertible:

- At an individual level what can be done?
- At interpersonal level how to facilitate safety, peace, in relating to others?
- At organizational level what and how can our respective organizations plan to help develop a global culture of human security?

Advocacy for non-proliferation or even elimination of nuclear weapons and weapons of mass destruction, I would even say, weapons of individuals destruction should be high on our advocacy agenda.

Closer to each one of us, and within our reach, **At a relational level**, creating a safe space at every work environment is indeed contributing to human security.

Human security includes giving people a space to feel and know they are safe. No coercion, no bullying, no intimidation, no compulsion, or instrumentalization of people.

“There is a need to establish a task force with a specific mandate to provide us with a blueprint on how to develop a culture of human security which integrates all socioeconomic dimensions.”

Freedom of thought, conscience, religion, or belief is an imperative of human security. This means no violation whatsoever of people’s physical, emotional, intellectual, social, and spiritual integrity. No bending of people’s conscience.

Human Security also has dimensions related to health, healing, and wholeness. Without these components of human security, life is frustrated of its essence of flourishing human potentials.

Allow me to postulate that the permanent pillar of life from birth to old age is human security which incontrovertibly is acted out through dignity of covering infants for comfort, affirmation and encouragement and sense of worth through all the stages of life. Again, the imperative of peace comes to the fore when speaking about human security. No wonder our partners from the UN insist on the fact that the framework the world must factor in in all our endeavors is the imperative of human security. One can add: Human security for all.

There is an elephant in the country and in the whole of the Americas.

One cannot be serious about security without addressing the chronic lack of security for indigenous peoples. Of course, from the Amazon but also from Vancouver and in between.

In the context of the Americas, a perennial task is before us:

What to do with the reality of the indigenous peoples?

Just talking about human security and ignoring, bypassing, what is at plain sight in every land taken from indigenous peoples is part of a chronic perennial denialism. Multiplications of webinar that could give the illusion that we are changing the world are not sufficient. Which world are we changing? Though impossible to turn back the clock of history, can we today envision a human security that does not exclude anyone?

This brings another dimension of human security. The seeming impossibility of justice should not exclude the imperative of reconciliation for those who have become privileged as per the inheritance from colonists with those who have been deprived of their stories, identities, lands and resources.

Human security becomes a farce if it sidelines these troubling issues.

Healing for those living today can be worked on. The future depends on it.

A holistic understanding of human security is therefore needed if the human family is serious about peace, a comprehensive peace, peace building, peacemaking, peace sustaining, peace wishing, or peace giving as when we say “Salam aleikum, shalom alekhem, or salamat.”

Our world faces a sociopolitical dimension of insecurity. This is obviously related to the last on the list UNDP provided in 1994: political security.

Human security is threatened by the rise and multiplication of anti-democratic regimes, authoritarian and repressive Global Statistics.

In 2021, the V-Dem Institute at the University of Gothenburg, Sweden, produced the largest global data set on democracy, covering about two hundred countries, measuring democracy in disaggregated, multidimensional ways, involving over thirty-five hundred scholars and experts.

The institute reports that:

- Autocracies now rule a majority of people—in eighty-seven countries that are home to 68 percent of the global population.
- Liberal democracies diminished over the past decade, from forty-one countries to thirty-two, and now have a population share of only 14 percent.
- About one-third of the world’s people—that is 2.6 billion people—live in nations undergoing “autocratization”; only 4 percent live under regimes that are becoming more democratic.
- Autocratization has affected major countries like Brazil, India, Poland, Turkey, and the United States.
- Latin America is back to a level of democracy last recorded in the early 1990s, while Eastern Europe and Central Asia are at post-Soviet Union lows.
- India with its population of nearly 1.4 billion, used to be the world’s largest democracy; it is now described as an electoral autocracy due to the severe shrinking of space for the media, civil society, and political opposition under the current government.
- Attacks on freedom of expression and the right to peaceful assembly and protest and assaults on the media and academic and other civil society institutions are intensifying across the world; the quality of elections is deteriorating.*

The task before us is indeed daunting. It will take the mobilization of all actors of civil society, international institutions, national institutions, faith-based groups, religious and non-religious humanitarian organizations, all people of goodwill rallying to show solidarity to protect and to empower all people to live safe and in dignity.

Nothing but a comprehensive non-discriminatory approach to human security will do. There is a need to establish a task force with a specific mandate to provide us with a

* Pranab Bardhan. *A World of Insecurity: Democratic Disenchantment in Rich and Poor Countries* (Cambridge, Massachusetts & London England/ Harvard University Press, 2022), 1-2.

blueprint on how to develop a culture of human security which integrates all socioeconomic dimensions. Such a tool can provide a heuristic basis to concretely address peoples' security and planetary sustainability.

We need to discuss how to put in place such a task force, a consultative group to draft a document, a road map on how to give a chance to human security. This is necessary for building a better world where peace and security, justice and development, human rights in terms of freedom from fear, freedom from want and freedom to live in dignity. Peace, in all its multifaceted dimensions, is an imperative.

It is fitting to remember a Hebrew prayer for human security.

*“The Lord bless you and keep you and keep you
The Lord make His face shine on you and be gracious to you.
He Lord lift up his countenance and give you peace.
So, they shall invoke My name on the children of Israel and I will bless them”
(Numbers 6:24-27).*

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The Health and Economic Burdens Inflicted by Human Security Destruction

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Abstract

Finally, after many years of resistance, the majority accepts the scientific evidence that we live in what Paul Crutzen, Fellow of the World Academy of Art and Science, defined as the Anthropocene Era, because humanity has left a major impact on not just the planet but all life forms (Crutzen and Stoermer, 2000). Nowadays, with the rising frequency and magnitude of negative impacts that we bring upon ourselves by the way we act, the general public is becoming more and more aware of the rising threats we create for ourselves and the whole planet (UNESCO, 2021). Like in any other form of addiction, many humans tend to defend themselves by becoming aware of their self-destructive behaviors, tricking and soothing themselves by ignoring the mounting man-made threats and engaging in cognitive dissonance to avoid anxiety-inducing awareness. The exponential growth of the human population and its consumption patterns has resulted in such dramatic and exorbitant costs to the environment. Not only have our current lifestyles negatively impacted our planet's ecosystems, but a growing number of scientists have warned us that we are rapidly reaching a tipping point where mitigation and/or reversal of trends is no longer possible (IPCC, 2014). If we do not act promptly and effectively, we will face not just the consequences but existential threats that threaten the survival of planet Earth's self-proclaimed intelligent species.

Currently, the most visible treatments relate to human security, which refers to the safety of people and communities, the right to be free from fear, hardship and humiliation. Seven dimensions are associated with UN's conception of human security: economic, food, health, environmental, personal, community and political. The 1994 United Nations Human Development Report, entitled *New Dimensions of Human Security*, states: "Human security is people-centred. It is concerned with how people live and breathe in a society, how freely they exercise their many choices" (UNDP 1994, p.23). The attacks to destroy human security are dramatically costly, create immense suffering and loss of lives, and traumatize people and ecosystems. Since we live in a complex system and everything is connected, human security destructions impact negatively all the interconnections.

As underlined in General Assembly resolution 66/290,*

“Human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood and dignity of their people.” It calls for “people-centred, comprehensive, context-specific and prevention-oriented responses that strengthen the protection and empowerment of all people.”

One of the burdens caused by the destruction of human security is psychological trauma. People that are traumatized especially at a young age are at risk of developing mental and physical illness and even pass onto their children the untreated consequences of their traumas. People that develop mental health illness show a very large history of trauma and trauma survivors have a much higher risk of becoming mentally ill. It can also lead directly to post-traumatic stress disorder (PTSD).

To deal with all the interconnected emergencies and learn from mistakes of the past, a new paradigm is emerging that is systemic/holistic, interdisciplinary and intersectorial, sustainable, and based on facilitating person- and people-centered processes with actions of empowerment to better diagnose the origins of the problems and create new tools for effective interventions grounded in human rights and the SDGs. This allows us to be more effective in achieving better results in the prevention and treatment of emergencies and obtaining positive cost effectiveness and at the same time, facilitating people to empower and respect themselves, others and the world, implementing win-win strategies. People-centered participatory action research and other people-centered strategies could bear fruits for a more accurate mapping of these phenomena and the design and implementation of effective people-centered interventions advocated by the United Nations and several U.N. Agencies.

1. Psychological/Emotional Trauma

“Trauma is a widespread, harmful and costly to individuals and society. It occurs as a result of violence, abuse, neglect, loss, disaster, war, natural catastrophes and other emotionally harmful experiences. Unaddressed trauma significantly increases the risk of mental and substance use disorders and chronic physical diseases. Trauma has no boundaries with regard to age, gender, socioeconomic and substance use disorders and chronic physical status, race, ethnicity, geography or sexual orientation” (SAMHSA, 2014, p.2).

Research has shown that childhood trauma is a plague worldwide (Stoltenberg et al. 2015, Fang, 2015, WHO, 2022) and how exposure to violence, abuse, neglect, racism, discrimination, violence, and other adverse experiences increases a person’s lifetime potential for serious health problems and health-risk behaviors, as demonstrated by the landmark Adverse Childhood Experiences (ACE) Study (Felitti et al. 1998; Bellis et al. 2015, 2019; Trauma and Public Health Taskforce, 2015; Agnew-Blais and Danese, 2016; Bisson et. al 2019)

* <https://www.un.org/humansecurity/what-is-human-security/>

2. The Burden of Adverse Childhood Experiences

Comparing prevalence rates of child maltreatment and related statistics across countries is difficult due to many factors, including differences in legal frameworks and recording systems. However, it is recognized that it is a widespread phenomenon affecting approximately 150 million people worldwide, in both low- and high-income countries. The most recent data from the European Union show that the prevalence of maltreatment in the United Kingdom and Italy is 11.2% and 9.5% respectively, which is comparable to data from the United States (12.1%) and Canada (9.7%). Unfortunately, in many parts of the world, including Brazil, Russia, India, and China, statistics on the prevalence of maltreatment among children and adolescents are not standardized, making reliable cross-country and cross-continent comparisons difficult (Ferrara et al. 2015). In rural areas, local health agencies are scarce, and sometimes people do not report being trauma survivors to avoid stigma and prejudices. On top of this, many countries under dictatorships intentionally falsify their data since they routinely falsify reality as a way to maintain control and retain power.

The Adverse Childhood Experiences study (ACE) and other subsequent research show that ACE is an important risk factor for the most common causes of illness, disability, and death, as well as poor quality of life (Felitti et al. 1998; Felitti, 2002, Hills et al. 2000, 2001, 2004; Read et al. 2008).

Felitti and his colleagues found that the more ACEs a person suffered as a child (score 1 means one Adverse Childhood Experience and so on), the higher was the health burden later on in life (Felitti, 2001). Other dramatic health impacts were found by Felitti and later on confirmed by other research. (Bellis et al. 2015, 2019; Trauma and Public Health Taskforce, 2015; Agnew-Blais and Danese, 2016; Bisson et. al 2019). Adverse Childhood experiences are both common and destructive and research highlights how this combination makes them one of the most important determinants of health and wellbeing. Felitti underlines some of the reasons why in the past—but in many cases also today—the enormous health and economic burden caused by ACEs are not effectively managed.

Distress from ACEs can negatively affect children's brain development, the immune system, and the stress-response. (Rao et al. 2010; U.S. National Academy of Science, 2012; Shonkoff & Garner, 2012; Fox et al. 2015; Stonkoff & Phillis, 2000; CDC, 2019; National Scientific Council on the Developing Child, 2020). The changes in the brain can affect children's attention, decision-making, and learning.

“To understand why Adverse Childhood Experiences are very harmful, one should keep in mind that the childhood years, from the prenatal period to late adolescence, are the “building block” years that help set the stage for adult relationships, behaviors, health, and social outcomes. ACEs and associated conditions such as living in under-resourced or racially segregated neighborhoods, frequently moving, experiencing food insecurity, and other instability can cause toxic stress (i.e., prolonged activation of the stress-response system)” (Bucci et al. 2016 p.12).

Some children are exposed to additional toxic stress from historical and ongoing trauma due to systemic racism or the effects of intergenerational poverty due to limited educational and economic opportunities. Trauma in childhood contributes significantly to the global burden of disease, imposing enormous costs on people and their communities. Research has shown that childhood trauma can negatively impact children's physiological, psychological, and social processes and functioning, and increase the risk of developing several types of mental illnesses: Personality and mood disorders, substance abuse, and psychosis (Springer et al. 2003; Nemeroff, 2004; Varese, Smeets, Drukker et al. 2012; Trotta, Murray, Fisher 2015; Agnew-Blais & Danese, 2016; Hughes et al. 2017).

About 61% of adults surveyed in 25 U.S. states reported experiencing at least one type of ACE before age 18, and nearly 1 in 6 reported experiencing four or more types of ACEs (CDC 2021). Some children are at a greater risk than others. Women and several racial/ethnic minority groups were at higher risk of experiencing four or more types of ACEs. It is estimated that prevention of ACEs could reduce many health conditions. For example, prevention of ACEs could prevent up to 1.9 million cases of heart disease and 21 million cases of depression (CDC 2019).

3. The Economic Burden of Adverse Childhood Experiences

The economic and social cost to families, communities, and society is hundreds of billions of dollars each year. A 10 percent reduction in ACEs in North America could mean annual savings of \$56 billion (CDC, 2019). Other researchers have calculated much higher costs. Peterson, Florence & Klevens (2018), using updated cost methods and data, estimated much higher lifetime costs per child for nonfatal (\$831,000) and fatal (\$16.6 million) child maltreatment victims and a higher estimated annual economic burden to the U.S. population (\$428 billion to \$2.0 trillion, depending on the data source for nonfatal child maltreatment).

Bellis and colleagues (2019) in their systematic review and meta-analysis research for studies that compared risk data from individuals with ACEs to those without ACEs and found that the costs of mental illness were the highest: ACEs were blamed for about 30% of cases of anxiety and 40% of cases of depression in North America.

Unfortunately, sometimes the war on children and minorities is waged inside their own family and communities blinded by dysfunctional and oppressive beliefs and customs, bigotry, racism, gender discrimination and any other form of discrimination.

4. Toxic Stress Burdens from Prejudices

Many people are living in communities that blame and punish people for being who they are (Mayer 1995, 2007), which harms their physical and mental health and limits their potential. In many cases, societal prejudices express themselves violently. Widespread violation of women's rights in nations like Iran and Afghanistan are just a few of the numerous examples. There remain a number of nations that have Capital punishment for homosexuals, in many countries being a sexual minority is a crime. Such laws not only undermine human rights—they can also fuel discrimination, stigma, and even violence against people (UNICEF 2014; USCIRF, 2021).

The discrimination against albinos is yet another dramatic example: People with albinism face persecution, stigmatization, and marginalisation. They suffer due to false beliefs and superstition in some nations.

The violation of human rights is not found only in poor countries. The United Nations Office of the High Commissioner on Human Rights (OHCHR) and the US Institute of Diplomacy and Human Rights (USIDHR) report that the right to be free from discrimination is most frequently violated in the USA.*

Despite years of effort to defend and advance human rights, there is still much work to be done. There is much room for improvement in terms of human rights everywhere in the world, as millions of people continue to have their rights violated, untold suffering and the traumas and toxic stress that create a significant amount of insecurity for families and communities, unacceptable damage to health and wellbeing, and heavy social and economic burdens. Numerous scientific studies have examined the harm that racism and discrimination do to people's health.

5. The Trauma of Racism and Oppression Burdens

Racism has been linked to a number of adverse mental health conditions, but the association between racial discrimination and PTSD symptoms appears to be the strongest. Discrimination based on race and ethnicity is a contributing factor to alcoholism and PTSD symptoms (Cheng & Mallinckrodt, 2015; Flores et al., 2010; Sibrava et al. 2019). The effects of trauma are magnified when someone has multiple stigmatized identities (Safren and Dale, 2019). Vicarious retraumatization caused by the cultural legacy of state oppression contributes to poor community health. Nagata and colleagues (2019) have shown how the experience of internment of Japanese Americans during World War II had long-lasting traumatizing effects on internees and their descendants. Gone and colleagues (2019) have examined the impact of historical trauma on the health of indigenous populations in the United States and Canada. Victims of oppression who have multiple stigmatized identities are most affected (Dale & Safren, 2019). A model of intersectional stress and trauma among Asian American sexual and gender minorities was presented by Ching and colleagues (2018).

6. The Pervasiveness of Emotional Trauma Around the World

The WHO World Mental Health Survey (2021) and Kessler and colleagues (2017) report that trauma and PTSD are prevalent worldwide, are unequally distributed, and PTSD risk differs by trauma type. Although a substantial minority of PTSD cases resolve within months of onset, the average symptom duration is significantly longer than previously thought.

Over 70% of respondents reported experiencing one traumatic event; 30.5% were exposed to four or more traumatic events. Five types of trauma—witnessing death or serious injury, the unexpected death of a loved one, an assault, a life-threatening car accident, and experiencing a life-threatening illness or injury—accounted for more than half of all

* <https://www.ohchr.org/en/press-releases/2022/08/un-committee-elimination-racial-discrimination-publishes-findings>

experiences. Exposure varied by country, sociodemographic characteristics, and history of traumatic events. Exposure to interpersonal violence had the strongest associations with subsequent traumatic events (Benjet, et al. 2016).

The World Health Organization laments that the Mental Health Atlas 2020 shows massive inequalities in the availability of mental health resources and their distribution between high-income and low-income countries and between regions. It also shows that significant gaps exist globally between the existence of policies, plans, and laws and their implementation, monitoring, and allocation of resources. Similar gaps are observed in the implementation of mental health services at the primary health care level.

The Mental Health Atlas 2020 also shows that countries' mental health information systems have limited capacity to report on specific indicators such as service utilization. Only 31% of Member States (WHO) regularly collect mental health data covering at least the public sector in their country.

In addition, 40% of Member States reported that they compile mental health data only as part of general health statistics. The percentage of countries reporting that no mental health data were compiled in the last two years decreased from 19% of responding countries in 2014 to 15% of responding countries in 2020.

Human and financial resources allocated to the implementation of strategies/plans are limited. In addition, only 19% of WHO member states reported that indicators are available and used to monitor the implementation of most components of their policies/plans.

- 45% of WHO Member States reported that a dedicated authority or independent body conducts inspections of mental health services and responds to complaints of human rights violations.
- 21% of WHO Member States have a mental health policy or plan that is currently being implemented and is fully compliant with human rights instruments.
- 28% of WHO Member States have a mental health law that is currently being implemented and fully compliant with human rights instruments (WHO Mental Health Atlas 2021).

7. Burn Out, Vicarious Trauma, Compassionate Trauma: Also, the Helpers Need Help

Helpers or volunteers are people too and they also need good care, they are at a risk of chronic stress, burn out and vicarious trauma.

Vicarious trauma can be defined as the trauma resulting from being in contact with traumatized people and it can affect trauma survivors, directly or even through TV and other media coverage of calamities. Vicarious trauma in many cases affects people who provide services to trauma survivors exposed to natural disasters, wars, terrorist attacks, violence, sexual attacks etc. When Vicarious trauma is experienced by helpers it is called

compassionate trauma (Branson, D. C. 2019). People who work with survivors of trauma and violence run the risk of being negatively affected by the multiple effects of vicarious/compassionate trauma.

“Person-centered care, complemented by recovery-oriented care and trauma-informed care, forms the basis for a universal approach to healthcare.”

Helpers or volunteers offering assistance, support and psychological contact to trauma survivors, despite the profound significance of the helping relationship, the highly ethical and moral motivation, the profound humanistic, existential significance of their endeavors can nevertheless be at risk of negative mental health consequences. It is very important to prevent and abate the impact of compassionate/vicarious trauma for those professionals who are exposed to survivors of trauma or violence, such as health personnel, policemen, firemen, journalists, volunteers, therapists and all those people who in various roles get in contact with traumatized people. Vicarious/Compassionate trauma occurs more frequently when helpers have no respite for their emergency work, when they cannot *recharge their batteries*, or disconnect from work that is heavy and taxing. Effective forms of prevention are good supervision, solid work alliances, peers, support groups and a good work-life balance to take care of personal life, spending time with family and friends.

The challenge for those who offer their helping services with passion, generosity, and empathy is to extend that kind of helping relationship to themselves, because you cannot give others what you do not have. It is therefore morally, ethically and professionally necessary to promote helpers' resilience, health and wellbeing, because if we want to give a lot to people, we must also relate generously with the person with whom we will be spending each hour of our lives: ourselves. (Mathieu, 2007)

8. Growth From Trauma

A minority of people who have been exposed to various types of traumas show remarkable resilience, and a growth process occurs in them. These people develop a better and more meaningful relationship with themselves, with others, and with the world. In their systematic review, Linley and Joseph (2004) note that traumatic experiences that evoke feelings of threat, uncontrollability, and helplessness have the potential to promote growth in some people.

Optimistic people usually experience a wide range of positive emotions. When they experience trauma, they reframe it positively, by exhibiting good levels of acceptance, coping, and rumination, and are more likely to grow from the traumatic experience.

There is ample empirical evidence of the negative impact of traumatic events, but there is also research showing that some people grow personally after trauma (Affleck & Tennen, 1996; Abraido-Lanza, 1998; Calhoun & Tedeschi, 1998; Mahwah, Erlbaum, Calhoun & Tedeschi, 1999; Armeli, Gunther & Cohen, 2001). A facilitating relationship with an adult

that is empathic and accepting and respecting a child that is a trauma survivor can significantly buffer the damage of ACEs (Bellis, Hardcastle, Ford *et al.* 2017). Trauma survivors can be facilitated by their psychotherapists and helping professionals to grow from their traumatic experiences and increase their resilience (Lyons, 1991; Mahwah, Erlbaum, Calhoun & Tedeschi, 1999; Simonton, 2000; Linley, 2003, Linley & Joseph, 2004, Joseph, 2004).

9. How to Deal Effectively with Trauma: Trauma Informed Care

To be trauma-informed means to be centered on the trauma survivor, to be aware, to be informed about trauma. It is a scientifically sound approach aimed at preventing retraumatization and at offering services and designing structures that lower the risk of retraumatization and maximize the possibility of effective treatments and recovery of trauma survivors.

We have come to redefine good practices as “Best Practices of Trauma-Informed Care,” thanks to an attitude of openness and recognition of the mistakes made in the past. Precisely because we did not know that some aspects of the treatments offered at the time were part of the problem and not of the solution: For example, we did not know that pushing clients against their will to remember past traumas, re-experiencing traumatic moments and so on could be iatrogenic (Fallot & Harris, 2001, 2002, 2009; SAMSHA, 2014).

Today, thanks to what we have learned from the mistakes of the past, we have a series of directives and parameters that help us to prevent damage and maximize the benefits of service rendered. Trauma Informed Care (TIC) is a practice where all the aspect of the organization, the training and supervision of personnel, is centered on the needs of trauma survivors, are seen as partners in organizing the services and the treatments with them, thanks to an effective and strong working alliance. TIC uses a person-centered approach, underlining the need for addressing the client rather than applying general treatment approaches (SAMSHA, 2014).

Person-centered care, complemented by recovery-oriented care and trauma-informed care, forms the basis for a universal approach to healthcare. (Bassuk, 2017).

10. The Trauma-Informed Organization

Such an organization is person- and people-centered and recovery-oriented and has a clear commitment to trauma-informed philosophy, supports and promotes a trauma-informed agenda that includes the creation of policies and procedures to address trauma, inclusion of trauma-informed language in the mission statement, use of adequate resources for training, review of screening and assessment tools to include trauma and trauma-informed leadership in the community.

A trauma-informed organization is planned, organized and managed in a person- and people-centered way. The mission is to provide a facilitating environment where every person, clients, staff is treated in a person-centered trauma-informed way in order to create a facilitative climate promoting the safety and development of every person. Accordingly, for clients and their families, the trauma-informed organization offers trauma informed client-centered services that encourage a proactive role in decisions, prevent retraumatization,

recovery, growth from trauma, resilience and empowerment. For the personnel they offer lifelong learning, supervision, burn out and vicarious trauma prevention and encourage life-work balance.

TIC provides clients with more opportunities to access services that reflect a compassionate view of their problems. TIC can provide a greater sense of security for clients who have a history of trauma and prevent more severe consequences of traumatic stress (Fallot & Harris, 2001, 2002, 2009; San Diego Trauma Informed Guide Team, 2012; Bassuk et al. 2017). The Trauma Informed Care approach is not only the golden standard for healthcare settings but is equally needed and applied in every other setting where people live and work—schools, organizations, juvenile justice institutions, communities and city planning etc. For example, a trauma-informed school is a school sensitive to the issues of trauma and therefore the teachers will also know that not always is a so-called undisciplined student somebody not respecting the rules, the student could be expressing an underlining problem due to trauma. Knowing this will allow the teacher (or the school principal) to manage more effectively her/his role as a trauma-informed teacher, by referring the problematic student to the school psychologist or to a social worker, so that the student, if he/she needs help, can be helped and his/her trauma burden does not become more serious. The ethical principle, *first, do no harm*, reverberates strongly in the application of TIC.

“A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for healing; recognizes the signs and symptoms of trauma in staff, clients, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, practices, and settings.” (SAMSHA, 2012, p. 4)

11. Trauma-Informed Cities

Being a trauma-informed city means taking a holistic approach. It means acknowledging and repairing a system that is unjust and contributes to systemic violence and poverty. It also means embedding a trauma-informed approach into the policies, programming, services, and training of the people who implement them. It means understanding the connection between trauma and violence and the impact on people’s lives, wellbeing, and behavior. A trauma-sensitive approach means changing all aspects of city programs, language, and values to ensure that those who implement programs, services, and policies know how to recognize and respond to trauma. A trauma-sensitive approach also provides tools and support to heal trauma and prevent trauma in communities. Examples in North America include Toronto, Baltimore, Philadelphia, Chicago, San Francisco, and Tarpon Springs (FL). The adoption of a trauma-informed city model, if implemented effectively, can lead to more effective and efficient services, healthier and happier service users, city staff, and other service providers, and a better functioning and thriving city.

TIC is centered on the whole person and not just the problem. Having an informed-trauma approach is not only a duty from an ethical, clinical and mental health point of view, but it is also effective taking into account the cost-benefit ratio since providing treatments

that reduce the damage is in the interest not only of the survivors of trauma but in the best interest of the whole society.

12. Trauma Informed Care Best Practices Project (TIC Project)

The cost of emotional trauma was enormous, long before the COVID-19 pandemic and the invasion of Ukraine; now the global burden of trauma has doubled. The costs of trauma are systemic; it damages individual and social health and, if left untreated, can be passed on to future generations. The high economic costs of trauma harm survivors, their families, communities, and countries. (Lancet, 2020; WHO 2021, 2022a)

Trauma Informed Care Best Practices are science-based practices that can avoid the risks of retraumatization and promote resilience and growth after trauma. The Person-Centered Approach Institute (IACP) with the World Academy of Art and Science (WAAS), the World University Consortium (WUC), the Department of Psychology of the University of Torino, the University for Sustainability, Santa Fe, New Mexico, The World Sustainability Forum, the Black Sea Universities Network, the Protect our Planet Movement and the Psychological Association of Ukraine have created a worldwide project to support, connect and assist all the professionals and public and private organizations operating in countries ravaged by violence and disasters that are in one way or the other, dealing with people, and in so doing, need to be trauma-informed.

Professionals working in their various roles in public or private organizations, whatever is their field of work with people, if they are unaware of the research findings and not trained in Trauma Informed Care (TIC), can unwillingly cause the retraumatization of the trauma survivors. Professionals ignoring the principles and the practices of Trauma-Informed Care are part of the problem that is generating staggering costs of suffering, disability, ill personal and social health, productivity loss and loss of prosperity; on the other hand, professionals aware of the importance of Trauma Informed Care (TIC) as one of their ethical imperatives, will be part of the solution.

The application of Trauma Informed Care Best Practices by professionals and organizations will spare people from unnecessary suffering, protect and promote human safety, health, and wellbeing for people and communities, and promote sustainability and prosperity for all.

The Trauma Informed Care Best Practices Project (TIC Project) will provide free education, training, support and empowerment to all the different actors working in countries affected by violence and disasters: Thanks to the knowledge acquired, they will be better able to apply the principles in their field of work.

Part of the Trauma Informed Best Practices Project is a series of Trauma Informed Best Practices Free Post Graduate Courses designed by Alberto Zucconi and Luca Rollè that is offered to psychotherapists of different nationalities operating in war zones and in communities ravaged by violence, motivated to serve their people by becoming trainers of trainers. The Post Graduate Training Programmes are offered free of charge, by the Person-Centered Approach Institute (IACP) and the Department of Psychology of the University of Turin in partnership with WAAS, WUC, the Black Sea Universities Network, The University

for Sustainability, The World Sustainability Forum, the Protect our Planet Movement and the Ukrainian Psychological Association.*

Trauma Informed Care is one example of a revolution that has happened in the health field. It has been progressing even if some barriers to change still exist.

13. Change of Paradigm in the Field of Health

In the traditional mechanistic approach, health is defined as absence of illness. In the WHO manifesto the new holistic/systemic paradigm of health, it is defined as full development of human potential. Health promotion is defined as:

“the process of enabling people to increase control over, and to improve, their health” (WHO, 1986. Ottawa Charter for Health Promotion p.1).

The basic conditions and resources for health are peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity. Improving health requires a secure foundation in these basic conditions. As you can see, protecting and promoting health and human security go hand in hand.

Good health is an important resource for social, economic, and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural, and biological factors can benefit or harm health. Health promotion activities aim to improve these conditions by advocating for health. The WHO website has emphasised the importance of achieving health for all, with the proclamation that

“all countries should aspire to build strong primary health care and health systems, supported by a well-trained, people-centred and competent health workforce that can respond to the needs of all people” (WHO 2021c p.vi).

And furthermore:

“Building and maintaining trust, especially when a person has had previously distressing or discriminatory interactions with health institutions, is an essential part of providing people-centred health services.” (WHO 2021c p.1).

The WHO Director General underlines the importance of:

“promoting participation and community inclusion for people with lived experience; capacity building in order to end stigma and discrimination and promote rights and recovery; and strengthening peer support and civil society organisations to create mutually supportive relationships and empower people to advocate for a human rights and person-centred approach in mental health and social services.” (WHO, 2019 p.1)

* The TIC Project is welcoming enquiries about partnership from public and private institutions and is welcoming donors. To donate to the TIC Project: <https://new.worldacademy.org/support-ukraine/> <https://www.worldsforum.org/donate.html>

14. A Renewed Urge for Paradigm Change is Heralded by UN Bodies

The 2019 Global Burden of Disease (GBD) report suggests that the global health community needs to radically rethink its vision. An exclusive focus on health care is a mistake. Health emerges from a broader perspective that includes quality of education, economic growth, gender equality, and migration policies. The World Mental Health Report underlines that:

“Growing social and economic inequalities, protracted conflicts, violence and public health emergencies threaten progress towards improved well-being. Now, more than ever, business as usual for mental health simply will not do.” (WHO 2022a p. xiii)

And furthermore, the WHO underlines that in order to be effective we have to change the social construction of reality:

“Everyone in the community and the care system needs to support social inclusion for people living with mental health conditions, and to promote rights-based, person.” (WHO 2022a p. xvii)

The World Health Organization states that by 2022, mental health problems will be the leading cause of disability worldwide. Children, adolescents, and the elderly are most affected. WHO estimates that about 20 percent of children and adolescents and about 15 percent of people aged 60 and older worldwide suffer from mental disorders. The most common mental disorders are anxiety (affecting 300 million people worldwide) and depression (affecting 280 million people). Most of these people live with their disorder without ever receiving treatment. The WHO also states that the old refrain from investing in health for lack of money. Actually it is more expensive not to invest on disease prevention and health promotion since:

“At all stages of life, promotion and prevention are required to enhance mental well-being and resilience, prevent the onset and impact of mental health conditions, and drive down the need for mental health care. There is increasing evidence that promotion and prevention can be cost-effective.” (WHO, 2022a p. xviii)

15. Health at the Workplace & Insecurity Burdens

Nancy Leppink, Head of Labour Administration, Labour Inspection and Occupational Safety and Health, ILO Geneva, in her presentation on “Socioeconomic Costs of Work-Related Injuries and Illnesses: Building synergies between Occupational Safety and Health (OSH) and Productivity” confirms that the ILO estimates that more than 2.3 million women and men die each year from a work-related injury or illness. More than 350,000 of these deaths are from fatal injuries and nearly 2 million deaths are from diseases. In addition, more than 313 million workers are involved in nonfatal work injuries that result in serious injury and lost work time, and it is estimated that there are 160 million cases of nonfatal work-related illness each year. The devastating impact on workers and their families cannot

be fully calculated; however, by far the greatest cost to workers is loss of quality of life and even premature death. Pain and suffering are recognised as incalculable costs, but a worker's mental health can also be severely affected after an accident.

The total cost of an occupational injury or illness is often underestimated because certain costs are incurred outside the organisation and some internal costs are difficult to quantify or determine, such as: lost work time, lost production, reduced work output, and reduced labour force participation. It is estimated that the indirect costs of occupational injuries or diseases can be four to ten times higher than the direct costs. The ILO estimates that the costs of lost work time, workers' compensation, production disruption, and medical expenses amount to 4% of world GDP (about \$2.8 trillion). Thus, the human and financial costs of these daily adversities are enormous and highlight the economic burden of poor occupational safety and health (OSH) practices. Conversely, OSH investments reduce both direct and indirect costs, particularly by lowering insurance costs while improving performance and productivity. Lower social insurance and healthcare costs mean lower taxes, better economic performance, and higher social benefits. Occupational safety and health must therefore be maintained as a key element of development and given high priority internationally and at the national and corporate levels. According to a study by the International Social Security Association on the return on investment for prevention, for every euro invested, a company can expect a potential economic return of 2.20 euros (Leppink, 2015).

Francis La Ferla, former head of the World Health Organization Programs for the Promotion of Health in the Workplace in Europe, states:

“the bio-psychosocial model of health—which is the more comprehensive of the many determinants of health. Each of these determinants emerges from the bio-psycho and social dimensions of this model, which embeds health in a more holistic context. The assets of this approach are immense. Particular emphasis is given to the need for each individual to understand that he is “the main carer” of his own life and “the centre of his own health”. This empowerment is fundamental for the success of the Person-Centred Approach to Health and well-being.” (La Ferla 2003 p.ii).

The concept of Healthy Organizations that invest in worker health and safety are more productive and profitable than those workplaces that try to exploit their human resources. For the individual, health problems entail the loss of wellbeing, livelihood, happiness, satisfaction, even life itself, added to which are concomitant losses to the family. For business and industry, the losses are measured in direct costs, production losses and countless intangible costs. For society, the cost of unnecessary damage to health and life, compounded year after year over the lives of millions of people, is truly incalculable. (Zucconi & Howell, 2003)

Some researchers have provided the first estimate of preventable deaths and preventable health care costs due to psychosocial stress in the workplace in the United States. The preventable costs are substantial—the most conservative estimate is about \$44 billion per year, or \$156 per American per year (Goh, Pfeffer & Zenios, 2019).

16. The Climate Change Burdens

The total cost of an occupational injury or disease is often underestimated because certain costs are incurred outside the period of the occupational injury or disease. Experts widely agree that climate change is increasing the frequency and intensity of extreme weather events. Although such events do not always become natural disasters, there is evidence that damage from natural disasters is also increasing, which tells us that “natural disasters” is a misnomer because human impact on the environment has exacerbated the frequency and magnitude of natural or man-made disasters. Accurate estimates of damage and casualties are notoriously difficult, but the most comprehensive database on natural disasters, the Emergency Events Database (EM-DAT), shows that natural disasters caused \$3.7 trillion in property damage, killed more than 1.5 million people, and left more than 90 million people homeless between 1995 and 2019. Property losses caused by natural disasters have grown faster than GDP as wealth and population levels in disaster-prone areas have increased. Better warning and forecasting systems and more resilient infrastructure have likely reduced the death toll from extreme weather events, but large-scale disasters continue to pose a significant threat to people’s lives, especially in poorer countries. To minimize the economic impacts of extreme weather events, it is important to first understand how these impacts arise and develop. (Deryugina, 2022).

17. The Burdens of Environmental Destruction

For a long time, it was believed that advances in what we know would increase what we can do and called it human progress. Today in the Anthropocene Era, we need to reconsider this notion. It may be dangerous just to know and do more, we need to understand and learn how to live in a complex relational system, and to do so, we need to learn from our mistakes and learn to be attuned with ourselves, others and the world.

The WHO reminds us that

“the most solid evidence suggests that up to 68% of deaths (and 56% of exposure in DALYs) are environmental. Environmental hazards are responsible for much of the global burden of disease: relative to the total population, 23% of all deaths worldwide and 22% of all DALYs are environmental. Reducing environmental exposures would significantly reduce the global burden of disease” (WHO, 2016 p. 103).

Children under five and older adults are most affected by the environment: with 26% of all deaths attributable to the environment, and adults aged 50 to 75, with between 24% and 26% of deaths in this age group attributable to the environment (WHO, 2016 p. 103). The updated analysis for 2016 shows that 24% of global deaths (and 28% of deaths in children under five) are attributable to modifiable environmental factors. Sixty-eight percent of these attributable deaths and 51% of attributable DALYs could be estimated using evidence-based comparative risk assessment methods, and assessments of other environmental exposures were completed with additional epidemiologic estimates and expert opinion. Ischemic heart

disease, chronic respiratory disease, cancer, and unintentional injury lead the list. People in low- and middle-income countries bear the greatest burden of disease. (WHO, 2019).

18. Climate Change is the Single Biggest Health Threat Facing Humanity

The World Health Organization warns us that the way we behave in the Anthropocene Era has produced the worst threats for humanity, and the worst of all is climate change.

19. The Burdens of Acidification of Oceans and Microplastic Particles Pollution

Another growing man-made disaster is the acidification of oceans and the millions of tons of plastic dumped in rivers and oceans, the micro plastic particles that enter the food chains.

New research suggests that plastics may contribute to ocean acidification, especially in heavily polluted coastal areas, through the release of organic chemical compounds and carbon dioxide, both of which can lower seawater pH (Usman et al. 2022). After their use, plastics are usually carelessly disposed of in water bodies, thus entering the aquatic environment. It is estimated that coastal countries generate about 275 million tons (MT) of plastic, of which 4.8 to 12.7 million MT end up in the ocean. In 2017, a United Nations estimate revealed the presence of about 51 trillion microparticles (MP) in the oceans, a value 500 times greater than the number of stars in the entire galaxy, warned Erik Solheim, executive director of the United Nations Environment Program (UNEP, 2017). It is estimated that there will be more plastic than fish in the oceans by 2050 if the current trend is not stopped. Once microplastic is in the environment, it does not biodegrade. It accumulates in animals, including fish and shellfish, and consequently is ingested by humans as food, found in the ocean, and ingested by marine animals. The plastic then accumulates and can enter humans through the food chain: Microplastic particles have been found in food and beverages: In laboratory studies, it has been linked to a range of negative toxic and physical effects on living organisms.*

New research suggests that plastics may contribute to ocean acidification, especially in heavily polluted coastal regions. The World Bank warns us that waste management is a universal problem that affects every single person in the world. Individuals and governments make consumption and waste management decisions that affect the daily health, productivity, and cleanliness of communities. Poorly managed waste pollutes the world's oceans, clogs drains and causes flooding, transmits disease through the spread of vectors, exacerbates respiratory problems due to particulate matter in the air produced by burning waste, harms animals that unknowingly consume waste, and affects economic development (Kaza et al. 2018).

20. Floating Plastic Islands

There are five floating plastic islands in the oceans that threaten to wipe out much of the marine life and contribute to climate change. Some of these trash islands—like the one in the North Pacific—are the size of France, Spain and Germany combined.

* <https://echa.europa.eu/hot-topics/microplastics>

They are the result of more than six decades of dumping trash into the ocean, mostly by land and sea. The College of California estimates that we have dumped 8.3 billion tons of this polymer worldwide in all the last six decades, and the most worrisome part is that more than 70% of it is now clogging the planet's landfills and oceans.

Researchers suggest plastics may contribute to ocean acidification, especially in heavily polluted coastal regions of the world. The UN has warned the international community about the damage that marine litter causes to the economy and to the environment decimating marine ecosystems (i.e., killing more than 1 million animals each year, and also adding billions of dollars to the cost of ocean conservation). Researchers at the University of Hawaii found in 2018 that polyethylene—one of the most commonly used single-use plastics—releases greenhouse gasses such as ethylene and methane when it decomposes in the sun. Trash in the oceans is increasing so much that the World Economic Forum (WEF) predicts that by 2050, the oceans could contain more plastic than fish.

21. WAR Burdens

War is one of the most destructive man-made disasters: Although not usually mentioned as a health concern, war in its many guises is one of the most vicious negative health determinants known. To show the immensity of its impact, there were 250 wars in the last century which killed close to 200 million people, wounded and maimed hundreds of millions more, and killed huge numbers of domestic and wild animals. A continuing deadly aftermath is the remaining presence of estimated 60-70,000,000 landmines still buried in 68 different countries and killing some 26,000 people annually, half of them children. The toll on animals is estimated to be 10 to 20 times greater than for people (McFee, 2002) bringing a concomitant horrific impact on the entire ecological balance.

The indirect assault on health caused by war's catastrophic damage to the environment, much of it permanent, might in the end be even more harmful than direct killing. A few examples include the thousands of tons of toxic chemicals released into the atmosphere over Kosovo from the bombing of petrochemical plants; the 60 million or more gallons of oil spilled in the Kuwaiti desert in the Persian Gulf War from destroyed wells forming 300 lakes of black sludge over 19 square miles; the 100 million pounds of the defoliant and herbicide Agent Orange sprayed to destroy forests in Vietnam, causing ecological and health damage whose long-term effects scientists are still trying to assess (McFee, 2002).

From these data, it is clear that armed conflict—which at the time of this writing shows little signs of abating—remains a man-made health threat of the most severe nature. (Zucconi & Howell 2003 p. 72).

According to the Institute for Economics & Peace's Global Peace Index 2022, the

“...economic impact of violence on the global economy in 2021 was \$16.5 trillion in purchasing power parity (PPP) terms. This figure is equivalent to ten per cent of the world's economic activity (gross world product) or \$2,117 per person. The economic impact of violence increased by 12.4 per cent from the previous year.

This was mainly driven by an increase in global military expenditure, which rose by 18.8 per cent, although more countries reduced their expenditure as a percent of GDP. China, the US and Iran were the countries with the largest increases in military expenditure in nominal terms. Violence continues to have a significant impact on the world's economic performance. For the ten countries most affected by violence, the average economic impact of violence was equivalent to 34 per cent of GDP, compared to 3.6 per cent in the countries least affected by violence. Syria, South Sudan and the Central African Republic incurred the largest proportional economic cost of violence in 2021, equivalent to 80, 41 and 37 per cent of GDP, respectively.

Expenditure on Peace building and Peacekeeping was \$41.8 billion in 2021, equal to only 0.5 per cent of military spending.” (IEP, 2022 p. 3).

We cannot afford the costs of violence:

“The global economic impact of violence was \$16.5 trillion in 2021, equivalent to 10.9 per cent of global GDP, or \$2,117 per person. The 2021 result represented an increase of 12.4 per cent—or \$1.8 trillion—from the previous year, primarily due to higher levels of military expenditure. In 2021, 132 countries increased their military expenditure from the previous year, compared to 29 countries that reduced spending. The economic impact was \$7.7 trillion, an increase of 18.8 per cent. In 2021, the economic impact of armed conflict increased by 27 per cent to \$559.3 billion. This was driven by increases in the number of refugees and internally displaced people, and in GDP losses from conflict. All regions of the world recorded increases in the economic impact of violence from 2020 to 2021. MENA and Russia and Eurasia were the regions with the largest proportional increases, at 32 per cent and 29 per cent, respectively. Syria, South Sudan and Central African Republic incurred the highest relative economic costs of violence in 2021, equivalent to 80, 41 and 37 per cent of GDP, respectively. In the ten countries most affected by violence, the economic cost of violence averaged 34 per cent of GDP in 2021” (IEP 2022 p.6).

22. The Burdens of Forced Migrations

Dr. Tedros Adhanom Ghebreyesus, Director-General of World Health Organization, in his foreword to *Refugee and migrant health: Global Competency Standards for health workers* (WHO, 2021) stated:

“Refugees and migrants are among the most vulnerable communities in many societies. All too often, they live insecurely on the fringes of society, in fear and without access to a reasonable level of essential services, including health services. They may face discrimination, social exclusion, negative attitudes, and stigmatizing stereotypes. The COVID-19 pandemic has disrupted health services across the world, putting these already vulnerable and marginalized communities at heightened risk. The pandemic has compromised the ability of

health systems to respond to the whole spectrum of health needs, exacerbating existing inequities. WHO believes that everyone should be able to enjoy the right to health and access to people-centred, high-quality health services without financial impediment, including refugees and migrants, as expressed by our commitment to universal health coverage". (WHO, 2021, p.v).

“Personal health cannot be separated from social health, and social health cannot be separated from equitable access to health education and health services. Personal and social health cannot be effectively promoted without giving importance to environmental health.”

The United Nations Refugees Agency (UNHCR) states that:

“...by the end of 2021, 89.3 million people were forcibly displaced worldwide as a result of persecution, conflict, violence or human rights violations. This includes:

- 27.1 million refugees*
- 53.2 million internally displaced people*
- 4.6 million asylum seekers*
- 4.4 million Venezuelans displaced abroad*

As of May 2022, 100 million individuals were forcibly displaced worldwide.† This accounts for an increase of 10.7 million people displaced from the end of the previous year, propelled by the war in Ukraine and other deadly conflicts. **117.2 million people** will be forcibly displaced or stateless in 2023, according to UNHCR’s estimations.”*

The Invasion of Ukraine has produced heavy burdens to Ukrainians first but it has also reverberated around the world in many fields like food distribution, energy and logistics disruptions. The Organization for Economic Cooperation and Development estimates that Russia’s invasion of Ukraine would cost the global economy \$2.8 trillion in lost output by the end of next year—and more if a harsh winter leads to energy rationing in Europe.‡

23. The Insecurity of Not Having Identity Papers

The Sustainable Development Goals Division of the UN Department of Economic and Social Affairs (UN DESA/DSDG) and the International Development Law Organization

* <https://www.unrefugees.org/news/unher-ukraine-other-conflicts-push-forcibly-displaced-total-over-100-million-for-first-time>

† Many other regions of the world are facing dramatic refugees problems. For a complete list consult the UNHCR website: <https://www.unhcr.org/globaltrends/report>

‡ <https://www.oecd.org/ukraine-hub/en>

(IDLO) pointed out during the Global Conference on the Implementation of SDG 16, held in Rome from May 27 to 29, 2019, that hundreds of millions of people worldwide, including 650 million children, still lack proof of their legal identity. Promoting legal identity is a prerequisite for achieving all SDGs, particularly targets 16.9 and 17.19. Legal identity for all—from birth—is a human rights issue, ensuring that everyone is recognized before the law and can exercise and claim their rights. The vast majority of people in the world who do not have proof of legal identity are children who have never been registered at birth.

24. Peace is Cost Effective

Research has shown that:

“...improvements in peace can lead to considerable economic improvement in GDP growth, inflation and employment. The average economic cost of violence was three times higher for the countries with the largest deteriorations in the GPI, equal to 22.1 per cent of their GDP, compared to 6.7 per cent for the countries with the largest improvements in 2019. Over the last 20 years, countries with the biggest improvements on the GPI had 1.4 per cent higher GDP growth per annum than the countries with the largest deteriorations. Over a 20-year period, this additional growth would compound to an additional 31 per cent of GDP. Countries deteriorating in Positive Peace recorded more volatile GDP growth than the index average. Over the last 20 years, the ten countries with the largest improvements in Positive Peace average 2.6 percentage points greater economic growth per capita annually than the ten countries with the largest deteriorations. If all countries improved their peacefulness to the average of the 40 most peaceful countries, the reduction in violence would accrue to \$3.6 trillion in savings over the next decade. The impact of violence goes beyond the victim and perpetrator and has economic, social and political consequences(Institute for Economics & Peace. Economic Value of Peace” (IEP, 2021 p.4).

25. The Dividends of Positive Peace

Peace is a win-win solution for everybody and a prerequisite for growth and prosperity.

“Positive Peace is a transformational concept. It is defined as the attitudes, institutions and structures that create and sustain peaceful societies. The Institute for Economics & Peace. Economic Value of Peace (IEP) has empirically formulated the Positive Peace Index (PPI) through the analysis of almost 25,000 economic and social progress indicators to determine which ones have statistically significant relationships with peace as measured by the Global Peace Index (GPI).

The PPI shifts the focus away from the negative to the positive aspects that create the conditions for a society to flourish. Due to its systemic nature, improvements in Positive Peace are associated with many desirable outcomes for society including stronger economic outcomes, higher resilience, better measures of

wellbeing, higher levels of inclusiveness and more sustainable environmental performance. Therefore, Positive Peace creates an optimum environment in which human potential can flourish.

Positive Peace can be used for empirically measuring a country's resilience, or its ability to absorb and recover from shocks. It can also measure fragility and help predict the likelihood of conflict, violence, and instability. There is a close relationship between Positive Peace and violence as measured by the internal peace score of the Global Peace Index (GPI).

*For this reason, the greater the improvements in Positive Peace, the greater the economic performance. The countries with the largest improvements in Positive Peace have averaged higher rates of economic growth per capita relative to the countries that recorded the largest deteriorations by more than 2.6 percentage points” (Institute for Economics & Peace. *Economic Value of Peace*, 2021 p. 50).*

Economic Nobel Prize recipient Joseph E. Stiglitz and Harvard professor Linda Bilmes showed in their famous book that the governmental calculations can be quite wrong in minimizing the true economic burden of war, in the case of the Iraq War the Administration officials estimates were 5000 billion US dollars and Stiglitz and Bilmes calculated that the actual costs were amounting to 3 trillion US dollars (Stiglitz & Bilmes, 2008).

26. Effective Ways to Promote Change: Person- and People-Centered Approaches

There is ample scientific evidence that people- and person-centered approaches produce more effective results and are more cost effective in the medium and long term than the other traditional approaches. Person- and people-centered approaches (PCA) are scientifically validated, interdisciplinary and inter-sectorial approaches designed to foster the protection and promotion of human capital and at the same time offer the maximum level of effectiveness in protecting and promoting human ecologies and natural ecosystems, promoting sustainable change. The PCA is a value-oriented approach based on equal rights, empowerment strategies, deep respect for each person's culture and tradition. The PCA promotes empathic understanding, mutual respect and effective communication and collaboration among different stakeholders with actions of empowerment, recovery and resilience with the creation of solid working alliances based on mutual trust. The applications of the people-centered approaches are showing excellent results in many fields and disciplines; they can be found in different parts of the world and are constantly expanding.

27. Person- and People-Centered Education and Training

To survive, every life form depends on learning effectively and quickly to adapt its behavior to changes in the environment. We need to retool and improve all levels of our education. Formal and informal education at all levels must provide us with the knowledge, skills, and attitudes that will enable us to survive and even thrive in today's changing times by

learning the skills necessary to build sustainable relationships with ourselves, others, and the planet. (Morin, 2001, 2007; Zucconi 2021). In education, person-centered or student-centered learning is more effective than traditional teaching (Rogers, 1967, 1969, 1971, 1977, 1983; Zimring, 1994; Thorkildsen, 2011). Research shows that educational goals are better met, attendance is better, students are more satisfied, morale is better, self-image is better, critical thinking is better, problem solving is better, relationships between students in the classroom and outside of school time are better, and there is less destructive behavior when students drop out; (Pintrich, 2000; Cornelius-White & Harbaugh, 2010). Person/student-centered education has positive effects on all levels of education (Knowles, 1984; Kember, 2009) and also shows excellent results when applied to fields such as molecular biology, biochemistry, pharmacology, etc. (Knight & Wood, 2005; Kemm & Dantas, 2007; Costa, 2014) or when hybrid or e-learning forms of education are used (Motschnig-Pitrik & Derntl, 2002).

28. People-Centered Participatory Leadership

In leadership development, person-centered, sustainable leaders are people who excel at listening rather than inflammatory rhetoric. They are champions of empowerment and take pride in helping their people gain confidence and self-esteem, develop their potential, and serve their communities. (Jacobs et al, 2020; Zucconi & Wachsmuth, 2020).

29. Person- and People-Centered Health

In health protection and promotion, person-centered medicine empowers people and communities to protect and promote their health and well-being where they live and work by promoting knowledge, self-awareness, and self-determination and preventing iatrogenic harm. (WHO, 2008, 2010, 2012; Zucconi, 2008, 2019). Personal health cannot be separated from social health, and social health cannot be separated from equitable access to health education and health services. Personal and social health cannot be effectively promoted without giving importance to environmental health. When all these variables are considered and managed within a bio-psycho-social-spiritual framework, and interventions are intersectoral and interdisciplinary, protecting and promoting human and environmental health leads to prosperity. (Zucconi & Howell, 2003; Zucconi & Wachsmuth, 2020). In the green and blue economies, circular economies are much more effective than traditional economies (Pauli, 2010; UNU-IHDP and UNEP, 2012; WHO, 2020e).

“Modern science is characterized by its ever-increasing specialization, necessitated by the enormous amount of data, the complexity of techniques and of theoretical structures within every field. Thus science is split into innumerable disciplines continually generating new sub disciplines. In consequence, the physicist, the biologist, the psychologist and the social scientist are, so to speak, encapsulated in their private universes, and it is difficult to get word from one cocoon to the other... ..It is necessary to study not only parts and processes in isolation, but also to solve the decisive problems found in the organization and order unifying them, resulting from dynamic interactions of parts, and making the behaviour of parts different when studied in isolation or within the whole...

In short, “systems” of various orders are not understandable by investigation of their respective parts in isolation”. (Von Bertalanffy, 1969 p. 30).

30. People- and Person-centered Approaches to Protect and Promote Human Security for All

In the past, when the United Nations proposed the concept of Human Security, it was met with some criticism, of being vague, with the implied meaning that it was something that should be bestowed from above. Nowadays the concept of human security has been creating more awareness on the social construction of reality, the importance of citizens' consciousness, and has become a bio-psycho-social-spiritual paradigm as a right of every human being—a right to be demanded, defended and promoted with person- and people-centered actions of empowerment. The right to human security refers to the security of people and communities. There are several dimensions related to the sense of security, such as freedom from fear, freedom from want, and freedom from humiliation. There are several reasons why the people-centered approach is one of the approaches of choice for protecting and promoting human security. Human security is a right to be demanded, defended and promoted by people, through self-empowerment measures.

For the last 80 years researchers have shown that person- and people-centered approaches are more effective in promoting change in the fields of health, education, management etc. In the last 20 years the United Nations and several UN agencies and International bodies have realized the importance of a paradigm change, from the traditional top-down approaches to holistic/systemic circular participatory approaches. (Zucconi & Howell, 2003; Zucconi, 2008; Karlsrud, 2015; Zucconi & Wachsmuth, 2020; Sedra, 2022; WHO 2006, 2007, 2010, 2012, 2016a, 2019, 2020, 2022c, 2022e; WHO/Europe, 2013, United Nations, 2015; United Nations Development Programme, 2021)

The UN is changing its traditional leadership role and embracing a participatory leadership approach as it recommends to all the nations and to all the stakeholders the implementation of person- and people-centered approaches to promote change including the defense and promotion of Human Security with actions of empowerment. Awareness of the failures of traditional approaches and a new cultural and scientific awareness that everything is connected is necessary considering the damages inflicted by learned passivity from authoritarian styles of government and management. Person- and people-centered approaches are effective and have a positive cost/benefit ratio and promote the empowerment and responsibility of all the stakeholders. (Zucconi & Howell, 2003; Zucconi 2008, 2019, 2020, 2021; WHO 2006, 2007, 2010, 2012, 2016, 2019, 2020, 2022c, 2022e; WHO/Europe, 2013, United Nations 2015; United Nations Development Programme, 2021)

“In 1994 the UNDP Human Development Report New Dimensions of Human Security coined the term “human security” within the UN system. The report highlighted four characteristics of human security: universal, people-centered, interdependent and early prevention. It further outlined seven interconnected

elements of security: economic, food, health, environmental, personal, community and political. In human security, in order to be effectively implemented a People Centered Approach has to be successful in encouraging local ownership; balancing top-down and bottom-up approaches; managing hybridity; fostering inclusion; and advancing conflict prevention” (Sedra, 2022, p.25).

The UN Secretary-General appointed a high-level independent panel to comprehensively review peace operations. The panel published its report in June 2015 and made four recommendations, one of which stated:

“...the UN Secretariat must become more field focused and UN peace operations must be more people-centred (UN 2015: viii). On the shift to more people-oriented peace operations, the panel argued for ‘a renewed resolve on the part of UN peace operations personnel to engage with, serve and protect the people they have been mandated to assist. [...] Placing people at the center of peace operations also carries the potential to mitigate some of the impacts of the robust and state-centric mandates that peace operations are furnished with, by helping other, more vulnerable and less privileged actors to find a seat at the table, and supporting the development of more responsive, accountable and legitimate institutions.

The ultimate aim should be to foster a resilient society, and by extension, resilient state-society relations”. (UN 2015: viii)

The people-centered security (PCS) approach was defined in response to criticism of the human security agenda. It continued to focus on meeting the diverse security needs of men, women, boys, and girls, but sought to engage rather than oppose the state in pursuit of this goal. It narrowed the definition of security and justice to an essential core of issues and saw the role of donors as facilitating dialog between the state and civil society and balancing top-down and bottom-up reforms.

“At its core the PCS approach, which was firmly cemented in UN orthodoxy by the 2010s, aims to renew the social contract between the state and the population it serves..... the tremendous potential of the PCS approach as a driver of positive change in the peace and security field ...” (Sedra, 2022, p.4)

“While the 2030 Agenda reaffirmed the centrality of the PCS approach and established benchmarks for its realization, the capacity of UN agencies to apply it still requires some strengthening. UN security programs are characteristically rooted to language on people-centeredness, but many practitioners lack the tools, time, or experience to apply this to project implementation. Reflecting this disjuncture, it is very common for security programming designed and framed as people-centered and locally owned to evolve into state-centered, externally driven processes” (Sedra, 2022 p. 6).

The Last Report on SDG 16+ states:

“Ultimately, the aim of stakeholder engagement in the 2030 Agenda is to ensure responsive, inclusive, participatory and representative decision-making at all levels of society. Ensuring participation and inclusiveness in decision-making is valuable from a human rights perspective. It also adds a procedural dimension to the principle of “leaving no one behind” by ensuring that those at risk of being overlooked have a voice in government decisions that affect them. Finally, people-centered service delivery is critical to all the SDGs: from accessing education and health, to reducing inequality, to ensuring security, justice and the rule of law. In all of these policy spheres, the role of transparency and access to information are pre-conditions for the implementation of the 2030 Agenda and the SDGs as a whole.” (SDG 16+ Report p. 34)

How much is imperative to implement effective approaches to human security for all is underlined in a 2021 UN Peacekeeping unit report that stated:

*“...under our most pessimistic scenario, a 25% increase in effectiveness of conflict prevention would result in 10 more countries at peace by 2030, 109,000 fewer fatalities over the next decade and savings of over \$3.1 trillion. A 50% improvement would result in 17 additional countries at peace by 2030, 205,000 fewer deaths by 2030, and some \$6.6 trillion in savings. Meanwhile, under our most optimistic scenario, a 75% improvement in prevention would result in 23 more countries at peace by 2030, resulting in 291,000 lives saved over the next decade and \$9.8 trillion in savings”. **

31. SDG 16+ is Instrumental in Protecting Fundamental Freedoms and Ensuring that No One is Left Behind

“Governance institutions and decision-making processes rooted in a human rights-based approach to development are critical to the achievement of SDG 16+ and to ensuring that no one is left behind. Bold reforms in making governance institutions more people-centered, responsive, effective and accountable in line with SDG 16+ principles will increase the resilience of societies to conflict by better integrating minority and marginalized voices. Institutions must not only be accountable and transparent, but also more participative, inclusive, responsive and representative. They must operate in accordance with the rule of law and human rights principles of non-discrimination and equality”. (SDG 16+ REPORT, p. 34).

32. Scientifically Reliable Person-centered Participatory Research Methods

Over the past 40 years, researchers have developed scientifically reliable, person-centered participatory research methods. They offer advantages over traditional research because the

* https://peacekeeping.un.org/sites/default/files/estimating_future_conflict_risks_and_conflict_prevention_implications_by_2030.pdf

use of a participatory research approach allows for the integration of stakeholder perspectives and the exploration of issues that are considered priorities by communities and often not considered by researchers.

Participatory research involves community stakeholders in working with researchers at all stages of the research process, from problem identification to research question development to dissemination of findings. Relevant stakeholders are full partners in all phases of the research. This requires relationships based on trust and respect, regardless of the partners' education or experience in science and research (Woolf et al., 2016). Involving communities in the design of studies helps produce data that is more appropriate and relevant to them, and promotes empowerment and capacity building (Prior, Mather & Ford, 2020; Duea et al. 2022).

33. Being People-Centered for the Future Generations

Another wise and ethical way to be people-centered is to consider that the way we behave is not only irresponsible for us, but even more so for future generations. Kenneth Stokes, WAAS Fellow and President of the World Sustainability Forum, has written a Universal Declaration on the Responsibilities of the Present Generations Toward Future Generations and presented it to the United Nations hopefully to be discussed in the next general Assembly in 2023.*

34. Existential Threats: Risks of Human Extinction or Civilizational Collapse

Scientists have advised us that our current lifestyles are not only negatively impacting our planet's ecosystems, but that we are rapidly reaching a tipping point where mitigation and/or reversal of trends is no longer within our reach (IPCC, 2014). In other words: if we do not act promptly and effectively, we will face not just threats, but existential threats that threaten the survival of the self-proclaimed intelligent species of planet Earth.

At present, the Doomsday Clock shows only 100 seconds to midnight. The Bulletin of the Atomic Scientists was founded in 1945 by Albert Einstein, one of the founders of WAAS, and some scientists from the College of Chicago who were involved in the development of the first nuclear weapons as part of the Manhattan Project. The Bulletin uses the symbolism of the apocalypse (midnight) to refer to the threat to humanity and the planet. The Doomsday Clock is set each year by the Bulletin's Committee in consultation with the Board of Sponsors, which includes 11 Nobel Laureates. The clock has become a widely recognized indicator of the world's vulnerability to catastrophe from nuclear weapons, climate change, and breakthrough technologies.

The Clock in 2015 was indicating a worrisome 180 seconds to midnight, it was at 120 seconds in 2019 and in 2022 it was at 100 seconds to Midnight. Indicating that our destructive behaviors keep it ticking faster and faster.... while we try to escape responsibility, we

* https://www.worldsforum.org/universal_declaration.html

effectively castrate ourselves, disempowering ourselves and sabotaging our potentialities for effective coping with the manmade rising emergencies. *Michael Marien and David Harries, both fellows of WAAS, are respectively Senior Principal and principal of the Sustainability Guide (www.securesustain.org) their website is housing many important reports and lists more than 50 organizations focused on Security and Sustainability.**

“We lack a systemic and interdisciplinary understanding of how barriers to change arise and how they can be effectively addressed or mitigated.”

To summarize: People-Centered Approaches (PCA) are scientifically validated, interdisciplinary, and cross-sectoral approaches that aim to support the protection and enhancement of human capital while maximizing effectiveness in protecting and enhancing human ecology and natural ecosystems to promote sustainable change. PCA is a values-based approach grounded in equity, empowerment strategies, and deep respect for all life forms, cultures, and traditions. PCA promotes empathetic understanding, mutual respect, and effective communication and collaboration among diverse stakeholders with empowered action and resilience interventions. The application of the person-centered approach has produced excellent results in many fields and disciplines; it can be found in different parts of the world and is constantly expanding. To survive, every life form depends on learning effectively and quickly to adapt its behavior to changes in the environment. We need to transform and improve our education system at all levels. Formal and informal education at all levels must provide us with the knowledge, skills, and attitudes that will enable us to survive and even thrive in the current era of change by learning the skills necessary to build sustainable relationships with ourselves, others, and the planet. We need people-oriented, participative leaders, people who shine more through listening than inflammatory rhetoric, who are masters of empowerment and take pride in helping their people gain confidence and self-esteem, develop their potential, and serve their communities (Jacobs et al, 2020); (Zucconi & Wachsmuth, 2020).

Effectively communicating these important issues to various stakeholders and decision makers is a difficult task as we must effectively consider the multiple variables that influence each other: We lack a systemic and interdisciplinary understanding of how barriers to change arise and how they can be effectively addressed or mitigated. Most currently proposed roadmaps for addressing the Anthropocene era focus primarily on financial and technological variables and pay little attention to psychological, social, political, cultural, organizational, and institutional variables (Ekstrom, Moser, & Torn. 2011).

* <https://securesustain.org/global-risks-and-challenges/>

Marien and Harries are also part of the WAAS working group on Existential Risks to Humanity (ER2H) chaired by two WAAS fellows, Bob Horn hornbob@earthlink.com and Jo Nurse drjonurse@gmail.com. The group is preparing a “WAAS Polycrisis Report” which will describe different definitions of current multiple crises and their interactions that lead to widespread calamities and existential risks to nations or humanity.

35. Promoting Sustainable Change and Governance

Because everything is interconnected, we must think globally and act locally to achieve sustainable governance that puts people at the center (Morin 2007). We need to act systemically as well as across disciplines and sectors to promote health, awareness, and resilient people, healthy relationships, healthy communities, effective education, healthy workplaces, a healthy economy, a healthy environment, and healthy and sustainable growth.

Promoting change toward sustainable governance is a multi-level, circular, continuous action of psychosocial and cultural change of the individual, the organization, the community, society, and vice-versa. Sustainable change must be protected and promoted at all different and interconnected levels that form an epistemic web of sustainable and synergistic relationships that are simultaneously socio-cultural, economic, political, environmental, educational, scientific and psychological.

As mentioned in this paper, there is a solid body of research on effective applications of person- and people-centered approaches in the field of psychology, psychiatry, health, education, training, management, research, organizational development, leadership, community and city planning, sustainable development, nonviolent communication, conflict prevention and resolution, peace work, human security protection and promotion etc. To get out of the current quagmire, people need to develop their innate abilities to relate effectively to themselves, others, and the world, and relearn to form emotional bonds with all life forms. This is necessary to promote sustainable change at all levels.

We need to realign education because we urgently need more effective education models that enable us to diagnose and mitigate worsening man-made challenges. We need to empower people and communities, promote awareness and transparency, and make explicit what is often implicit. We need to foster a more transparent, resilient, and congruent society where values and power imbalances are as visible as biases, denials, and outdated ways of knowing and doing. Understanding these processes, which is a compass for the resilient citizen, should be available to all stakeholders to promote recovery, agency, and resilience.

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Human Security & Global Understanding: Towards New World Relations

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Abstract

*The semantical as well as the practical implications of 'human security' need to be re-adapted due to the constantly changing kind of vulnerabilities of all people around the planet, independent of their place, culture, status or beliefs. Today major threats are of global nature, which can affect anybody. With this, the international organization of the efforts to combat them is not anymore a sufficient strategy. Improving the security of all citizens of the planet calls first for bridging the gap in understanding between global problems constellations and the local everyday living conditions in cultural, social, economic and natural respect. Such a perspective encompasses an understanding of the local as well as cultural conditions in new ways, related to its impregnation by global processes and grasping the global consequences of everyday actions locally. A timely approach to human security needs to prepare transdisciplinary and trans-sectoral as well as transnational cooperation. To improve human security for all under globalized conditions, effective solutions must be based on a subjective perspective. Related, democratically shaped bottom-up actions need to be fostered first by regional action centers in that respect; globally coordinated top-down measures should always complement these efforts. All in all, a shift from a top-down approach to a grass-roots bottom-up approach in identifying the most urgent needs of security by citizens of the planet is needed to reach global sustainability, and with it, the improvement of anyone's security in the spirit of The Jena Declaration.**

With the ongoing Digital Revolution and the corresponding globalization of the relations to the world, today we experience a new expansion of the spatial scope of action and the subsequent acceleration of social life. These imply a deep transformation of living circumstances, also the local ones. On that basis, virtually every domain that shapes our everyday lives politically, economically, socially, and ecologically has been altered dramatically over the last few decades for most inhabitants of the planet.

It is important to understand that the spatial and temporal living conditions established anew are closely related. By this, the feelings of security established so far are radically undermined on a broad front. New technologies now allow us to easily override spatial distances for many everyday practices without much or no time investment. That way, far-flung places and people are in ever-closer contact, either way—constructive or destructive,

* <https://www.thejenadeclaration.org/>

as life improvement, life hazard or better: life risk. At the same time, new kinds of personal global communities and networks are emerging. Nevertheless, this does not diminish the importance of the local. Even if in many ways the local seems to be completely at the mercy of global processes, it keeps its relevance. In fact, in some respect, it gains even in importance.

Mainly, based on the Digital Revolution and global climate change, local communities, regions, and even nation-states continue to lose dramatically their independence from broader events and interrelations in nearly all respects. Places, regions, and nations are no longer well-defined and delimited containers of living. They are rather becoming transit stations of globally connected processes. Thus, while the determination and identification of the place, region, or nation remains important for communication and many practical activities, the content of what happens at and through these stations is less so, not only—but also—in respect of human security and socially not much less important: in respect of feelings of security.

On that basis, an exclusive focus of security policies on spatial constellations and political configurations at national scales misses important dimensions of today's geographical, economic, social, and cultural realities. Consequently, a recalibration of the perspective on human security is badly needed: we need to turn away from the representation of human security inside of nationally fenced, and accordingly statistically reproduced life-worlds towards grasping security requirements for locally contextualized ways of living that is embedded in global processes in nearly every respect.

Such a perspective helps to reach an appropriate understanding of the global condition of human security so urgently needed. And such a global understanding is required if we are to find pathways to capture and contain new types of security issues and contextualize the old ones adequately. To reach the 'to be protected' subjects with their real-world problems and at the place they are approachable, at the local level, specific strategies need to be locality-focused designed from a global perspective and implemented accordingly.

The most visible example for the first one is perhaps the loss in the significance of the barrier at the border for the constantly growing part of digital form exchanges, for instance in the form of capital and information flows. This loss is marking the vanishing of the so far well-established state's scope of control and protection in these societal areas. With the replacement of material carriers of symbolic values by digital transactions, the basis of previously known forms of territorial control is significantly weakened.

An example of the second one is perhaps the removal of protection and control that children's rooms offered growing up. Impermeable walls and doors have changed from concrete, plaster, or wood to a kind of crystal porous reality, now penetrable by digital content even by closed doors. These and similar kinds of changes are pulverizing well-established ontological securities, undermining not only long-time established routines and habits but also the basis for trust in wanting to feel safe.

1. Cornerstones of the New Strategy

It is evident that humankind now is confronted with unprecedented situations and with new, profound demands on security and feelings of safety. The world's climate, ecosystem, biodiversity, and economic and socio-cultural wellbeing are at stake. Those already most vulnerable will bear the brunt of the impacts. To improve their security level, it is imperative that first the gap between global problems and national, regional, and local interests and decision-making be bridged.

“A widespread awareness of how everyday actions are exposed to global and local security threats is necessary. This includes the ability to understand connections between actions that may seem disconnected across time and space.”

Today's most pressing existential problems—including security issues—can only be addressed through an inclusive, global perspective that encompasses an understanding of the conditions and consequences of everyday actions. Finding solutions for global challenges requires new alliances and approaches which include innovative partnerships across a wide range of fields of competences, including scientific disciplines, as well as collaboration with local communities, and all sectors of civil society. Consequently, and secondly, an approach that can bridge inclusiveness and independence is indispensable.

Taking all these necessities into consideration, a new and timely approach to human security needs to reach out, thirdly, not only for transdisciplinary cooperation but also for trans-sectoral as well as transnational cooperation. Collaboration with local communities requires, fourthly, addressing the global nature of most of the pressing challenges, and how everyone's security issues are affected onsite by these (global) challenges.

Taking these four elements of a new strategy together calls fifth for the broadest possible bottom-up approach. In brief: Effective solutions must be based on the subjective perspective of the concerned citizens, on bottom-up decisions and actions, and should then be enabled and promoted by related, coherent top-down measures.

2. The Approach

Given the fact that the ongoing globalization processes constantly open up new fields of human security requests, perhaps in a never before reached scope, intensity, and rhythm, we need to conceptualize the approach to human security according to this new nature of challenges.

The *first step* of this approach lies in raising awareness. Everyday practice is where the local and global become one, arts and humanities can expand views and understanding, and where scientific insights are applied. Therefore, a widespread awareness of how everyday

actions are exposed to global and local security threats is necessary. This includes the ability to understand connections between actions that may seem disconnected across time and space. Grasping the global condition of local and regional living contexts of one's own life in this way constitutes the awareness of the globalized living conditions, its global understanding.

“Human security is much more than just a political agenda.”

Especially due to the accelerated rhythm of changing security requests, making citizens aware of the changing ontology of the present world and its security implications is the primary order. The widespread application of digital technologies with the implied drastic change of the spatio-temporal conditions for human action, as well as the exuberant power of the transformation of natural conditions in the time altar of the Anthropocene, also have unsettling implications for most of the citizens. Consequently, one of the important tasks for an adapted approach to human security is to develop and promote a locality-related understanding of the new, global condition everyday life-worlds is confronted now around the globe, and to foster a sufficient sensitivity to the endangering implications: Raising awareness is the primary pre-condition for an encompassing human security survey under constantly changing conditions.

The *second step* of the proposed approach is the consequent application of a subjective perspective with all its facets. The immediacy of the hazardous effects of technical innovations due to the new spatio-temporal conditions is asking for a strategy with a high degree of promptness and immediacy of access to the citizens. Therefore, such a strategy shall allow us to detect dimensions of human security that are not so far thematized, neither by the (social) sciences, engineering, the press, the media, nor even the arts. Such requirements are fulfilled by a subjective perspective approach. That implies revealing the subjectively experienced forms and dimensions of lacking security, before developing beforehand an “objective” catalog of requirements, or even benchmarks for achievable situations. The second step of this approach lies in therefore reaching a thick description of types of threats to human security in a constantly changing world, by paying sufficient attention to their cultural and local embeddedness. Cataloging the key types of threats in all realms—culturally, socially, economically, politically, and ecologically—is therefore the constitutive feature of the second step of the survey. Therefore, despite the highest relevance of the subjectively experienced component, human security is a comprehensive and strongly science-based concept. Consequently, human security is much more than just a political agenda.

The *third step* calls for a science-based evaluation of the subjectively experienced menaces of human security. This strategy implies transdisciplinary cooperation, including the cooperation of citizens with social and natural sciences as well as the humanities.

Working at the citizen level first and foremost is about building relationships of trust with communities. To get heard at all, the abstract institution of “science” needs to be represented by real people—human faces. Being on-site and taking time for instigating dialogue is critical for transdisciplinary research and evaluation. Community members will much more likely

be willing to engage if they are dealing with a researcher they know and who has a credible interest in their concerns. The phrase “No one cares how much you know until they know how much you care” reflects this need for relationships based on integrity and true interest. In particular, scientists engaged in transdisciplinary research must learn to understand the community’s perception of the problem that is to be addressed, the members’ values and self-perceptions, and the motivations, interests, and emotions that drive their actions.

A deeper understanding of the experienced threats by a community not only helps to better comprehend the problem at hand, but is also necessary to translate scientific knowledge relevant to the case in a language that is understood and to evaluate scientifically experienced threats. For this, the cooperation of a wide range of scientific disciplines, including the humanities, social and natural scientific disciplines as well as medicine and engineering is at stake and needs to be coordinated. In short: The *third step* is geared toward overcoming the widely established barriers between the natural sciences, social sciences, and humanities on the one hand, and between the everyday world on the other. Joint work should, whenever possible, be carried out in partnership with engaged citizens promptly and directly.

The *fourth step* concerns the implementation. The results of the transdisciplinary cooperation need to be translated to a comprehensive political agenda and a strategic implementation plan. But not only that it needs to be translated further for use in classrooms at all levels, but also into broader public awareness campaigns through easy-to-understand publications, computer games, movies, documentaries, TV programs, podcasts, social media campaigns led by influencers, drawing and story map competitions, arts events of all types, and the like.

In sum: Addressing a practice-centered approach to human security is calling for establishing an inclusive perspective in the form of

- a. raising awareness for existing threats to human security,
- b. identification of its *conditio sine qua non*, by applying the approach of subjective perspective,
- c. a science-based evaluation of the indicated threats in transdisciplinary cooperation, and
- d. the implementation of the surveys’ collected data.

3. Organizational Targets and Structure

Meeting the challenges for human security in the 21st century calls for transdisciplinary, trans-sectoral, as well as transnational cooperation, in new ways. This includes not only knowledge production in the form of data collection, about the state of the art of human security, but even more so for knowledge dissemination about existing and potential threats, and implementation of the conclusion and recommendations. Finding solutions for the mastering of global challenges for human security is calling for new alliances of partners from the above-mentioned realms: a wide range of different societal sectors from all parts of the world, of scientific disciplines, but also a direct collaboration with citizens.

Taking all necessities together calls for a well-prepared bottom-up strategy, cross-cutting the established order of international top-down division of competences. As all relevant realms in science, education, politics, and civil society are still not prepared, solid conditions for this must be first established. The rapidly changing nature of human security is calling for a monitoring process, ongoing over decades. Therefore, a careful and well-thought out organizational structure for a long-term process for monitoring human security issues is needed, coordinated by a global platform including all partners.

Such a platform needs to fulfill specific requirements such as

- Drawing attention to these major issues of the global community, that is concerned by it existentially.
- Contributing to solving global problems above the international level to enable universal peace.
- Careful elaboration enabling its functioning over several decades based on a financially well-supported program at all levels, global, regional, as well as local.
- Leading to identifiable and practical results for the short as well as long-term implementation.

The groundwork will be done by local partners, and citizens around the world, organized in the form of Regional Action Centers. The Regional Action Centers (RACs) will give the human security campaign a presence and an identity at the regional and local levels. The hosting institution of the RAC is preferably a well-established and reputable university. The RAC will plan the human security-related activities in cooperation with the educational institutions and the schooling system, as well as civic engagement organizations, local and regional authorities, etc.

The RAC's aim is to include all societal, economic, political, and cultural levels and sectors in the planning and implementation of the survey, the dissemination of the information of its outcome, and the implementation of the derived strategies. The RACs will mainly act as hubs to coordinate the human security communication networks and action patterns at the regional level. The hub concept is related to the bottom-up structure of the program. The activities encompass several types of action fields linked to the basic guidelines of the program's rationale and objectives.

All in all, the human security campaign includes five program lines: survey, evaluation, information, teaching, and implementation.

The *survey* will reveal citizens' claims for human security and various threats to it in a rapidly changing world. For the evaluation of the results, a transdisciplinary approach will be applied, bringing together citizens, and social, human, and natural scientists to identify the biggest deficiencies of the current situation, and the measurements to be undertaken.

The *evaluation* of the survey result is the second basic program element for all the follow-up actions. It has to detect first the key threats in the different areas of everyday life,

identify the proposed measures by concerned citizens, the human, social and natural sciences as well as engineering adapted to the local and regional levels. To prepare the ground for adaptation of such recommendations and translation into new ways of living, the third step is of central importance.

Learning will focus, first of all, on making the global condition of all citizens better understandable. The campaign will focus on the first strategic action line, the elaboration of a master program on ‘Global Understanding – Educating Leaders for a different Future’. Subsequently, it is intended to develop a global network of 100 prime universities in global understanding, offering a specific master’s program, based on a transdisciplinary practice-centered approach. A second strategic action line focuses on the elaboration of teaching materials for all levels in classrooms throughout the world.

Information about the outcomes of the survey will be provided in cooperation with strong partners from the private sector to increase public awareness using, for example, social media, print media, computer games, social networks, digital platforms (www.global-understanding.info), social media, and TV programs.

For the monitoring and coordination of the long-term *implementation* of the survey’s results, a powerful digital platform for action needs to be established that will be made at disposal free of charge to all the partners linked to one of the Regional Action Centers. It will be the global hub under the auspices of the relevant organizations of the survey in cooperation with the relevant UN organizations such as FAO, ECOSOC, WHO, UNESCO (with its UNESCO Chairs network), OCHA, ILO, UNEP, Security Council, and others. With their cooperation, the Regional Action Centers will be the key agents for implementation— together with the local, regional and national political authorities, the enabler of the initiatives based on the survey.

4. Concluding Remarks

The shift in perspective and action to improve human security in the age of the Anthropocene includes therefore a series of additional programmatic shifts that need all to be as coherent and complementary as possible. To these requirements counts certainly the shift from a diplomatic top-down approach to a grass-roots bottom-up approach in identifying the most urgent needs of security by citizens of the planet. The shift from an ecology-driven concept of sustainability to a cultural and societal approach is one of the important consequences of the radical inclusion of the citizens onsite into global security strategies. That focus on the regional and local will allow the establishment of an encompassing network of Regional Action Centers, the de-central nodes of the whole endeavor.

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SEED-IDEA – Basic Sciences and Human Security

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Human security is the state of being secure from danger, fear, and anxiety for all humans and social groups. The roots of these insecurities were clearly recognized in the Sustainable Development Goals, which were adopted by the United Nations General Assembly in September 2015 within the resolution *Transforming our World: 2030 Agenda for Sustainable Development*. Most of these goals are connected to basic sciences— mathematics, physics, chemistry, and biology. The ones that are directly connected to and crucially depend on the results of basic research are those focused on innovation, engineering, healthcare, water security, food security, energy technologies, climate action, protection of the environment, education, and peace.

“One of the necessary conditions for the sustained growth and inclusive development of a country, which eliminates dangers, fears, and anxieties of all kinds for all humans and social groups, is to have a thriving scientific and technological community capable of generating new knowledge and applying it.”

Basic research is a theoretical and experimental activity undertaken with the aim to advance knowledge without a specifically envisaged application in practice. It is the exploration of the unknown, which requires curious, courageous, creative, and persistent researchers. There is no clear dividing line between basic and applied research—they are inextricably intertwined. Most research, whether in academia or in industry, is a combination of new knowledge generation and its subsequent exploitation. Usually, if the extent of basic research is diminished, the same will happen with the results of applied research. The ideal situation is to have strong basic research and strong applied research that are effectively interconnected.

New knowledge is essential for fostering innovation, technology, and production, but also acts as a stable foundation of education and training as well as of other activities that contribute to the development of society, to enhance human security. It is sometimes naively argued at a national level that, since we live in a global society, the investment in science should be concentrated primarily on applied research, with the necessary basic scientific information acquired indirectly, *e.g.*, via the internet. However, new knowledge is more than a set of results of basic research. Its acquisition includes development of cognitive

capabilities, *i.e.*, the capabilities of thinking, concluding, and remembering, of the involved teams of scientists. Therefore, the transfer of new knowledge along the chain of research and development, with basic research as the initial link, can be successful in the long term only if it includes the direct interactions of capable scientists and engineers all along the chain. There have been numerous examples in which the objective of a crucial basic scientific experiment was attained only upon the realization of a severe technological requirement.

One of the necessary conditions for the sustained growth and inclusive development of a country, which eliminates dangers, fears, and anxieties of all kinds for all humans and social groups, is to have a thriving scientific and technological community capable of generating new knowledge and applying it. This condition can be met only with an appropriate strategy of scientific and technological development that complements the corresponding investment plan, which must be applied consistently and continuously, even during periods of economic crises. But how will the government of a country make an appropriate strategy of basic research and the corresponding investment plan? It can do that only on the basis of proposals made by the scientific community of the country, *i.e.*, by its independent scientific institutes and such institutes within its universities and industry. This means that the primary social responsibility for maintaining, actualizing, and enhancing basic research lies with the scientific community, individually and collectively, *i.e.*, with those who have committed themselves to the exploration of the unknown.

Our conviction is that the necessary basis for advancement and excellence in science and technology on a wide front and their significant contribution to human security is a dialectical unity of the national and global approaches to these fields. This means that the global science should comprise the national sciences, *i.e.*, a national science should be an integral part of the global science—in agreement with the capacity of the country. This is in contradiction with the everlasting rule that national science should follow global science that is determined by the most developed countries. In Southeastern Europe, for example, such an approach applied to basic research would also provide the very much needed cultural bridges and contribute to peace between the nations living in it, some of them being in severe conflicts with each other several times during the 20th century, which could be repeated. Hence, the approach would additionally contribute to the inclusive, balanced, and sustainable development of the region. The same is true for a number of other regions worldwide.

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SEED-IDEA – Moving from Reason of Force to Force of Reason

Federico Mayor

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Faced with global threats that are today looming over mankind—some of them possessing an irreversible nature—and looking into the eyes of our descendants and the forthcoming generations, it is inevitably up to “Us, the Peoples” to fulfil our essential duties, now that we are aware of the seriousness of the situation and we know, at last, that we are equal in dignity and able to express ourselves freely. Joining our voices in a big popular clamour we shall firmly promote the following to achieve Human Security For All:

- An immediate ceasefire in Ukraine and other ongoing conflicts, with corresponding peace processes being started immediately thereafter,
- An immediate change from the supremacist plutocratic governance (G6, G7, G8, G20...)—that has led the world as a whole to an extremely risky situation (environmentally, socially and security-wise...)—to a democratic, multilateral governance, with a broadly extended United Nations willing to adopt a Universal Declaration of Democracy, aimed at redirecting the gloomy trends we are facing now and making possible the transition from a culture of imposition, domination and war to a culture of encounter, dialogue, conciliation, alliance and peace,
- The total elimination of nuclear warheads, because it is unbearable from all points of view that the Sword of Damocles of total extermination should cast a shadow over the destiny of human species,
- The immediate review of justice institutions, in order to put an end to the ruling of “conservative” or “progressive” judges, whose sentences are dictated by virtue of their own ideology instead of administering impartially law such as what is required by the quality of “fair” justice.
- Eradicate without contemplation the “tax havens”, which are a big obstacle to reducing the social gap that is constantly growing,
- Also on the scale of other local, regional and worldwide institutions, the obstacles that have always for the same reasons of absolute power hindered the democratic function would be removed: the most clear and urgent example is represented by the European Union, which cannot continue to accept that specially relevant decisions are adopted unanimously, which is the antithesis of democracy,
- Taking also into account that summer fires may be prevented with adequate action during winter (firewalls, space limitations...), and with the availability of devices and technical

media of all types that allow swift and adequate action when a fire occurs. Yes: the world citizenship is looking for less bombs and more firemen, less war planes and more media to look after the Earth, less soldiers in the garrisons and more military emergency units... and more health workers...

- The new concept of security* shall take very much into account the quality of the environment and the adequate conservation of the sea, the earth and the air. The unacceptable recycling of waste, with accumulations and dumps designed to satisfy disproportionate economic ambitions instead of preserving the quality of the earth and its aquifers as well as the seabed—let us never forget that the water of the sea occupies 2/3rds of the earth's skin—slowly fills itself with toxic substances, thus reducing the carbon dioxide recapture capacity of phytoplankton,

“We the peoples” can invent the future. We cannot remain silent any longer. Let us raise our voice so that hope and joy of living are possible again.”

Everything mentioned above has been a part of multiple projects whose aim was to move from the reason of force to the force of reason. But it could not be put into practice—I must insist on this—because the “peoples” did not exist: 90% of mankind was born, lived and died in a few square kilometres and a radical discrimination was made based on gender, sexual sensibility, beliefs, ideology, ethnicity... In only a few years, the progressive equality in dignity has opened a new scale of future perspectives and what is important for human beings—now fully equal!—may be freely said. Now it has become possible to participate and, “We, the peoples” can and must raise our voices to face those menaces that could otherwise reach points of no return. Now we can finally leave war (“*bellum*”) and choose word (“*verbum*”). Now we can fulfil our unavoidable intergenerational responsibilities.

My mother—I have never forgotten it—always told me: “Never accept what you find unacceptable”. Well, it is unacceptable that due to power structures, international organizations cannot fulfil the important role they should be playing in order to open a new era in which the culture of peace and non-violence could finally supersede confrontation and force, in which democratic multilateralism would allow the agreements that are not possible in the context of a supremacist plutocracy.

Today, the citizenship which has become aware, equal in dignity and capable of expressing themselves freely, could allow humanity—“the eyes of the universe”—to start a new period of grandeur making use of the unlimited distinctive creative capacities of the human species. Today, the time has come: “We the peoples” can invent the future. We cannot remain silent any longer. Let us raise our voice so that hope and joy of living are possible again.

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* Mayor Zaragoza, Federico (2021): *Inventar el futuro*, Córdoba, Ánfora Nova.

Ensuring Human Security by Creating Abundance through Mindshift, Conscious Capital, and Technology

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Abstract

The demand for human security is growing proportionally with the exponentially growing complexity of the existential threats born in the Anthropocene. After discussing the Meta Crisis as a steppingstone for problem solving, the paper aims to give hope by arguing that human security is tightly related to the implementation of the UN SDGs within Planetary Boundaries and shows several ways out. Furthermore, it demonstrates how the capital resulting from the Law of Accelerated Returns could be used to address the failures associated with the Law of Diminishing Returns that is currently underlying the weakening global economies. The paper concludes by demonstrating how to ensure human security by intentionally developing key sectors of the new sustainability economies, from energy to food, healthcare, transportation, new materials, and information technology to name a few.

“Successfully achieving the Human Security Development goals depends in large part upon the unseen, but highly influential emotional, spiritual, psycho-social, and cultural factors, the Mindset, the perception of people.”

1. The Meta Crisis, Paleolithic Emotions, Medieval Institutions and Godlike Technology

In their 1994 report entitled *New Dimensions of Human Security*, the United Nations Development Programme (UNDP) had identified several types of human security pertaining to Human Development,* namely to increase investments in the development of the economy, food, health, the environment, personal, community, and democracy. In their 2022 Special Report entitled *New Threats to Human Security in the Anthropocene: Demanding greater solidarity*,† UNDP updated their findings by adding other important threats such as rising inequality, violent conflicts, the downsides of digital technologies, lack of healthcare, and decreasing interpersonal trust independently of financial situation. The interesting part is

* <https://tinyurl.com/y6a2fw3r>

† <https://hs.hdr.undp.org/intro.html>

the authors' main intention, which was to assess the sources of the astonishing discrepancy between obvious improvements in human security with respect to the overall abundance and wellbeing and peoples' growing *perception* that human security is decreasing worldwide.

Since perception is often more important than reality, moving forward, the goal should be manifold. On the one hand, we must acknowledge that we are in the middle of a Meta Crisis; the fact that human security is threatened not by one existential threat, such as the climate or biodiversity crisis born in the Anthropocene and associated with the planetary boundaries,¹ but many other apparently intractable, interdependent, and interrelated crises including those arising from unethical application of Artificial Intelligence (AI) in software and hardware development and application, but also in nuclear weapons, biotechnology, and nanotechnology.² Thus, the continuation of *Human Security Development* that addresses the existential threats of the Anthropocene by understanding and addressing the Meta Crisis is one important key.

On the other hand, successfully achieving the *Human Security Development* goals depends in large part upon the *unseen*, but highly influential emotional, spiritual, psycho-social, and cultural factors, the *Mindset*, the *perception* of people. In the words of sociobiologist Edward O. Wilson, the real problems of humanity are several factors associated with our "*Paleolithic emotions, medieval institutions and godlike technology.*"³ As a result, exterior crises are exacerbated by a collapse in public sensemaking and meaning-making. These distortions arise from the impact, the flow of information and disinformation through traditional media and internet-based social media (the fourth estate), have on humanity worldwide. These factors must not be underestimated. Internet-based social media has become the new media infrastructure, but it is more intimately entrenched with our minds and nervous systems than any previous infrastructure be it printed books, electricity, cars, planes, trains, radio, or television.

The AI-driven digital infrastructure penetrates and assaults the very foundations of our human nature, because it is not values neutral but manipulative and addiction-generating for the single purpose of profit generation.* Through our smartphones, which have a market penetration of more than 80 percent of the world's population, the *AI algorithms embedded in our apps function like a brain implant*. They act in our heads and minds without our explicit approval or volition. Moreover, governments have failed to understand the long-term implications of such AI algorithms and did not regulate them, leading to unforeseen and potentially destructive results for human security and on the society at large.

The above discussed discrepancy between obvious improvements in human security and peoples' growing *perception* to the contrary could very well be also related to the result of AI-based manipulations. Moving forward, the importance of the *Mindshift* toward later stages of human consciousness could become instrumental in increasing *Human Security* especially through the application of technology for good.⁴

* <https://www.humanetech.com/>

2. Planetary Boundaries, Leadership, Capital and Regulation

Ensuring human security has long been associated with the implementation of the Millennium Development Goals, later called Agenda 2030, or the UN Sustainable Development Goals (SDG).^{*} As we rethink human security, we must invariably consider humanity's predicament. We must remind ourselves that we live on a unique, life-giving planet that has been spinning at lightning speed for 4.5 billion years in a 13.8-billion-year-old universe. Thus, ensuring human security is impossible without ensuring the security of living systems and non-living systems as integral sources of human life; life in general. Making sure that we continue to live safely on a life-giving planet is the first step. The scientific community is united in their warnings⁵ regarding the state of human-caused climate emergency and their calls to action to fix it. Many of them insist that human activity has few decades left to address current emergencies.[†]

2.1. Transformation is Feasible

The 17 SDGs are ambitious goals to create a prosperous humanity on a life-giving planet. However, there are grave opposing issues within these goals, which increase the risk of one goal being chased at the cost of others. For example, implementing goal #8, *Good jobs and economic growth*, by burning fossil fuels, will make achieving goal #14, *Life below water*, or #13 *Climate Action* impossible due to destructive CO₂ emissions into the atmosphere, fueling the current vicious cycle. These contradictions may be the reason for the humble progress since the adoption of the SDGs in 2015. However, according to the *Transformation is Feasible*⁶ report to the Club of Rome, if we act now, we can remain within Planetary Boundaries,⁷ and continued human security is within reach. Here is what would have to happen.

Based on data collected over the past decades and a complex System Dynamics Model,⁸ scientists simulated 4 future scenarios up to 2050 that are shown in Figure 1. The 9 Planetary Boundaries (PB) are represented on the vertical axis. They regulate the stability of the planetary system, which includes ocean acidification, biosphere integrity, freshwater use, ozone depletion, and climate change. The higher the value on the vertical axis, the higher the harmony level between the PBs and the lower the PB-value, the less probable human existence would be possible. The horizontal axis represents the number of SDGs that would be implemented collectively at any one point in time, with the intention being to realize as many of the 17 as possible, moving consistently toward the higher value, to the right. In order to successfully implement *all* the SDGs within the Planetary Boundaries, humanity must operate within the safe areas on both axes; the higher the values, the better. The four scenarios are the following:

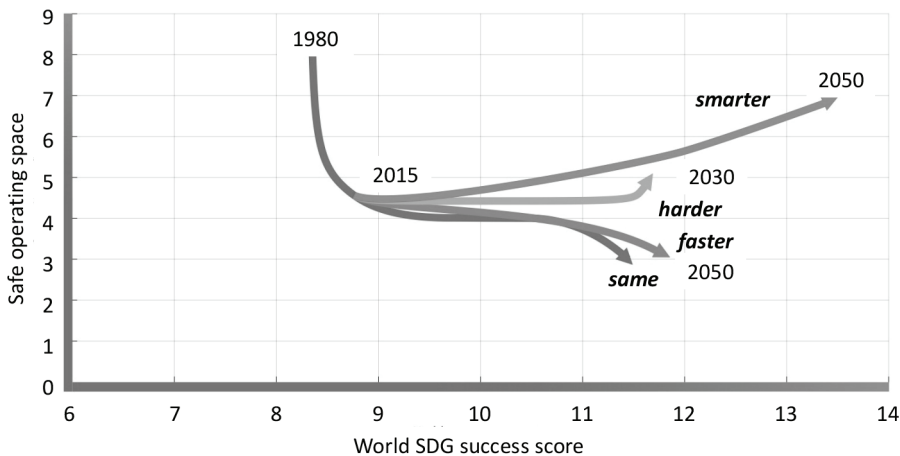
1. *Same*: represents how far business as usual would take the world to 2050 while creating severe global warming, costly weather events, social instability with increased political and human insecurity, rising nationalism, and rising inequality as well as social conflict.

^{*} <https://sdgs.un.org/goals>

[†] UN Paris Agreement 2015, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

2. *Faster*: shows where accelerated economic growth of 2.8% per annum in 2018 to 3.5% per annum would end up. With less than +1% GDP growth per person per annum until 2050, we would risk destabilizing the planet in a big way.
3. *Harder*: indicates what would happen if governments and industry try harder by growing our ability to deliver on our promises by 30%–50% across all global areas of society, from climate to trade treaties. But the results would not be significantly different and would not lead us to safe planetary boundaries.
4. *Smarter*: Would solve the problem by 2050.

Figure 1: Transformation is Feasible: Four scenarios for implementing the UN SDGs within Planetary Boundaries⁹



Implementing the *Smarter* scenario would require a significant *mindshift* across all players in the society along the following 5 transformations:¹⁰

1. *Energy*: Accelerated renewables growth to halve emissions every 10 years starting with 2030 and create a global energy democracy.
2. *Differentiated Growth*: Rolling out sustainable development in developing countries.
3. *Food*: Accelerated transference to sustainable food chains to decrease the food production footprint.
4. *Active inequality reduction*: Create jobs despite automation and AI, address unfairness, and redistribute wealth.
5. *Investment in girls' and women's education, gender equality, health, family planning*: to stabilize the global population.

This strategic direction represents an important guiding post for ensuring human security worldwide. However, governmental regulation across the planet would be instrumental in making it happen.

2.2. Political Leadership, Capital, and Regulation

Goals can only be achieved by (1) setting intentions (mindshift), (2) allocating the necessary resources, such as capital, human, and materials, and (3) putting proper measurements and metrics in place to assess progress or regress.

There is hope. New policies to ensure human security through various new green deals including sustainable finance models are under way. For example, the European Commission has manifested the political will to respond through the European Green Deal* and its 10-step action plan.† Its intention is to achieve carbon neutrality by 2050 and includes three key steps of major importance:

1. *Taxonomy*, a classification system for green investments, including energy sources necessary during the transition phase (i.e. nuclear energy and gas)
2. Sustainability-related *disclosures* to ensure that distributors and manufacturers of financial products openly inform investors regarding the potential impact of sustainability on decisions and financial returns.
3. Climate *benchmarks* as well as Environmental, Social, and Governance (ESG) disclosures to facilitate the adoption of climate-correlated strategies.

Despite its appalling aggression and the resulting energy crisis in major European countries, the Russian invasion of Ukraine in February 2022 led not just democratic governments in Europe but also the USA to take drastic measures toward ensuring human security by accelerating the transition to renewable green deal activities. They issued new regulations to enable the green transformation of key sectors of the economy from renewable energy to food, but more importantly, through the availability of the necessary raw materials. The Biden administration launched the *Green New Deal*‡ and the *Inflation Reduction Act*,§ to curb inflation through the allocation of \$391 billion on clean energy and climate change, and by promoting clean energy through tax credits for solar panels, electric vehicles, heat pumps, and better infrastructure and housing isolation. In September 2022, the European Commission launched the European Critical Raw Materials Act¶ to secure energy resources while transitioning toward sustainable energy.

2.3. AI and Technology Regulation

The Future of Life Institute** is an organization founded by Max Tegmark, Jaan Tallinn, Anthony Aguire, et al., to keep AI beneficial for humanity, promote AI safety research, and

* European Green Deal, 11 December 2019, https://commission.europa.eu/publications/communication-european-green-deal_en

† EU Financing Sustainable Growth, 2019, https://commission.europa.eu/publications/communication-european-green-deal_en

‡ <https://joebiden.com/climate-plan/>

§ https://en.wikipedia.org/wiki/Inflation_Reduction_Act_of_2022

¶ https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_5523

** <https://futureoflife.org/>

make sure AI is regulated before it gets out of control. This eventually led to the development and adoption of 23 Asilomar AI Principles.* Furthermore, on December 6, 2022, the European Union’s marquee legislation, the Artificial Intelligence Act, took specific measures to regulate General Purpose AI Systems (GPAIS)† for technologies which can accomplish a range of distinct tasks, including those that were not intended or specifically trained.

“We know what to do, we just need to do what we know in a massive joint effort worldwide.”

Related to Beneficial AI, the future of healthcare, work, criminal justice, and ethics, law professor Ryan Calo,¹¹ insists that the conversation around AI ethics is not only about simple ethical standards but also policy and binding rules to enforce it. In his paper entitled AI Policy: A Primer and Roadmap,[‡] Calo encourages governments, regulators, and other stakeholders to add the following perspectives:

- *Justice and Equality* through the stability of algorithms to reflect human values including fairness, transparency, and accountability, which include bias and material decisions with other financial, health, and freedom outcomes.
- *Include Legality Issues*, because legality does not always equate to democratic law (see Edward Snowden’s whistleblowing¹² and the UN Prism act)
- *Use of Force* as an exceptional case of AI-enabled decision making and consensus about meaningful human control and decisions for or against wars.
- *Safety, Certification, and Cybersecurity*, particularly with respect to autonomous systems, cars, robots, and airplanes.
- *Privacy and Power* (see data hunger): consumer privacy has become increasingly under siege with citizens having little or no ability to avoid various forms of surveillance.
- *Various Cross-cutting Questions*: law and technology are reacting too slowly to one another. This could backfire, given the exponentially growing nature of AI technology and the lack of expertise at policy level.
- *Taxation and Displacement of Labor*, which is concerned with the prospect of AIs displacing jobs currently performed by humans (e.g., autonomous vehicles), providing Universal Basic Income through taxes.
- *Regulating Data Collection*: AIs cannot develop without significant amounts of data. Thus, prevention of data collection without the owner’s consent must be addressed.

* <https://futureoflife.org/open-letter/ai-open-letter/> and <https://futureoflife.org/ai-principles/>

† <https://www.consilium.europa.eu/en/press/press-releases/2022/12/06/artificial-intelligence-act-council-calls-for-promoting-safe-ai-that-respects-fundamental-rights/>

‡ https://lawreview.law.ucdavis.edu/issues/51/2/Symposium/51-2_Calo.pdf

To ensure human security, governments must heed expert advice and regulate unethical application of such exponentially growing technologies before they get out of control.¹³

3. The Source of Capital

In *The Collapse of Complex Societies*,¹⁴ anthropologist Joseph Tainter argued that evolved societies, such as the Sumerian, the Mayan, or the Roman Empire, ultimately collapsed due to the *Law of Diminishing Returns*, because the increasing societal complexity could no longer be financed. Since the fall of the Roman Empire, many more complex societies have emerged in Europe, China, and the United States of America, to name a few. Unlike in previous times, today's economies are intertwined, interdependent, operating globally, and push the limits of safe planetary operating system. But today's societies do not have to collapse because our technological development could enable us to address current crises and avoid breakdown if enacted upon ethically, integrally sustainable, and in a timely manner. That should give us tremendous hope. As we have seen above, we know what to do, we just need to do what we know in a massive joint effort worldwide.

There is more hope. For the first time in human history, we witness what Ray Kurzweil (2005) calls the *Law of Accelerating Returns*.¹⁵ It refers to the speed and power of the evolutionary process that increases exponentially over time and leads to massive cost reduction and demonetization. It is based on the evolution of human individual and collective consciousness, which explodes exponentially so that *the rate of exponential growth itself grows exponentially* creating an abundance that could provide humanity with a window of opportunity to build more resilient and sustainable societies and avoid the collapse. Notwithstanding the unprecedented population growth over the past 100 years, we live during one of the most peaceful, advanced, and stimulating eras in human history.*

The *Law of Accelerating Returns* counteracts the *Law of Diminishing Results*. This should give us tremendous hope, because it creates a unique opening for humanity and the planet.

4. Human Security in the New Era

Ensuring human security must include rethinking humanity, which is what James Arbib and Tony Seba did in their paper with the same title *Rethinking Humanity: Five Foundational Sector Disruptions, the lifecycle of Civilizations, and the Coming Age of Freedom*.¹⁶ Arbib and Seba are aligned with a vast spectrum of other researchers¹⁷ in arguing that the 2020s are critical for ensuring not only humanity's security but its very future. They expect that the cost of most major sectors of the global economy from information technology to energy, to food, to transportation and new materials may eventually fall while the production processes will become by several orders of magnitude more efficient and use 90% fewer natural resources and produce significantly less waste. We can choose to implement the UN SDGs within Planetary Boundaries within the next several decades or allow human civilizations to collapse and descend into another dark age as previous civilizations. Seba and Arbib recommend the following high-level leadership action plan:

* More on <https://ourworldindata.org/> and in Bozesan M. (2020). *Integral Investing: From Profit to Prosperity*. Springer: Cham, Switzerland.

- *Admit that we are at a breaking point without equilibrium with no return.*
- *Bracing for impact.* Due to multiple governmental failures over several past decades, the old systems (i.e. financial, environmental, and social) have already begun to collapse and the turmoil will be intensified by technological disruption.
- *Beware of the cascading impact of further disruptions.*
- *Equalize the need for quick transformation with the need for social, economic, and political stability.*
- *Create a clear vision and a tactical implementation plan to manage adverse outcomes such as further instability, unemployment, and mass migration.*
- *The race to the top has begun.* Governments and private capital must ensure nobody is left behind to avoid further social destabilization.
- *Exponential thinkers are more likely to succeed than linear thinking forecasters.*
- *Apply existing technology and tools to solve the problems; do not waste time to develop new ones.*
- *Smaller communities and big cities may succeed better and earlier (see Shanghai, Seattle) over large countries.*
- *Resiliency and robustness will win.*
- *Rethink old concepts like economies of scale and efficiency.*

In summary, human security can only be addressed within the context of understanding and addressing the meta crisis. A problem well understood is half solved. That requires a significant mindset shift. The abundance created by, and the capital unleashed through the *Law of Accelerated Returns* should be used to build the new sectors of sustainable economies from energy to food, to healthcare, to transportation, to new materials, and information technology. The collapse of old systems is already occurring and causing major and rather unpleasant crashes.

The request: Brace for the impact.

And we must act now, be united, and act in line with planetary boundaries, the safe operating system of our Earth. That requires effort, capital, and significant social and cultural cohesion. We know what to do, but we must finally do what we know. That should give us tremendous hope, confidence, and a sense of direction.

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Human Security, Individualism and Collectivism

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Abstract

The quest for human security has pitted the individual against the collective throughout history. Individualism and collectivism are two competing philosophical and social movements that have divided the world for centuries and their origins can be traced back to ancient times. They are founded on different interpretations of the value and place of freedom and equality in society. The individual seeks the protection and support of the collective while at the same time insisting on freedom for personal self-expression and action without hindrance by the collective. The collective seeks the allegiance and conformity of the individual to the laws and dictates of central authority in the name of collective security and wellbeing, which is often perceived by the individual as a threat to personal security rather than assurance of it. Therefore, any ultimate solution to the quest for human security must necessarily address and reconcile these apparently contradictory viewpoints and arrive at a perspective that resolves them into complementary dimensions of a greater whole. This article traces the development of individualism in the West and positive and negative characteristics associated with its more extreme manifestations in order to understand both the strengths that perpetuate it and the weaknesses that continuously erode its stability. It points to the emergence of a reconciling formula based on a shift from individualism to mature individuality and the prevailing struggle within democratic societies in recent times. An evolutionary progression of this character constitutes an essential condition for arriving at a sound, stable, universal foundation for human security for all.

Like other species, human beings have always gathered into social groups in quest of the enormous benefits generated by cooperative, mutually beneficial relationships and activities. Throughout history the security of people has depended on social relationships. Protection from external threats, food gathering and production, care during illness, production and distribution through sharing, barter exchange and trade, personal and community security of life and property, enforcement of human rights and political security from arbitrary exercise of power and force all depend on mutually beneficial relationships between the social collective and its individual members.

At the same time cultures have developed a wide range of values, rules and institutions defining the nature of cooperative relationships, ranging from the very loose associations of individuals and families to tightly knit, highly structured institutions of large social arrangements—military societies, monarchies, feudalism, aristocracy, autocracy and various forms of democracy. All these social systems are founded on varying conceptions of the right

relationship between the individual and the collective which have gradually evolved into different philosophical positions and social formulations. But they have come to be pitted against one another as contending rivals—individualism and collectivism.

“So long as we seek to proclaim a sole victor, we assure ourselves of another defeat. The solution lies in recognizing that what appear as contradictions are complementary dimensions of a greater truth.”

Individualism and collectivism are two competing philosophical and social movements that have divided the world for centuries and trace their origin back to ancient times. They are founded on different interpretations of the value and place of freedom and equality in society. The age-old rivalry continues today between two sacred universal values—the value of freedom and the value of equality. For ages the rivalry played itself out on different sides of the planet between cultures with little knowledge and contact with one another and in various forms, permutations and combinations as if humanity were experimenting with all possibilities before finally arriving at a proper balance or synthesis—a complete unifying formula but a richly diversified world culture.

While their rivalry is ancient, it is also evolving and taking on ever new forms. The evolution reflects a progression of global society from physical to vital-social and increasing mental levels and forms of consciousness. The clash of values takes many forms in different cultures and settings, but they all arise from the inability to reconcile apparently contradictory values and view them as complementary aspects of a greater truth. Today the unreconciled conflict is exemplified by the growing rivalry between pluto-democratic capitalism in America and state capitalism in China, but the fissures run within countries and cultures as well as between them.

In earlier times the rivalry presented itself as a combat between conformity to tradition versus openness to change, as the contrast between intellectual Athens and militant Sparta, the Hellenic power of thought and aesthetics and the Roman power of ethics, law and social organization, the dogma of the Church and the creativity of Renaissance Italy, the proclamations of religious scripture and the enlightenment of experimental science, the stability of monarchy and the convulsions of revolution, the conventions of static feudalism and the expansive dynamism of mercantilism, the massive power of empire and the convulsions of nascent nationalism, and during the latter half of the 20th century as the global rivalry between communist authoritarianism and capitalist social democracy.

With the end of the Cold War, it appeared that the rivalry had finally been brought to a definitive conclusion. Some scholars prematurely proclaimed the final victory of the freedom of capitalist plutocracy combined with the liberating democratic power of the Internet over the power of state socialism. It now appears that the announcement was premature and

victory short-lived. Three decades later, the world confronts a new incarnation of the age-old combat, but in more complex forms which are more difficult to clearly distinguish and define. It expresses as the assertion of a state capitalism combining freedom and authority with unparalleled adeptness and results, mobilizing the dynamic energies of capitalism and entrepreneurship with the central authority and power of the state. The dividing lines have lost their clarity, the opposing values mix in unexpected ways. While authoritarian communism leans toward capitalistic freedom, democracy edges toward the intolerance of opposing dogmas. The divisions between the adversaries are no longer defined as a geographic spread between East and West or even between nations and cultures. The center stage of the struggle between values is now within nations and among their own people.

The unresolved debate today still poses the same dilemma—an inability to reconcile two universal principles—the liberating energy and creativity of individual freedom and the pursuit of social justice founded on equality and fairness. The more extreme incarnations of the conflict both demonstrate the inherent weaknesses of a formula based on a partial truth. For the truth transcends individual values and resides in reconciliation and harmony of innumerable aspects of reality. So long as we seek to proclaim a sole victor, we assure ourselves of another defeat. The solution lies in recognizing that what appear as contradictions are complementary dimensions of a greater truth. Freedom and equality, the individual and the collective, form indivisible components of a greater whole seeking to emerge. And even in combination, they do not represent the whole truth. The French Revolution went beyond them, proclaiming a triune truth—liberty, equality, and fraternity. No society has yet really even attempted in practice that still greater reconciliation.

This essay explores one side of the equation from the perspective of its acknowledged virtues and blatant limitations. It focuses on the creative power of freedom and its inherent tendency to self-destruction when pursued as a sole end in itself without regard for other truths. It holds that the key to resolving the apparent contradiction lies in our conception of individual freedom. It makes an important distinction between two concepts—individualism and individuality.

1. The Rise of Individualism in the West

Human cultures vary over a wide range between individualism and collectivism. Since the birth of mind in ancient Greece, Western cultures have tended toward individualism in thought and action, while Asian societies from Mesopotamia and India to the Far East have leaned toward increasing degrees of collectivism. The individualistic streak in Western cultures was evident in the democratic assemblies of ancient Athens and the spirit of free enquiry exemplified by Plato, Socrates and Aristotle. It expressed during the Roman Empire as the predilection toward republican forms of governance and aversion to the monarchical tendencies displayed by Julius Caesar. It reemerged powerfully at the end of the Middle Ages in Renaissance Italy and the early Enlightenment, the birth of modern science, the Protestant Revolution, the French Revolution and the prolific entrepreneurial innovations of the Industrial Revolution that preceded the rise to prevalence of modern democracies and capitalism in the West.

The culture of individualism is associated with many positive attributes. It nourishes a spirit of self-confidence and self-reliance, independent thinking, an urge to question, inquire, innovate and create self-chosen value systems, the sense of adventure and love of challenges, non-conformity, the love of freedom and independence, the insistence on equality, respect for human rights, etc. Taken to an extreme it results in a lack of concern for community welfare and neighbourhood spirit, exaggerated emphasis on individual rights rather than social responsibility, excessive competitiveness and extreme forms of possessiveness, egoism, selfish individualism, too much stress on the right to self-defence leading to violence, lack of communal cooperation and social harmony due to the animosity and conflict arising from the clash of divergent viewpoints.

The individualistic spirit of self-reliance gave rise to the right of each person to interpret The Holy Scriptures, question religious doctrine and directly relate to God without the intermediacy of the Church during the Protestant Reformation and thereafter the emergence of the protestant work ethic which spurred the economic rise of the West. It provided the impetus for massive migrations of the impoverished landless and persecuted minorities to the new world in search of freedom to create better lives for themselves—an attitude now widely prevalent among aspiring masses around the world, but previously more exceptional than commonplace.

In comparison with the insularity and cultural self-absorption prevalent for centuries in the East, the individualistic cultures of the Western world have always been adventurous explorers and ambitious conquerors. When the Ottomans blocked the Silk Road for European trade with Asia in the 15th century, European nations began a quest which led to the Age of Discovery and European Colonialism. Overcoming the superstitious fears that had barred navigation down the west coast of Africa and across the Atlantic, they discovered the New World and established permanent sea routes to the Orient.

The value of self-reliance gave immigrants the confidence to brave adventure, settle in the lawless wildernesses of America bereft of protection from man or beast within the safety of settled communities. With no police force to depend on, both men and women had to rely on their own courage and resourcefulness for personal safety, and often take the law into their own hands. The right to self-defence gave rise to the gun culture in America as an extreme form of physical self-reliance on personal arms rather than community defences for protection.

From the 16th century onwards impoverished peasants and working-class Europeans started aspiring for a new life in the New World. Leaving one's native country to settle in virtually unknown places calls for courage, a spirit of adventure, a willingness to confront unanticipated challenges, and a rugged fighting spirit. Pioneers had to defend their crops from marauding wild animals and those bent on stealing their harvests and property. The New World was settled by men with such an adventurous spirit. Then there came the task of winning freedom from their European Mother countries from which they had migrated. Western literature is replete with adventurous individuals who loved to embrace challenges. R.L. Stevenson's *Treasure Island* and Mark Twain's *Adventures of Huckleberry Finn* are typical examples. The challenges of surviving on a deserted island are the dreams of many Western teenagers.

With the emergence of rule of law backed by police and courts for the administration of justice, one might have expected the preoccupation with personal self-defence to become obsolete. But the entrenched habit borne of individual insecurity and insufficient investment in social institutions persists, especially in less populated and less educated parts of the country, where the culture persists of training youth at an early age to defend themselves for self-reliance. Such training equips the young with the confidence to decide on their own careers, learn skills of their own choosing, and to seek out jobs for their livelihood. It motivates adults to work hard and save for their own future, to be mindful that they will be responsible for their own security after retirement and often solely dependent on their own personal savings and social insurance.

The insecurities of both youth and aged are a source of energy and motivation for the individual to learn, develop and assume responsibility. But they are also a source of competitiveness, anxiety and tension which deprives many of the security resulting from lifelong cooperative and harmonious relationships. High rates of divorce, drug addiction, crime and imprisonment are the flip side consequence of societies which fail to arrive at an effective balance between the freedom of the individual and allegiance to the collective.

The spirit of self-reliance fosters many other healthy attitudes. One such found in marked measure among Americans is the attitude that nothing is impossible and no problem is beyond solution by resolute human effort. Whereas self-reliant individuals believe that prosperity is their birth-right and the story of rags to riches is applicable to anyone who truly aspires to rise. This belief that nothing is impossible spurred Americans to land a man on the moon at a time when such a feat was still regarded as science fiction.

The remarkable power of self-reliance was revealed in World War Two after virtually all of mainland Europe had fallen under the control of Nazi military power and Britain stood alone as the last bastion of freedom. When no other leader had the confidence or faith in the resolve of the British people, the Tory cabinet reluctantly put Winston Churchill in charge. Without consultations, hesitation or even asking the people for resolve, he went on public radio and broadcast his famous speech culminating with the words "We shall never surrender!" His speech was not merely intended to deter the Nazis. It was a stirring appeal to the deeply seated faith of the British people, their love of freedom and determined self-reliance. The Nazis expected to complete the conquest of Britain within three months, whereas at the end of that period they withdrew in defeat. It was not merely the courage and conviction of Churchill that won the Battle of Britain. His leadership drew on the strength of the people's self-reliance which withstood extreme adversity and turned defeat into victory. It was not achieved by the compulsions of an authoritarian military government but by the passionate loyalty of free people who valued their independence above all else.

That same remarkable power was exhibited in America during the 1930s, which followed immediately after one of the most prosperous and at the same time unequal periods in American history. America was not at war in the 1930s, but it faced the equally oppressive challenge of economic depression and the worst financial crisis in American history. In the three years following the Great Crash of 1929, 6000 American banks had failed and closed. When Franklin Roosevelt became President in early 1933, he had to order temporary closure

of the banks to stop the panic from bringing down even the strongest financial institutions. A week later he went on public radio to address the American people. FDR appealed to their spirit of self-reliance and self-confidence. He told them that the crisis was man-made and could be stopped by the people. He called on them to banish fear and panic and draw on the values which had made America the most prosperous nation in the world. He announced the reopening of the banks and urged the American people to redeposit their hard-earned savings back into the financial system as a vote of confidence in themselves and the nation. His appeal evoked a positive response in the hearts of many Americans and a vast majority supported his New Deal program. Within a week, the panic subsided and the banking crisis came to an end. FDR later commented that nothing he had learned about economy at Harvard had prepared him to meet this situation. An intangible human value accomplished what three years of monetary and fiscal policy had failed to achieve. That is the value of values.

2. Evolution of Social Individuality

Individualism values unconventional behaviour and respects lifestyles that do not conform to what society approves. During the first and second World Wars and the Great Depression, extreme individualism was muted in America by the extreme insecurity of war and poverty and the demand for national social cohesion. But the new generation born after WWII relatively had more peace and prosperity compared to what the earlier generations experienced. When the so-called Baby Boomer generation reached young adulthood, many scoffed at the conformity of their parents and unquestioning acceptance of government policies. The Hippie Movement of the 1960s challenged virtually all established beliefs and customs, from music, art, dress codes, sexual conduct and marriage to faith in all forms of authority. American youth questioned social values relating to the pursuit of money and comfort, scorned conspicuous consumption, political hypocrisy and police violence. In expressing their rejection of conformist values they renounced formal codes, disparaged marriage, affirmed gay rights, dropped out of colleges in large numbers, retreated into communes and back to nature. Youngsters who took to hippie culture dropped out of college and travelled overseas in unprecedented numbers.

They questioned and challenged almost everything. But they also affirmed ideas and values that had been spurned as primitive, superstitious, absurd or heresy by previous generations. They challenged conventional political theories dividing East and West and exposed the hypocrisy of their own leaders for espousing idealism while violating the very ideals they affirmed both at home and abroad. They pointed to the inconsistencies between the cherished values on which America and democracy were purported to be based on, the practical realities of life in America. They rejected conventional religions in favour of a highly individualistic exploration of esoteric ideas and doctrines. It led to a mushrooming of meditation centres and yoga schools all over the U.S. and a surging demand for all types of books related to Eastern spirituality. Without a healthy respect for diversity of views, such openness to radically different beliefs and cultural values would not have been possible. They protested racial and gender discrimination, supported the American Civil Rights Movement, founded the environmental movement, protested the War in Vietnam and the nuclear arms race, affirmed the collectivist values of socialism, and embraced foreign ideas, people and cultures more openly than any previous generation.

Yet for all its idealism, the 1960s was essentially a rebellion against all forms of established convention. It exposed and condemned more than it created. It affirmed the value and right of the individual to protest the rank injustices and hypocrisy of the prevailing system and viewed what was then the world's freest nation as an authoritarian police state and imperialistic aggressor. It sided always with the weak and downtrodden, but had few solutions beyond rejection of the status quo. In opposing the Vietnam War, it never considered the potential consequences of the spread of revolutionary communism throughout Asia until it undermined democracy in a fragile, nascent Indian democracy, which had just been freed after half a millennium of external rule.

Although the anti-establishment movement of the 1960s gradually faded back into the mainstream, many of its core values of tolerance, openness, respect for nature and other cultures permeated into the mainstream and reshaped American culture. Its most valuable contribution was a shift in emphasis from extreme selfish individualism to self-actualized individuality. The hippies scorned in principle the extreme egoism of selfish accumulation and vain status symbols. They replaced idolatry of the self-made man who overcame adversity to rise to the highest centers of wealth and power with a more refined concept of a person who could think for him or herself, adopt and live by idealistic values, dedicate themselves to the welfare of humanity and not merely their own personal success. A subtle shift began from pursuit of social success to the quest for psychological growth and spiritual self-development. The notion of the physically self-reliant person who could brave adversity gradually evolved into that of the mentally and emotionally mature individual who could live in harmony with those different from themselves, who could understand and respect those who were different, and cherish the universal values that transcend cultural distinctions in form and expression.

The greatest contribution of the Hippie revolution was to affirm a type of individual freedom that extolled idealistic individuality founded on universal spiritual values rather than selfish, egoistic individualism. What was borne in the 1960s inspired youth around the world on both sides of the Iron Curtain in pursuit of a universal set of values founded on a shared sense of identity as citizens of the global village called Earth. It extolled a love of nature and respect for the planet. Like the idealism of the French Revolution, it was quickly smothered by more mundane pursuits. Like the values proclaimed in the Universal Declaration of Human Rights (UDHR) in 1948, it extolled idealism but failed to provide a realistic framework for achieving it. It took 72 years for the principles set forth in UDHR to be transformed into the 17 UN Sustainable Development Goals in 2015 and affirmed by 193 nations. The idealism of the 1960s still awaits its transformation and universal affirmation.

The historical development of individualism and its partial transition to individuality corresponds to a general evolution of human consciousness. The emphasis on self-reliance and exploration so prominent in early America represents the emergence of individuality at the physical level. Its expression as invention, entrepreneurship and social innovation is an expression of individuality at the vital social level. The capacity and propensity to think differently and independently marks its development at the mental level.

The recognition of individual rights marks an important stage in the political and social evolution of individuality. The transition from feudalism, aristocracy and monarchical rule

by a tiny elite class can be traced back to the Reformation in the West, long before it gained momentum further East. The subordination of the individual to religious authority gradually waned as more and more people exercised religious freedom of choice. Politically, the US rejected English monarchy at the end of 18th century while France threw out royalty at roughly the same time, only to call it back for a last fling a few decades later. By the first quarter of the 20th century most people of Europe had weaned themselves from subordination to monarchical rule. Yet the values of authoritarian collectivism remained far longer in the European colonies established in Asia and Africa. Even today the authority of religious leaders, the upper classes, the elderly, the family, the teacher, the employer, the government official, and the community at large is far more prominent in collectivist nations of the East.

In 1789 the French Revolution adopted its Declaration of the Rights of Man and the Citizen, echoing some key elements of the Magna Carta of 1215 and the English Bill of Rights of 1689. Two years later, America added the Bill of Rights as an amendment to the US Constitution. Neither document specifically prohibited or denounced slavery. All four served as the basis for much of the content of the Universal Declaration of Human Rights adopted by 48 nations in 1948. None of them granted women the right to vote which was won by the English women in 1918, by American women in 1920 and by the French in 1944. Progress elsewhere in Europe was slower. The last canton in Switzerland to accord women the right to vote did so in mid-1970s.

The right to private property and freedom from taxation without representation were fundamental to the birth of Western democracies, for without it the individual could never be freed from the arbitrary exercise of power of the state. The seizure and collectivization of ownership under communism was deemed by the West as one of the greatest infringements on individual freedom.

Social rights were harder and slower to come by, yet the inexorable march toward gender equality continues. Women in India won the political right to vote almost two decades before some of their counterparts in Switzerland, but social freedom was more difficult to achieve because it required the consent of society and not merely public law.

3. Evolution of Mental Individuality

Mental individuality can be traced back to the elite intellectuals of ancient Athens, but it remained at that time a rare capacity rather than a widely held endowment. Its re-emergence in Renaissance Italy and the Enlightenment can be characterized as the emergence of mental individuality at a much wider level. It has been postulated that the inexplicable popularity of Shakespeare's *Hamlet* over the last four centuries can be attributed to the representation of mental individuality in a common man of action as expressed in "To be or not to be."¹

In collectivist cultures conformity is the norm, education is founded on rote learning, and unconventional thinking is discouraged. But in individualistic cultures the value of diversity is revered and originality is encouraged. In such cultures children are taught to understand rather than memorize and accept nothing without questioning. A culture of mental curiosity gave impetus to the revolutionary ideas espoused by such thinkers as Newton, Darwin, and

Einstein. Darwin's theory of evolution challenged the Biblical theory of divine creation still propagated by the church. This assertion shook the Catholic Church to its very foundations and it took a century or more for Darwin's theory to gain near universal acceptance even in America, where conservative resistance prevails even today. Darwin succeeded not only because he exercised the freedom to challenge established dogma but even more so because he lived in a society which cherished that freedom.

Apart from physical challenges of exploration and migration, Europeans responded to mental challenges in the quest for new knowledge on the frontiers of science and in the search for technological innovations to improve production and communication and transportation. Engineers in English coal mines faced the big problem of pumping out the water that was collecting in coal pits. Finally, they came up with the idea of the steam engine which could pump out the water. It was only one more step to inventing the steam ship, steam locomotive and the countless other machines which launched the First Industrial Revolution at the time American colonists were drafting their *Declaration of Independence* and Adam Smith was writing *Wealth of Nations*. Less than a century later the Second Industrial Revolution founded on electricity began. And the marriage of science and technology in the 20th century has since given birth to further revolutions in computing and artificial intelligence.

It is only with the spread of education over the last hundred years that mentality has been widely valued as an endowment in general society. Wherever education transcends indoctrination, instruction in abstract theory or mere transfer of information and mental skills, the mind begins to awaken to both its capacity and right to think independently and differently, which is the foundation for mental freedom. Modern education transforms the freedom embodied in physical self-reliance into the mental freedom to inquire, question, debate and dissent. Yet even today intellectuality is frowned on with suspicion in many countries, especially among political leaders. Social conformity in thought predominates even in highly educated countries, as symbolized by the susceptibility to fake news, and it is still prevalent even in science and other fields of academia.

Arthur Conan Doyle's Sherlock Holmes became the epitome of the thinking individual combating evil with the power of scientific thinking combined with acute intuitive perception. Every criminal case that came to him challenged his capacities for detection and pursuit and he thrived on that challenge. He refused to fall prey to false clues, circumstantial evidence and the pressure of popular opinion. He displayed a capacity for original thinking that bordered on genius. He delved deeper into cases to discover deeper motives beneath the superficial clues. In *Silver Blaze*, a short story that fully depicts Sherlock Holmes' genius, the police arrests a gambler who has been seen in the neighbourhood where a champion race horse suddenly disappeared and the horse's trainer was found murdered. Holmes rejects the conclusions of the police because they overlooked apparently irrelevant facts—a receipt for an expensive woman's dress in the trainer's pocket, the failure of the trainer's dog to bark at the intruder during the night the horse was stolen and the accusation against the gambler rested on the supposition that he had slipped opium into the stable boy's dinner to knock him unconscious. Holmes' capacity to reject convention and public opinion led him to the only conclusion consistent with all the facts. It was the champion horse that killed the trainer with

a kick in the head while the trainer was trying to maim the horse's leg so it would lose the race and enable the trainer to win enough by betting against the favorite to support a mistress in London and repay his accumulated debts.

“Any viable global formulation for the human community to foster the security of all human beings must necessarily take into account and accommodate the cultural differences in values and institutions which differentiate diverse societies around the world.”

Humanity has yet to become fully mental. But it is gradually growing both due to the continued spread of education as well as through the remarkable broadening of personal experience characteristic of our times. Exposure to other cultures physically through travel, immigration and emigration further dissolves the rigid cultural barriers that distinguish and divide groups. The exponential growth in inter-cultural electronic communication has vastly accelerated this movement in ways it will be impossible to fully comprehend until decades after the impact begins to be felt. The unprecedented contact between individuals and cultures is not only breaking down old distinctions but also creating new combinations and forms which will gradually come to permeate the increasingly complex and diverse shared cultures of the future, making it more and more difficult to classify and compare according to conventional stereotypes.

4. From Individualism to Individuality

Individualism extols a partial and largely illusory freedom which effectively liberates each person to pursue his or her own selfish, egoistic ends with only a modicum of social responsibility as required by law and practical necessity. Individuality affirms a higher principle of freedom in which the individual is liberated from the pressures of conventional social conformity to think for him or herself but bound by a higher standard of universal values which dictates action for the benefit of all. Individualism is the freedom of the ego to tyrannize over others for its own aggrandisement. Individuality is the quest for self-perfection and universal well-being. The former views the person as the sole author of his or her own destiny and therefore the sole rightful beneficiary of the fruits of action. The latter recognizes that the individual and the collective are two inseparable dimensions of one reality and neither can exist without the other. The collective provides physical protection, practical know-how, knowledge, skills, tools, organization, education and opportunity for the individual to develop and excel. The formed individual provides the vision, aspiration, inspiration, originality, creativity, innovation, entrepreneurship and catalytic impetus for the growth and development of the collective. Both owe their greatest virtues to the contributions of the other. Neither can arrive at fullness and fulfilment without fully recognizing the value of the other. All attempts to compromise them are bound to fail due to the inherent inadequacy of partial truth.

Selfish individualism cannot help us accomplish the human security that we envision. Self-actualised Individuality considers both the individual and the collective as complementary instruments which aid each other in moving towards social evolution. It is Individuality that will help us achieve the Sustainable Development Goals, not the ego-centric notion of each for himself.

5. Human Security, Human Values, Multilateralism and Human Unity

The juxtaposition of individual human rights and human security against the establishment, development, expansion and preservation of the social collective as an instrument for promoting collective human security lies at the heart of efforts to effectively address the human security needs of all people everywhere without at the same time compromising or undermining the individual's fundamental freedoms and security from oppression and threat by the collective. Neither position taken in the extreme can suffice. Indeed, no position based solely on local or national perspectives can arrive at a satisfactory solution.

A universal formula for human security must necessarily be founded on a philosophical formulation and interpretation of human values. Many such formulations and interpretations have been developed and tested throughout history with varying degrees of success for limited periods of time, but none has yet emerged that seems adequate to meet the needs of the entire total collective. Any viable global formulation for the human community to foster the security of all human beings must necessarily take into account and accommodate the cultural differences in values and institutions which differentiate diverse societies around the world.

A comprehensive, inclusive, viable global solution must be predicated not only on universal human rights but also on the universal rights of the human collective. That includes peace, universal human rights and social equality, unimpeded access to food, affordable energy, preservation of biodiversity and the biosphere, and stabilization and management of the global climate. Without these, human security for all will remain unattainable.

The reconciliation of these positions must necessarily depend on the development of universal laws and institutions for enforcement which operate both nationally through governments and globally through the multilateral system. Without an empowered, effective multilateralism, efforts will at best represent the compromise between competing vested interests and priorities rather than universal peace, security, justice and well-being for all.

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1. Harlan Cleveland and Garry Jacobs, *Human Choice: The Genetic Code for Social Development* (Washington: World Academy of Art and Science, 1999)

SEED-IDEA – Securing Our Commons: New Forms of Financial Engineering to Secure Our (Global) Commons and Mobilise Trillions of Private Sector Liquidity

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If we look in detail at the dozens of Green Deal agendas globally and the UN SDGs, we will find that around two-thirds of them relate not to private goods but to global commons. Given that 85% of our global wealth is privatised already and we have a lot of liquidity on the capital market, we need to look carefully at how we can generate the money we need without privatising the rest of our planet.

The damage we have already caused (species loss, land degradation, climate change) has created massive social and ecological externalities that will increase our future costs. In other words, we have had our lunch and are trying to get away without paying the bill; we forgot to clean up and have left the mess for the Global South, future generations or nature itself to deal with. Now we are starting to experience the negative impact in the form of increased risks, adverse events and shocks. So we have to come up with a strategy that minimises the associated future costs and take a preventive approach similar to those we are familiar with.

Funding, hedging and managing the commons is a fiendishly difficult problem. On the one hand, commons can generate a staggering ROI of 1:15 or higher, if properly implemented; on the other, the public sector is over-indebted in most OECD and developing countries. In addition, the Anthropocene era is marked by uncertainties and asymmetric shocks. This makes it harder to mobilise the trillions of private sector liquidity that we need to fund the necessary global commons. Ensuring our commons means ensuring economic wealth and prosperity.

No taxation scheme currently exists anywhere in the world that is capable of funding our commons, hedging the associated risks and/or steering our economy as a whole towards a greener future. Even if we take stress tests, new ESG taxonomies, standardised accounting, philanthropy and charity into account, these more linear interventions are too slow and too low in volume to awaken this sleeping giant. In this traditional approach, finance still drives our commons. It should be the other way round: our commons should drive finance.

First, we have to start thinking differently about how to secure our commons. Both funding the commons and de-risking systemic uncertainties to mobilise the trillions of private sector liquidity are intertwined, but require a new approach to money and finance. Instead of linear, proportional (subsidies, taxation) or dynamic (double materiality, feedback loops and delays)

interventions, we have to start thinking in more complex ways and consider a change of monetary paradigm in order to secure our commons.

“There is no human security without economic security and this in consequence requires proper funding of our global commons.”

This, in turn, requires new forms of financial engineering that provide hedging instruments to de-risk uncertainties for the private sector (in particular: first-loss tranches, swaps, state guarantees) and additional conditioned liquidity to directly fund our global commons. In order to provide this additional liquidity, central banks and regulators will need to step up.

Countries that have the sovereignty to print their own currencies and own a highly convertible currency (USD, euro, yen) have the possibility to provide additional liquidity in a direct and digital way (CBDC: Central Bank Digital Currencies). Countries that have the possibility to print their own currency with a low convertibility rate require so called liquidity lines, in form of Central Bank Currency Swaps (CBCS) or repurchasing agreements (Repo) with central banks that provide a currency with a high convertibility rate. In either case central banks have a monetary tool that provides additional liquidity beyond conventional fiscal instruments.

Over 90 central banks are already experimenting with such CBDCs. CBDCs are created within the legal framework of each state's sovereign right to create its own currency. If a CBDC is linked to a digital smart contract that requires the money to be spent on our commons and provides additional liquidity to hedge the associated risks, we would then have the necessary liquidity available to secure our commons. Depending on location, we might refer to these currencies as a ‘green USD’, ‘green euro’, ‘green yen’ or ‘green renminbi’.

This mechanism would allow us to start parallelising our currency system and steering towards a green economy. And we could start going direct: in addition to taxpayers' money and private equity for start-ups, SMEs and corporates, we could support central banks to provide additional liquidity to fund our common future.¹

The World Bank, the IMF (via Special Drawing Rights), regional development banks (EIB, ADB, etc.) and IGOs such as the WHO would suddenly have enough upfront funding to tackle the next crisis, to implement disaster management responses, to start investing in pre-schooling, hospitals and universities, to reforest the Sahara, to create nature reserves around the world and to invest in renewables. All done with additional financial engineering tools at the intersection between the private and public sectors.

There is no human security without economic security and this in consequence requires proper funding of our global commons. We would then have entered a world where monetary policy trumps fiscal policy; where the private and public sectors are twins, operating in parallel; where central banks have an enlarged balance sheet and our global commons are

secured; where sustainability finally drives finance and where we have started to think outside the box.

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Notes

1. A procedure which is in line with the Treaty of Lisbon (Articles 126 and 136(2)) and supports the traditional mandate of each central bank to keep the CPI (Consumer Price Index) below 2%. The Bank of England and Bank of Canada have already been using this procedure (referred to as a zero-coupon perpetual facility) for years.

References

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Report on COP27 and its Implications for Human Security

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Abstract

As a Youth Delegate of the Republic of Serbia, from the Institute for Political Studies, in Belgrade, Serbia, and a representative of the World Academy of Art and Science (WAAS), the author summarizes in this report the most capturing sessions she attended during the 27th Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC) – COP27, which took place in Sharm El Sheikh, Egypt, on November 6–18, 2022. This report presents the existing efforts by governments, international organizations, educational institutes and academies, and civil society organizations to address the climate change problem from the perspective of human security.

1. Introduction

The Conference started on the morning of November 6th with the opening plenary sessions of COP 27/CMP 17*/CMA 4† followed by the openings of the Subsidiary Bodies meetings (SBSTA 57‡ and SBI 57§). The Sharm El Sheikh Climate Implementation Summit (CIS) convened the First Part of the High-Level Segment on November 6–8, during which the Heads of States or Governments and Vice-Presidents of the Parties delivered speeches. The CIS Roundtables were organized on the following topics: Just Transition, Food Security, Innovative Finance for Climate and Development, Investing in the Future of Energy, Water Security and Climate Change, and the Sustainability of Vulnerable Communities. The Resumed High-Level Segment, convened on November 15–16, included the speeches of the Parties whose Heads of States or Governments had not spoken in the First Part as well as of the representatives of the registered groups who were asked to deliver statements. The high-level ministerial dialogues were held throughout the two weeks and included the following topics: New Collective Quantified Goal on Climate Finance, Pre-2030 Ambition, and the Fifth Biennial Assessment and Overview on Climate Finance. Throughout the Conference, negotiations on the main issues of this year's agenda, with focus on Adaptation, and Loss and Damage, were taking place within different open and closed meetings. The decisions taken at the Conference can be found on the official website.¶ Starting on November 9, the featured

* Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

† Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

‡ Subsidiary Body for Scientific and Technological Advice.

§ Subsidiary Body for Implementation.

¶ <https://unfccc.int/cop27/auv>

events were organized under the thematic days in the following order: Finance, Science, Youth and Future Generations, Decarbonization, Adaptation and Agriculture, Gender, Water, Energy, Action for Climate Empowerment and Civil Society, Biodiversity, and Solutions. Apart from the high-level events and the meetings of the Parties and Subsidiary Bodies, the Conference included side events, exhibits, and pavilions with sessions running from 8 am to 10 pm.

This article will review the sessions that addressed the issues and advancements in science and education related to climate change as one of the greatest challenges to human security, with specific focus on expert solutions and intergenerational cooperation.

2. Finance

- *The Global Financial Solutions Summit* was held at the UN Climate Change Global Innovation Hub (UGIH). The two-hour long session *Innovative Green Bonds and National Sustainability Development Budgets* was moderated by Tal Ronen [President and Co-Founder of the Yehuda Kahane (YK) Center] and included presentations by Massamba Thioye (Project Executive at UGIH), Yehuda Kahane* (WAAS Fellow, and Co-Founder and Chair of the YK Center), Moshe Bareket (Outgoing Supervisor of Israel's Capital Market, Insurance, and Saving Authority), Ketan Patel (WAAS Trustee and Chairman of Force for Good), and Stefan Brunnhuber (WAAS Trustee and Full Member of the Club of Rome). Jeffrey Sachs [Former Director of the Earth Institute at the Columbia University and President of the UN Sustainable Development Solutions Network (SDSN)] gave the final remarks while Phoebe Koundouri (WAAS Trustee and Co-Chair of SDSN Europe) moderated the discussion with the audience, which included comments from Lord John Browne, Mike Hayes, and René Karsenti.

The speakers presented diverse but compatible financial solutions to tackle the unprecedented challenges to human security. The aim was to catalyze the economic paradigm change that can bring the global society to net zero emissions of greenhouse gases by 2050.

S. Brunnhuber explained that the global society is currently at a gap of about five to ten trillion US dollars per year in reaching the Sustainable Development Goals (SDGs), which means that the monetary and financial system has the crucial role in addressing these global issues. In J. Sachs's view, the problem in addressing these issues does not lie in the financial capacity or the lack of technological solutions, but in political power and decision making in regard to mobilizing the necessary funds. Efficient and effective power structures are needed that should redress the financial structures. K. Patel pointed out the fact that two-thirds of the global capital are owned by individuals and that the private sector is not willing to invest in green energy sources because the risk and return are not matching. Thus, transforming capitalism is essential for redistribution of capital to the most urgent global issues. J. Sachs further stated that the low- and medium-income

* A more elaborate presentation of YK Center's research was given at the Israeli pavilion session, which the author has reported on in the next few pages of this article.

countries (82% of the world) do not have the possibility to develop sustainably with the support of multilateral development banks because the interest rates are too high. These countries should be able to borrow green bonds at an interest rate of 4%, rather than 10% or more. The securities and guarantees provided by the governments and insurance companies are crucial for mobilizing private investment. They need to aid in leveraging the risks of investment in green energy sources. S. Brunnhuber added that the regulators and central bankers need to play their parts. P. Koundouri, together with her colleagues from SDSN, has been working on monetizing ecosystem services and natural capital for ensuring holistic sustainable finance, with an evaluation model that includes environmental and social factors. They have developed a three-step methodology to integrate sustainable finance in government accounts and value chain of business products. Sustainable financing, according to her, can be profitable.

The discussion concluded that global society is not lacking capital or technological solutions but the means to redistribute the funds in the direction of sustainable development. Governments, multilateral development banks, insurance companies, regulators, and central banks all have their roles to play in mobilizing optimal public-private partnerships for financing projects of value to human security. Also, as P. Koundouri underlined, a transparent quantification of externalities and risk measurement is necessary to create the critical mass of awareness among citizens, businesses, and financial institutions.

- The session at the Israeli Pavilion on *Innovative Financial Models for SDGs and Climate Action* included the presentations, *A National Sustainability Budget*, by Y. Kahane and M. Bareket, *Energiya Global Capital*, by Yossi Abramovich, *Nature Growth Incubator*, by Oren Heiman, and *Clean Money Forum*, by Oren Kaplun.

M. Bareket presented his work, co-authored with Y. Kahane, that focused on the financial solutions aiming to accelerate the adaptation of the SDGs on a national level. One of the main ideas is that non-monetary value should be combined with other economic models in order to quantify the positive and negative externalities of each particular economic activity with regard to its impact on society and environment. The quantification of externalities would result in taxation of negative effects and support of positive effects by subsidies. This would facilitate an appropriate balance between public and private investment. Government has a crucial role to play in providing incentives, monitored by regulators, which would allow money to flow from long term savings institutions, such as pension and insurance funds, toward financing of the SDGs. O. Heiman spoke about Nature Growth Incubator, which is a global agricultural technology (*agtech*) innovation center close to Tel Aviv, which uses Israeli based science and is supported by grants from the Israeli Government, and from Europe and USA, to create 80 globally disruptive *agtech* companies by 2030. In Israel, more than 4% of GDP is allocated to science and technology innovation. This is the largest *agtech* innovation center in the world, which is owned by 15 global leaders. It will grow nutritional and affordable food for the third world countries. O. Kaplun presented his work with the Israel Clean Money Forum on leading the Israeli divestment movement. He explained

that financing the SDGs requires leveraging finance to fight climate crisis, and that what is really missing is the divestment strategies and “the small money” for planning intermediary project preparation.

3. Science and Technology

- The Blue Zone side-event *Uniting global scientific research: Efforts to tackle climate change* gathered party delegates, civil society, and international organizations to bring the latest climate science findings, propose ways to develop successful partnerships in climate research, and discuss the possibilities of collaboration in implementing research results for achieving the SDGs. The session was moderated by Sheela Patel (Leader of the Adaptation Research Alliance). Speakers included: Ayman Ashour (Minister of Higher Education and Scientific Research of Egypt), Jim Skea [Co-Chair of Working Group III of the Intergovernmental Panel for Climate Change (IPCC)], J. Sachs, and Alex Halliday (Founding Dean of the Columbia Climate School at the Columbia University). The main questions in this discussion panel were: how to implement scientific results, and how to get science to better support implementation and policy? J. Sachs explained that in order to decarbonize society, that is, in order to be able to form a plan for decarbonization in all different sectors of society, universities and research centers need to propose to governments concrete plans of action. He underlined that engineers, together with economists, need to be “raised in profile” in their contribution to answering the climate change challenge because they are the key to the translation from scientific theory to implementation. The discussion brought up the importance of private sector scientific contributions in facilitating practical and context specific solutions for climate change suitable for both developing and developed countries. A *sine qua non* condition for private sector contribution is to allow the decision makers access to open-source data platforms. The session was concluded with three keywords that reflect the necessary approach in uniting global scientific research for tackling climate change: pragmatism, education (small investment and massive return), and partnership (across different sectors of society).
- UGIH also hosted *The Council of Engineers for the Energy Transition (CEET) Statement Release*. The session was opened by M. Thioye, who welcomed the speeches of the two Co-Chairs of the Council, Gerd Müller (Director General of UNIDO) and J. Sachs, as well as the contributions from Semida Silveira (Cornell University), Jaideep Sandhu (ENGIE), and Jessika Trancik (Massachusetts Institute of Technology). CEET, as the independent advisory council to the UN Secretary General, consisting of engineers and energy system experts, aims to develop global and region-specific recommendations to accelerate the transition to low-carbon energy systems and help in achieving net zero emissions by 2050. Launched in September 2021, it seeks to bring together financing and engineering, and promote the cutting-edge knowledge needed to accelerate sustainable development in all UN regions. Its engineering team (35 engineers worldwide) works on identifying concrete and practical solutions for decarbonization of economic growth in a way that allows local and regional sustainable development to benefit from global

innovation processes. At the same time, the Council's financial experts work on identifying ways to finance these solutions.

4. Youth and Future Generations

- The official side-event *Passing the Baton: The Intergenerational Policy Dialogue on Adaptation, Resilience, and Loss and Damage* was the first ever youth-led climate forum, organized as a roundtable, which gathered youth representatives, policy makers, climate ministers, and negotiators. The forum was organized pursuant to Article 65 of the Glasgow Climate Pact and paragraph 9b of the Annex of the Glasgow Work Program on Action for Climate Empowerment. The conversation was facilitated by Xuan Zhihan from China, and centered around the outcomes of the 17th Conference of Youth (COY17) and specific policy demands in the Global Youth Statement in regards to resilience, adaptation, and loss and damage. The government representatives were Diana Acconcia (Director of International Affairs and Climate Finance of the EU), Munir Akram (Ambassador and Chair of the G77 and China), Conrod Hunte [Ambassador and Lead Climate Negotiator for the Alliance of Small Island States (AOSIS)], Christopher Nyce (US Lead Negotiator), Ashraf Sobhy (Minister of Youth and Sports of Egypt), and Yasmine Fouad (Minister of Environment of Egypt). They answered questions by the youth representatives from Panama, China, Switzerland, Sierra Leone, Ghana, and India.

The opening remarks were given by Ch. Nyce, C. Hunte, D. Acconcia, and Y. Fouad, who expressed their willingness to support youth initiatives in tackling climate change related issues. D. Acconcia spoke on the EU Climate Pact Project, which aims to promote citizen initiatives in the climate debate, and suggested that youth representatives join this and similar projects as climate ambassadors who would engage their families and local communities in addressing the pressing issue of climate change. C. Hunte spoke about the already existing scholarships that aim to empower youth from small island countries to become leaders in their regions' sustainable development.

The questions asked by the youth representatives were the following. Yally Castillo from Panama, asked about the ways in which the new mechanisms for financing adaptation, and loss and damage proposed by the governments, which have proved to be inefficient so far, should integrate a diversity of the already existing mechanisms based on the local and contextualized knowledge and practices. A participant from the audience, from the International Federation of Red Cross, asked the government representatives how they plan to engage with the already existing local communities' adaptation efforts and ensure that the communities are not just recipients but co-implementers and leaders who make the decisions for their own community. A participant from Ghana addressed the fact that developing countries lack climate finance premiums and are thus less attractive for investing. He inquired about possible ways to make developing countries more accessible for climate financing and to make loss and damage funds available at the time when they are needed (climate disasters do not announce themselves). Chin Chin Lim from Hong Kong, China, who is an urban planner and youth climate advocate, talked about her struggles with implementing high level goals and policies from COPs

and other UNFCCC processes at the local and community level. She explained that there is an important lack of understanding of the local authorities and civil society on the goals set by UNFCCC, which results in their neglect. Her question was: how can we ensure that the high-level policies are translated to the local level and applied through national adaptation plans? A representative from Switzerland said that non-transparency is often an issue that prevents nations from committing to their pledged adaptation funding. She remarked that a lot of time and effort goes into ensuring that the funds go to the right place. She asked the government representatives how they plan to ensure, as quickly as possible, that the provided fundings flow to designated nations, from the national level to the regional level and finally to the local communities. In other words, how will it be ensured that these funds are actually used for implementation at the grassroots level? She added that local communities often have the best understanding of their own vulnerabilities and needs in relation to climate change and can serve in the assessment of adequacy and effectiveness of adaptation. In that sense, she asked whether governments plan to take into account the local knowledge and awareness on the vulnerability of communities and integrate it into the assessment of adaptation needs and national adaptation plans. Srishti Singh, who works at the intersection of adaptation and education in India, calls for more contextualizing and specificity when it comes to local adaptation. She believes that education is one of the stepping stones to building community resilience. S. Singh posed three questions, starting with: how adaptation focused education can be prioritized at all levels to build community resilience and aid in rehabilitating and rebuilding communities, especially when it comes to local youth who have been at the forefront of extreme climate events? Second question was: how the efforts on increasing the capacity of youth and building their experience through adaptation action could contribute to the bottom-up decision-making process? The final question was: what support could the international community provide for creating a policy structure that reaches the youth and, through them, local communities?

Ch. Nyce said that the implementation of local initiatives depends on the local community's capacity to advocate such ambition and that they should first find place within the local government actions. He explained that international help for adaptation is focused through the countries' Nationally Determined Contribution (NDC) plans as well as the adaptation plans. Thus, the local communities should aim to integrate in these plans the actions they consider necessary. He also added that the USA established a program that takes into account locally established resources, management practices and integrates green climate funds into it. He stressed the importance of sharing best practices between countries. D. Acconcia noted that, when it comes to planning adaptation, the EU includes the local level in dialogue and policy making. *Mission for Adaptation* is an EU funded initiative that aims to empower 150 regions in Europe to become climate resilient by 2030. M. Akram explained that the problem with the accessibility to finance and distribution of funds is that there is no global definition of climate finance, that is, it is unclear whether it encompasses only official assistance or grants, concessional finance, commercial loans, and private sector investments too. He added that G77 sees climate finance as concessional and not grant based. Also, G77 and China proposed

the establishment of a financing mechanism under the auspices of UNFCCC, where a certain amount of resources is available immediately in response to loss and damage. As it is now, for a country to receive climate funding, it needs to go through a long application process (120-page form and more than a year long waiting process). Thus, developing countries ask for a streamlining of the application process to allow them to have simplified access to climate funds. Further, climate finance should be an addition to humanitarian funds for disaster relief. Ch. Nyce explained that the USA puts emphasis on financing early warning and disaster response systems. The USA and EU representatives both emphasized their work on catalyzing partnerships between private and public sector in this regard. D. Acconcia explained that, in order to allow adequate financial support from the international community, countries should establish coherent mitigation and adaptation strategies.

- The International Renewable Energy Agency organized the session *Youth Leadership for Energy Transition* as an interactive intergenerational workshop exploring the role of youth in accelerating energy transition and achieving inclusive climate-safe future. The participants were divided into groups and were asked to explore and share their experience on: (1) education and capacity building priorities, (2) engaging youth in decision making, and (3) youth innovation and entrepreneurship. The results of the discussions were presented by session moderators aiming to showcase the ways to translate commitments into action and implementation. Among the initiatives presented were those organized by the Student Energy, the pioneer youth research institution in the field, and the Youth Sustainable Energy Hub, which prepares specialized capacity building workshops and provides mentorship opportunities. Participants from UNICEF presented their recent work on making global energy issues comprehensible to children through a simplified-language booklet on energy.
- The United Arab Emirates (UAE) Pavilion hosted a session where Masdar Clean Energy presented its *Youth for Sustainability Initiative*. This initiative, aligned with the SDGs and the UAE's national strategy, offers a series of programs focused on students and young entrepreneurs, including the Sustainability Ambassadors and Future Sustainability Leaders Programs. These international programs are open to youth worldwide and start with the *Abu Dhabi Sustainability Week*. UAE, which will be the host of COP28, supports the inclusion of youth in addressing the SDGs by engaging them in the work of both the Ministry of Culture and Youth, and the Ministry of Climate Change and Environment. The latter ministry is attentive to inclusiveness of youth and women. In it, women hold 33% of leadership positions, 46% of technical positions, and 27% of executive positions, while more than half of the mentioned positions are occupied by women below 35 years of age.

5. Education for Sustainability

- The Climate Education Hub (CEH) hosted the launching of the *Climate Education Coalition*. The session was moderated by Jan Michal Dabrowski (Consultant to the Earth Day and Co-Founder of the Climate Education Team of the Fridays for Future Movement).

The opening remarks were given by Ariadne Papatheodorou (UN Youth Representative) and Valeria Napoli (EU Commission). The session comprised the contributions of Amanullah Porag (Mock COP), Kazi Zubair Hossain (World Organization of Scout Movement), Temilade Salami (Echochampions), Opeyemi Elujulo (Care About Climate), and Micah “Bigwind” Carpenter-Lott (SustainUs). The Coalition, which has already gathered more than a hundred youth organizations and activists, aims to strengthen the collaborative actions towards integrating climate education into a compulsory curriculum of educational institutions worldwide. They state that integrating the topic of climate education in the COP28 negotiations would be a step towards achieving that goal. The memorandum on the establishment of the Coalition explains that the members should jointly plan strategy, coordinate campaigns that aim at building awareness on climate change, and promote the importance of climate education with the members of civil society, state politicians, UN officials, entrepreneurs, and the press worldwide.

- The University of Cambridge organized the session *Supporting Businesses on their Net Zero Journey with Comprehensive Climate Education* at CEH. The session was moderated by Eliot Whittington [Director of the Centre for Policy and Industrial Transformation at the Cambridge Institute for Sustainability Leadership (CISL)]. This Cambridge University department has focused on education of business individuals and communities on sustainability for 30 years. The session explored the role of business in the transition to net zero emissions. The discussion focused on small and medium enterprises (SMEs), which make 90% of world businesses. The first part of the session was moderated by Beverley Cornaby (Program Director at CISL), who invited John Reves [Vice President of Business Engagement at the World Business Council for Sustainable Development (WBCSD)] and Antoine Sire (Head of Company Engagement at BNP Paribas) to share their views on opportunities for sustainability education in business and its possible contribution to the overall decarbonization journey.

J. Reves elaborated on the importance of long-term training and continuing education when it comes to being equipped for transition to sustainability. He enrolled in a two-year Master’s course at CISL alongside his job at WBCSD in order to help bring the needed transformation to the organization. When trying to address some critical issues in the field of sustainability, a company needs to support not only its sustainability teams but also all other employees (marketing, finance, legal, supply chain, *etc.*) in developing their “green” knowledge and skills necessary to deliver on this ambition. Thus, WBCSD created courses that offer introductory elements and accommodate safe spaces for mutual learning between companies based on their work experience. In this way, they get to acquire new knowledge but also to develop new ways of addressing the real challenges they face in their transition towards sustainability. Thus, a company obtains the opportunity to open-up its problems and get support from other companies through mutual learning.

A. Sire spoke about a three-way effort of BNP Paribas to contribute to sustainable development. Firstly, the company provides training to all employees through short programs on climate change and sustainable transformation. Secondly, in partnership

with CISL, they train the employees (more than a 1,000 so far) by helping them to acquire specialized skills necessary to accompany their clients on the journey to sustainability. Thirdly, they train all the managers to embark all their colleagues on this journey and facilitate the transition of the bankers from non-sustainable to sustainable economy. When BNP Paribas decided to reduce the financing of upstream oil and gas industry sector between 2020 and 2025 by 25%, they needed to create a team with specialized skills to accompany the clients. The transition to sustainable banking means that they need the employees who can advise clients on, for example, sustainable savings. The company also created a low carbon transition group of 250 senior bankers, who work on sustainable transition of large corporations.

The panelists were asked to address the issue of climate skepticism. A. Sire explained that, in his view, there are two levels of climate sceptics. Most of the sceptics who believe that human action has nothing to do with climate change left the company in 2017 when BNP Paribas stopped working with the oil and natural gas companies that primarily did business with oil shale or tar sands and stopped financing the projects that were involved in their transportation or export. The more discreet sceptics understand that people have an important part in climate change, but do not admit that it has anything to do with their clients and their businesses. This kind of skepticism can be addressed through training. The situation changes once they understand that addressing climate issues is important for their company and the training empowers them to be part of the discussions with clients on sustainability. The most effective part of the training is the one involving client examples. Finally, what really encourages the bankers in this process is the positive response from the clients who can value the company's investments in sustainable development. The company established the Sustainability Academy, which provides sustainability trainings including the one organized by CISL. It is managed as an online platform through which members of the company can participate in the trainings and share experiences and best practices.

Jie Zhou runs the Accelerator Program of CISL, which provides incubation, mentorship, and support to SMEs and startups. She pointed out that the area in which it is nested is the Golden Triangle of England (Cambridge-Oxford-London), which is the intellectual powerhouse stimulating economic growth. The Cambridge innovation ecosystem comprises institutions focused on three main areas: space and infrastructure (Cambridge Science Parks, Cambridge Business Park, The Bradfield Centre, Idea Space, *etc.*), skill and talent (University of Cambridge, Microsoft, AstraZeneca, *etc.*), and support and service (Cambridge Innovation Capital, DeepTech Labs, IQ Capital, *etc.*). Nevertheless, this area lacks sustainability innovation that is itself convergent of different disciplines, including technologies and arts. Thus, CISL launched an incubator space called the Canopy Accelerator, which offers a sustainable workspace for impact focused and purpose driven startups and SMEs to mingle, collaborate, and thrive. The Accelerator provides the community and workspace, and runs a series of events and trainings. It is membership based and aims to bring together start-ups, SMEs, entrepreneurs, corporates, Cambridge Innovation Cluster, CISL Network, and finance

experts for sustainability innovation. Since 2020, the Accelerator team has been running cohorts focused on issues such as building environment on net zero emissions, women in sustainability innovation, and circular economy disruptors.

Startups and SMEs contribute to more than half of the carbon emissions. Thus CISL, together with the Business for Social Responsibility (BSR) and SME Climate Hub, developed a free online training program called Climate Fit, which aims to help startups and SMEs to decarbonize. In order to make it interactive and practical, they integrated an actionable checklist as well as tangible case studies and organized it into the following seven modules: Climate Strategy and Governance, Climate Action for Your Operations, Reducing Emissions in Your Supply Chain, Design for Net Zero, Financing Net Zero Transition, Engaging Your People and Communities in Your Climate Ambitions, and Telling Your Net Zero Story. After the presentation, J. Zhou initiated the discussion by addressing the necessity of large corporations to engage SMEs in their journeys to sustainability, especially in terms of supply chain.

Michelle Patron, who leads the Global Sustainability Policy at Microsoft, explained that SMEs play an important role in every part of the company's sustainability strategy. This involves three things: "getting the house in order" (carbon free by 2030 and 100% energy from renewable sources by 2025), developing solutions for customers (Microsoft Cloud, for tracking, account, and report carbon emissions), and enabling the world to reach its sustainability goals through markets, skills, and policies (Microsoft Innovation Fund and the partnership with 60 organizations for reliable and interoperable accounting).

Mats Pellbäck Scharp said that large corporations can have a well-developed life cycle assessment and know exactly where their emissions come from, but for effective results, they need to work together with SMEs from their supply chain. In a supply chain with thousands of suppliers (Ericsson has around 24,000 suppliers), digital innovation is crucial for unleashing the potential for positive change. Large corporations can impose requirements on the suppliers (see the Ericsson report *Exponential Roadmap*), but for this to be effective, it needs to go together with adequate free platforms for training such as the one proposed by CISL. Large companies such as Ericsson and Microsoft can engage with local SMEs in developing countries to help local communities develop and adapt the digitalized platforms for sustainable development. One of the conclusions of the session was that, funding only large corporate structures in their transition towards sustainability leaves an important gap in the overall transition. Since SMEs make 90% of world businesses, they need to reach funding for transition as well. The panelists and moderators also agreed on the importance of education in the transformation of both large corporations and SMEs towards sustainability.

6. Sustainability Science

- The international launching of the *Humanities-led BRIDGES Sustainability Science Coalition*, within the UNESCO's international science program Management of Social Transformations (MOST), was organized at the UNESCO Pavilion. The session was hosted by Gabriela Ramos (Assistant Director-General for Social and Human Sciences of

UNESCO) and gathered Steven Hartman (Founding Executive Director of BRIDGES), Luiz Oosterbeek [President of the International Council for Philosophy and Human Sciences (CIPSH)], Darina Saliba (Director of the International Center for Human Sciences – UNESCO Byblos), Peter Gluckman [President of the International Science Council (ISC)], and Michelle Mycoo (Member of the Scientific Advisory Committee of MOST).

BRIDGES, a network of networks, works as a global project-led platform that promotes transdisciplinary approaches to sustainability science, education, and action. It aims to establish potentially transformative collaborations across academic domains and using non-academic knowledge and practices from local and indigenous communities.

The Coalition is a result of the development of UNESCO's initiative on promoting sustainability science as a complementary cooperation between natural and social sciences, humanities, and arts (UNESCO's Guidelines for Sustainability Science in Research and Education, 2017) in collaboration with a number of international institutions (CIPSH, HfE Circumpolar Observatory, ISC, etc.) engaged in addressing issues of sustainable development. It aims to bridge multiple forms of knowledge to study complex socio-ecosystems as a web of meanings and interactions. Sustainability science facilitates developing the understanding of complex socio-ecological systems and implementing knowledge in the design of actions for sustainable development. The integrative power behind sustainability science is humanities-led and enables the understanding of how people interact with the ecosystem and what are the feedback loops within the dynamics of the interaction. It enables contextualized and culturally-specific knowledge and practice to become catalyzers for social transformation towards sustainability.

The institutions anchoring BRIDGES Hubs from the beginning of 2022 are: ASU Julie Ann Wrigley Global Futures Laboratory, University of Wales Trinity Saint David, University of Pretoria/Universiteit van Pretoria, Princeton University, The City University of New York, and The Club of Rome.

7. Conclusions

In conclusion, the author presents here an overview of the most important points related to human security that were emphasized in the speeches of political representatives of the UN member states and the UN led commissioners, and in the side-events and pavilion panels she had the chance to attend. First of all, there is a discrepancy in the urgency of addressing the issue of climate change as essential to human security. On the one hand, there are three million people living in the countries that are presently affected by climate conditions. Recent floods in Pakistan and Nigeria have caused immense human loss and suffering as well as tens of billions of US dollars of damage, which these countries cannot finance. Also, a number of countries (especially the small island countries) will disappear with a sea level rise of just one meter and the predictions show that the climate migration will be over a billion by 2050. On the other hand, the countries that are at present not severely affected and have not gone through loss and damage caused by climate change, but are at the same time among the

highest carbon emitters, are going back to coal to “make it through the winter”. Only 29 out of 194 Parties to the Paris Agreement have submitted their NDCs progress report in 2022. This clearly shows that there is a persistent problem that has not been identified or solved during the previous 26 COPs.

“The world needs political leaders who can reconcile national aspirations with global human security.”

The climate events demonstrate that apart from mitigation, questions of adaptation, and loss and damage need to be urgently addressed. After arriving at net zero emissions, the temperature will continue to rise for another two to five years, and the planet will need between two and three decades for the stabilization. During this time, the climate events will persist and people will need to find ways of adapting to the climate conditions.

Arriving at net zero emissions requires a green industrial revolution, with around four to six trillion US dollars per year of global investments. Financial experts promote the sustainable energy investments as deflationary and contributing to the expansion of the job market. Also, taking into account the world GDP and the scientific and technological advancements, experts state that we have solutions in terms of financial resources and technological tools, but we lack global mechanisms for redistribution of funds in the direction of sustainable development. In order to make the carbon emissions substantially lower, the governments of high-emitting countries must find a way to stop fossil fuel subsidies, despite the industry’s pressure on the political establishment. Also, governments must provide clear policies and guarantees in order to establish public-private sector cooperation and facilitate investment flow to developing countries. Further, transparent data infrastructures and open exchange on mechanisms, processes, and best practices in transition towards green energy are essential for addressing the global challenge of providing for human security. The agency guiding appropriate cooperation and coordination of action between public and private sector, multilateral development banks, and international organizations and ensuring the necessary flow of funds must be provided by political leaders and sustained through the support of people. All sectors of society must collaboratively engage in transparent transition towards a sustainable global society that “leaves no one behind”. Finally, taking into account the complex interconnectedness of the SDGs and their essential role in establishing human security for people worldwide would allow a more comprehensive and efficient transition, and transformation of global society and its institutions. Thus, long-term sustainable development planning must evolve through the intergenerational cooperation, empowering both formal and informal educational practices as the key catalyzers of social change.

Youth activists make great efforts to create political pressure in countries that stay unresponsive to the climate crisis. Nevertheless, activism could be more effective if they are focused on the national governments’ elections process. The world needs political leaders who can reconcile national aspirations with global human security. Youth representatives are

slowly being integrated into bureaucratic procedures of national and international governing bodies. Giving voice to a small number of young individuals cannot possibly provide for empowering the global youth for overcoming the challenges of our society. Youth needs to be provided with the opportunity to be part of the knowledge-creation process and craft skills within official governing institutions.

The author left the Conference with echoes of two opposing voices. The voices coming from the Global South are rooted, profound, sharp, evidently sincere, and most of all, reflect the essential capacity of all human beings—the willpower to survive. The speeches from the political representatives of the Global North are considerate, thoughtful, soft, polite, descriptive, well-rehearsed, but mostly vague. As long as the priorities of the highest emitters are tied to political, economic, and military power, the chances of reaching the net zero emissions by 2050 remain slim.

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Communicating Human Security & Capturing Perspectives

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Abstract

The human security index consists of three key components: economic fabric index, environmental fabric index, and social fabric index. These three components include various different indicators like health, education, diversity, peacefulness, governance, food security, environmental vulnerability, protection and sustainability, measures of human, societal, and national progress and GDP, equality in income distribution and financial-economic governance. Although the Human Security Index provides a quantifiable method to rank and categorize countries based on these indicators, it is understood that an individual's own notion and perception of security varies with changes in human perspectives and experiences. Therefore, to understand human security and what it means to different individuals and communities, varied approaches focused on subjective individual experiences at the micro level are always essential. For human security to become a comprehensive planning framework, it requires the integration of diverse perspectives and inclusive thinking about human security.

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In this regard, this article seeks to discuss various tools that can be adopted to i) communicate human security among populations ii) capture the varied perspectives of communities about human security and its significance from the perspective of their lived reality. The article will use as examples, different methodologies and dialogue-based communication approaches adopted by the POP (Protect Our Planet) Movement (an NGO).

As an outcome, the implementation of these tools can enhance the overall understanding of the human security concept and the contextualization necessary for local communities.

1. Introduction

“Human security is not a concern with weapons. It is a concern with human dignity. In the last analysis, it means a child who did not die, a disease that did not spread, an ethnic tension that did not explode, a dissent who was not silenced, a human spirit that was not crushed.”

– **Mahbub ul Haq**, Pakistani Economist and International Development Theorist

Human security first emerged as a concept in 1994 when the Human Development Report (HDR) called drugs, AIDS, terrorism, pollution, nuclear proliferation, and environmental problems as a threat to human security. The report demanded a new concept of human security and a renewed role of the United Nations (UN) to seek solutions through a more equitable sharing of global economic opportunities and responsibilities.¹ Almost two decades later, in 2012, the United Nations General Assembly adopted a resolution stating that, “human security is an approach to assist Member States in identifying and addressing widespread and cross-cutting challenges to the survival, livelihood, and dignity of their people.” The 66/290 resolution calls for “people-centered, comprehensive, context-specific, and prevention-oriented responses that strengthen the protection and empowerment of all people.”^{2,3} An endeavor to quantify and characteristically frame this “people-centered” and “context-specific” human development approach—that moved beyond the statistical Gross Domestic Product (GDP)—gave rise to the development of the Human Security Index.

The Human Security Index* consists of three key components: economic fabric index, environmental fabric index, and social fabric index. These three components include various indicators like health, education, diversity, peacefulness, governance, food security, environmental vulnerability, protection and sustainability, measures of human, societal, and national progress and GDP, equality in income distribution and financial-economic governance. Although the human security index provides a quantifiable method to rank and categorize countries based on these indicators, it is understood that an individual’s own notion and perception of security varies with changes in human perspectives and experiences. Furthermore, with human security being perceived as “a concern with human dignity” as pointed out by Mahbub ul Haq, it leads one to recognize that human security significantly relates to one’s individual perceptions and subjective experiences. Therefore, to understand human security and what it means to different individuals and communities, varied approaches focused on subjective individual experiences at the micro level are always essential. For human security to become a comprehensive planning framework, it requires the integration of diverse perspectives and inclusive thinking about human security.

In this regard, this article seeks to discuss various tools that can be adopted to: i) communicate human security among populations; and to ii) capture the varied perspectives of communities about human security and its significance from the perspective of their

* Human security index is a methodological instrument to allow comparison of the status of human security at the international level.

lived reality. The article will use as examples, creative methodologies and dialogue-based communication approaches adopted by the POP (Protect Our Planet) Movement (a non-profit-based organization). As an outcome, the implementation of these tools can enhance the overall understanding of the human security concept and the contextualization necessary for local communities.

2. Expanding the scope of Human Security Index

The Human Development Report (HDR), released in 1990 by the United Nations Development Programme (UNDP), introduced us to the Human Development Index (HDI). The report recorded three main components, each captured with composite indicators. They included health (life expectancy rate), knowledge (adult literacy rate), and economic standard of living (GDP per capita). Since then, these reports have been published annually, analyzing developed and developing countries alike on the global HDI scale with a focus on socioeconomic development. Over the years, HDI has absorbed criticism and engaged in dialogue on whether it is an accurate and legitimate representation of the highly nuanced concept of human development or socioeconomic development. This has led to a rise in several propositions, including the Quality-of-Life Index, the Wellbeing Index (2001), the World Economic Forum Global Competitiveness Index (2003 and 2007), the World Database of Happiness (2005), and the Happy Planet Index (2006), to equitably measure socioeconomic development.

Given this context, it is important to note that the prototype of a new concept of Human Security Index (HSI) was first established after the 1994 HDR. This report contained a draft “social world charter” which advocated for the United Nations to “become the principal custodian of our global human security” with indicators that attempt to characterize inclusive income, knowledge, and healthcare as actually delivered to people. The HSI—a model evolved over the years through the work of scholar David A. Hastings—has sought to address some of the challenges faced by HDI while also incorporating the robustness of its indicators.⁴

For two decades, the author has also been concerned about “cultural bias” in the development of indicators (Hastings 2002). How to ensure a minimum of cultural bias, and an opportunity for diverse cultural concerns to enrich concepts of human development and human security? Such an effort should harmonize as many concerns as possible about such human conditions that describe comfort, or true social (as opposed to militaristic) security of ordinary people in a society. What concepts are involved? What direct or proxy indicators might be developed and used? What indicators are available now? What improvements might be made in such indicators so that they move toward better value in describing human inclusiveness/comfort/[social]security across as much of the cultural and political spectrum as possible? How can such indicators best describe current conditions and help indicator developers as well as governments and supportive institutions strategize improvements in the human condition of a place?

– UNESCAP Working Paper, “From Human Development to Human Security: A Prototype Human Security Index”, **David A. Hastings**⁵

The Human Security Index, with its principal intention to address gaps such as those pointed out by Hastings can be greatly strengthened by taking cognizance of the perceptions and experiences of ordinary people from diverse backgrounds and realities. This makes the communication of the human security concept and consultations on it with populations chiefly essential.

3. Growing Threats to Human Security and the Need for a Bottom-up Communication Approach

“We are faced with a development paradox. Even though people are on average living longer, healthier and wealthier lives, these advances have not succeeded in increasing people’s sense of security.”

– **António Guterres**, Secretary-General, United Nations

In recent years, a range of threats, like COVID-19, digital technologies, climate change, and biodiversity loss, have either gained prominence or taken on new forms. In other words, humanity is contributing to the world’s growing precariousness and insecurity. Considering the direct humanitarian costs of violent conflict, it is easier to quantify the impact of risks to human security. However, this becomes much more complicated when taking into account indirect social, economic, health-related, and environmental consequences. Social, political, economic, health-related, and environmental factors all pose risks to human security.

Since World War II, violent conflict has evolved significantly in both form and effect, influencing human security. The state’s defense against violent attacks is a prerequisite for its security, but it is insufficient for human security. As a result, it is critical to identify potential threats to human security and, with a better understanding of the concept, improve abilities to combat such threats, or at the very least, reduce their severity.

The 2018 Intergovernmental Panel on Climate Change (IPCC) identified that climate change poses the biggest threat to human security.⁶ Both human security and human rights are at stake due to climate change.⁷ Climate change threatens human security as it undermines livelihoods, compromises culture and individual identity, exacerbates migration, and makes it more difficult for governments to ensure the necessary conditions for human security. Climate change may have an impact on some or all of the factors simultaneously. Famine, conflict, and sociopolitical instability are examples of situations with extreme insecurity that almost always result from the interaction of several causes.

Human security will be increasingly compromised as a result of climate change for many communities that are already economically and socially disadvantaged, resource dependent, and have few financial assets. In this context, the way in which the subject of rights is framed sets down the basic requirements that are applicable globally. However, national and international laws ignore these rights and fail to take into account sufferings or rights.^{8,9}

The UN has acknowledged the range of dangers to human security. At the 2005 World Summit, it stated, *“All individuals, particularly vulnerable people, are entitled to freedom*

from fear and freedom from want, with an equal opportunity to enjoy all their rights and fully develop their human potential."¹⁰ Human security is relatively a new notion, and there is comparatively little comprehensive literature on this topic when it is used in a broad sense. These factors make this field even more in need of investigation. It is necessary to create a more thorough and coherent understanding of human security in order to address the various risks associated with security. While the HSI has been a positive attempt to model the concept of human security, enhancing the scope of this framework and its use in policy and decision-making requires community participation. This is where the bottom-up communication approach comes into play.

As threats to human security continue to exacerbate due to the events unfolded by climate change and geopolitical instability, understanding the depth of the situation as it manifests itself in different demographics becomes key. In this regard, documenting individual perspectives on human security based on experiences across contexts would offer a multi-layered and comprehensive understanding for promoting the use of the human security concept as an effective planning framework. A bottom-up communication approach such as this would be inclusive, context-specific, and informed by experience, all of which would elevate the value and scope of any conceptual framework, including the HSI.

4. Tools: Communicating Human Security and Capturing Perspectives

In recent decades, the UN has built a library of knowledge on human security that can be incorporated in any form into communication strategies. In this section, we look at some communication methods specifically adopted by the POP Movement (an NGO) in its work that can be presented as potential examples for communicating human security through participatory approaches.

The POP (Protect Our Planet) Movement is a non-profit, youth-centered organization that aims to empower youth to have active participation in addressing issues of climate change through knowledge sharing, capacity building, and climate action.¹¹ Fostering collective leadership, the organization leans heavily on creative methodologies and dialogue-based communication approaches to promote its objectives.

4.1. Art and Creative Methodologies

Art can be a powerful medium for knowledge exploration and research when it comes to human security. The POP Movement and its sister organizations have extensive experience in utilizing art to inform UN programs and global guidelines, including the living *WHO guideline on self-care interventions for health and wellbeing*.¹² The flagship Art4Life (A4L)¹³ initiative pioneered by the Center for Human Progress (CHP), a sister organization of the POP Movement, brings together the creative forms of art like music, dance, puppetry, theater, and so on in workshop formats. This medium of communication offers a safe space for the participants and stimulates dialogue on sensitive and important issues that may be difficult to engage with otherwise. A4L can be evolved to promote participatory dialogue on human security, just as the CHP has utilized it to break the communication barrier on gender and sexual and reproductive health and rights.

Some creative communication tools adopted by the POP Movement and Center for Human Progress:

Drama: Drama, as a performative art to visually represent meanings and stimulate dialogue.

Music: Music, as a tool to inform, motivate, convince, and also strengthen expression, especially around hard-to-communicate subjects.

Storytelling: The art of storytelling, as a method to narrativize ideas and smoothen the process of communication in lived reality.



Magnet Theater: Magnet Theater, as a dialogue-based communication tool by and for communities, where a dilemma is portrayed and the performance freezes, allowing the audience to act out and test their own solutions and perspectives in a simulated real-life scenario.

Video: Video, as a visual communication tool which is spontaneous, engages the participants' attention, and stimulates action and/or dialogue.



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Another example of dialogue-based communication approaches from the POP Movement is a session organized for young audiences and other stakeholders as part of the Third International Conference and POP Festival for Youth-Led Climate Action.¹⁴ Focusing on climate refugees, the session brought to light how many individuals coming to the United States from Central America are fleeing because of violence, poverty, and corruption. But climate change is emerging as both a direct and an indirect driver of migration that complicates existing vulnerabilities. Persistent drought, fluctuating temperatures, and unpredictable rainfall have reduced crop yields throughout the Northern Triangle—a region that comprises El Salvador, Honduras, and Guatemala—challenging livelihoods and access to food in agriculturally dependent communities. In this regard, some important evidence and experience-based perspectives emerged during the session. Amali Tower, Founder and Executive Director of Climate Refugees, noted, *“Disasters don’t just happen in isolation; they are compounding due to economic factors, global health crisis, pandemic, high rates of poverty, and many others.”* Similarly, Felicia Rangel-Samporano, Founder of the Sidewalk School, which provides education to asylum seekers’ children on the US-Mexico border, noted in another participatory session, *“I don’t think people really understand how much climate change really factors into asylum seekers’ lives while they’re coming to our country. They come to our country for a better life, to have a chance at something, whereas in their country everything’s destroyed.”* The linkages between these real-world concerns and human security are undeniable. A creative communication approach adopted to understand these issues from the perspective of human security would starkly reveal the more multilayered threats that exist.

4.2. Grassroots, Community-driven Projects

The growing threats to human security and the regional issues tied to them now more than ever call for global responses and a one-size-fits-all approach cannot be adopted to address them. For a stronger, more innovative response, coordinated efforts led by grassroots and international organizations to design and implement any project are a must. Such projects heedfully respond to situations and can bring quick changes with a better monitoring and evaluation feedback loop. Through the objectives they try to achieve through community engagement, these projects can also serve as effective communication tools. Adopting this approach, the POP Movement has been working on various projects that promote regional voices with a feedback loop of bottom-up and top-down approaches. These feedback loops have aided in identifying the needs of communities across a geography, generating momentum for new projects and scaling up existing ones that are country-based and/or led independently by youth. The POP initiatives,¹⁵ which are country-based and led by a team of young climate leaders, address different issues pertaining to the local context by adopting varied strategies.

A common grassroots strategy adopted by the youth through the POP initiatives is tree planting. By engaging the local community, including young people, and with support from partners across the globe, the POP Movement has made progress toward human security by making the world greener through its active plantation drives. With six tree plantation initiatives in countries like Liberia, Zambia, Sierra Leone, Zimbabwe, Haiti, and Cameroon, the projects inspire youth, spread awareness, build their capacities, and empower

them. According to the International Resource Panel (IRP) hosted by the United Nations Environment Program, well-planned land restoration activities have a cross-sectional benefit and can help all 17 Sustainable Development Goals. Increasing the land's ability to produce food and building materials over time, addressing hunger by improving economic well-being by indirectly generating jobs and economic activities, providing traditional medicines, improving mental health through forest bathing, empowering women by increasing their access to quality nutrition, protecting infrastructure from extreme weather events, and enhancing the livelihoods of smallholder farmers are some of the benefits. A simple act of planting trees can help create healthy, thriving communities, thereby promoting human security.¹⁶ Furthermore, POP Movement's tree plantation initiatives take on special significance when it comes to communicating human security. This is because the continuous feedback loop of bottom-up and top-down communication not only ensures effective monitoring and evaluation, but through it, can facilitate knowledge sharing in human security. Capacity building and awareness sessions organized prior to any tree planting drive in a region lends scope for environment-related communication on human security. In these sessions, perspectives from the local community can be documented through participatory communication tools.



Among other strategies, the POP Movement has been focusing on climate education and gender sensitization to empower youth and build their skills. This is required to manage security risks from climate change, including mitigating its impacts on the ecosystem, improving management of high-risk locations, and adapting to socio-economic changes.

Even though initiatives, such as those mentioned above, have proven to scale-up and channelize regional voices in a short period of time, their work in silos is not enough to create a global impact for human security. Therefore, by adopting varied approaches to foster collaboration among different actors, the POP Movement continuously gathers global, regional, multisectoral, and transgenerational efforts to ultimately reach the size, scale, and momentum to become a global movement. The POP Global Climate Crusade, launched in early 2022, is an attempt towards achieving this objective. It is a series of joint approaches directed at creating effective and self-sustaining initiatives. The crusade is an ongoing effort to promote climate-related activities and events—in areas including, but not limited to, education, culture, social and human sciences, and communication—to adapt to the impacts of climate change and the risks associated with it.¹⁷ Kicked off in the African continent, within a month, this crusade commenced more than one hundred climate action activities including twenty tree plantation drives, over sixty awareness workshops, twenty-five community dialogues, and over ten tonnes of plastic waste collected through community efforts. The activities that emerged through the Climate Crusade also focused on other Sustainable Development Goals like gender equality, good health and wellbeing, zero hunger, clean water and sanitation, life on land, and others.



In these contexts, implementing the previously noted feedback loop mechanism in grassroots, community-driven climate action projects offers a channel for not only contextualizing human security but also communicating the same and gathering valuable experience-based perspectives from local communities.

4.3. Research and Writing

The academic literature compiled and developed by the UN adeptly delineates the concept of human security by examining key areas including the need for this concept, the

multifarious roles it can play, and the gaps it can address.¹⁸ Human security emerges from the interaction of multiple factors and can hardly be limited to a single cause.¹⁹ As a result, human security becomes a very sensitive topic for communication and necessitates that it be normative, ethical, educational, and effectively handled in any inquiry. It is necessary to undertake studies to effectively communicate about a potential threat to human security and rights and offer interventions to deal with it.

Climate change, as a condition, poses risks to individuals and communities, including threats to livelihoods, culture, and political stability. As systematically reviewed in the AR4 and AR5 reports of the IPCC, there are clear linkages between climate change and human security, and to support these, there is a need for continuous research studies in areas, communities, and geographies affected by climate change.²⁰ In this regard, the POP Movement has been invested in some pioneering research endeavors.

A recent study to investigate the environmental and public health impacts of the presence of Sargassum (macroalgae) on the coastal areas in the state of Quintana Roo, Mexico, is one such research project. For the past few years, beaches in Mexico and the Caribbean have been plagued by massive rafts of a golden-brown seaweed called sargassum. Thick, slimy, floating macroalgae, coming from the Caribbean, are piling up on the Gulf of Mexico. Sargassum, moved by currents, has reached the Straits of Florida. Various problems associated with the presence and decomposition of these macroalgae have been observed. These include an unpleasant appearance of the beaches due to the excessive presence of sargassum, the release of odors (gasses such as methane and hydrogen sulfide) that can be harmful to health, poor quality of water that takes on a brown color, effects on coastal ecosystems such as seagrasses and corals, significant loss of biodiversity, respiratory and skin infections due to direct contact with sargassum, which not only affect the inhabitants and tourists who come on vacation but also, and to a greater extent, workers who are engaged in removing macroalgae from the sea and the beaches and handling it until its final destination on land. Through this research, the POP Movement is aiming to identify the impact of the presence of sargassum on the environment and the health of the nearby living communities and also to determine how it can be a threat to human security.

With research as a tool, the POP Movement has been constantly working with experts to conduct capacity building workshops, dialogues, primary research, and literature reviews to propose strategies to mitigate the impact of climate change on public health. A recent paper proposes how adopting a well-defined public health framework would redress the social and environmental determinants of health and allow officials to build strategies and programs to aid communities in acquiring knowledge of climate resilience and preparing them for the health effects of climate change.²¹

In this series of efforts, another way of collecting perspectives and communicating about human security issues is by covering various aspects of climate change as a threat to public health and publishing them. An example is the upcoming book, *Health and climate change nexus: Unraveling the connections*. This book covers multiple dimensions of health and climate change in both developed and developing countries, and the interconnections

between health and climate change are discussed. In this book, strategies are recommended for mitigating the negative impacts of climate change on people's health. Research on the linkages between climate change and human health is reported in over 14 chapters from Mexico, Africa, the UK, the USA, India, South Asia, and Latin America. This information from developed and developing countries will be of immense interest to a global audience of researchers, activists, governments, and others.

5. Conclusion

“We will not enjoy development without security, we will not enjoy security without development, and we will not enjoy either without respect for human rights.”

– **Kofi Annan**, seventh Secretary-General of the United Nations (1997-2006)

This powerful remark by Kofi Annan closely ties together the concept of human security with human rights. As human security emerges as a rights-based issue, it is incumbent that the conceptual and policy framework surrounding human security brings within it diverse perspectives and contextualized experiences from the micro levels. For this purpose, communicating about human security to different individuals and population groups would be the crucial first step.

The article used as examples, creative methodologies and dialogue-based communication approaches adopted by the POP Movement and its sister organizations. Implementation of the tools discussed in the article enhances the overall understanding of the human security concept and the contextualization necessary for local communities.

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- increased exposure to water-borne and vector-borne diseases. Various different normative frameworks have been employed to think about climate change. Some, for example, apply cost–benefit analysis to climate change. The Stern Review provides a good example of this approach. It proceeds by comparing the costs (and any benefits)
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The global health community needs to radically rethink its vision. An exclusive focus on healthcare is a mistake. Health emerges from a broader perspective that includes quality of education, economic growth, gender equality, and migration policies.

– *Alberto Zucconi & Luca Rollè*

The Health and Economic Burdens Inflicted by Human Security Destruction

Widespread awareness of how everyday actions are exposed to global and local security threats is necessary. This includes the ability to understand connections between actions that may seem disconnected across time and space.

– *Benno Werlen*, Human Security & Global Understanding: Towards New World Relations

One of the necessary conditions for the sustained growth and inclusive development of a country is to have a thriving scientific and technological community capable of generating new knowledge and applying it.

– *Nebojša Nešković*, Basic Sciences and Human Security

“We the peoples” can invent the future. We cannot remain silent any longer. Let us raise our voice so that hope and joy of living are possible again.

– *Federico Mayor*, Moving from Reason of Force to Force of Reason

We must act now. We must be united and act in line with planetary boundaries, the safe operating system of our Earth. That requires effort, capital, and significant social and cultural cohesion. We know what to do, but we must finally do what we know.

– *Mariana Bozesan*, Ensuring Human Security by
Creating Abundance through Mindshift, Conscious Capital, and Technology

Any viable global formulation for the human community to foster the security of all human beings must necessarily consider and accommodate the cultural differences in values and institutions which differentiate diverse societies around the world.

– *Ashok Natarajan*, Human Security, Individualism and Collectivism

There is no human security without economic security and this in consequence requires proper funding of our global commons.

– *Stefan Brunnhuber*, Securing Our Commons: New Forms of Financial Engineering to
Secure Our (Global) Commons and Mobilise Trillions of Private Sector Liquidity

All sectors of society must collaboratively engage in transparent transition towards a sustainable global society. Long-term sustainable development planning must evolve through intergenerational cooperation.

– *Marta Nešković*, Report on COP27 and its Implications for Human Security

To understand human security and what it means to different individuals and communities, approaches focused on subjective individual experiences at the micro level are essential. Integration of diverse perspectives and inclusive thinking are needed.

– *Ash Pachauri et al.*, Communicating Human Security & Capturing Perspectives

CADMUS

Inside This Issue

The ultimate goal of the HS4A campaign must be nothing less than to mobilize global society for rapid social transformation of our values and our actions to achieve human security for all.

– *Garry Jacobs*

A Global Movement to Promote Human Security for All

It is time for a strong and determined intervention from every country to ensure that we place human security at the top of our political and economic leaders' agendas.

– *Jon-Hans Coetzer et al.*

Enhancing Human Security by Transforming Education Through Science, Technology, and Innovations

The multiple crises we face today are a wake-up call for putting human security and wellbeing to the forefront of public policies, for investing in people, in economies and societies so they become cleaner, greener, healthier, safer, and more resilient.

– *Irina Bokova*, Human Security, Culture & Protection of Humanity's Heritage

Human security is a multifaceted concept that focuses on the well-being of individuals and inclusive societies. Although there exists no single metric to measure human security, there are resources that can help us assess our progress.

– *Phoebe Koundouri & Konstantinos Dellis*
Human Security: Concepts and Measurement

Human Security is rooted in our best science and recognizes that human beings are social entities that require meaning and values in their endeavors.

– *Jonathan Granoff*

Human Security: Virtuous, Practical, Urgent, & Necessary

The next big thing is not a new technology, it is a new idea. Human Security is that idea.

– *Douglas Weinstein & Walt Stinson*
Human Security For All

There is a need to establish a task force with a specific mandate to provide us with a blueprint on how to develop a culture of human security which integrates all socioeconomic dimensions.

– *Ganoune Diop*

Key Findings Regarding a Comprehensive Human Security: Envisioning and Building a Better Future

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