

Biopolicy for a Green Economy Needed New Dimensions for Rio+20

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Biopolicy – stimulating effective action at every level

In fourteen months, the world spotlight will once again focus on Rio de Janeiro for the 2012 Earth Summit, also known as Rio+20. In the build-up to the Summit, it is crucial to lay the right foundation to give humanity a chance to curb destruction and implement a new vision. A vision that can secure renewed commitment to sustainable development and address emerging challenges. The task is both enormous and urgent.

To succeed in this effort, we need a strong, effective, participatory and inclusive policy framework. Since its inception in 1985, the Biopolitics International Organisation (B.I.O.) promotes “biopolicy” for the protection and appreciation of *bios*, all life on our planet. Biopolicy proposes new educational and economic paradigms, new legislative and institutional guidelines for environmental protection, and new defence strategies to ensure our planet’s health and security.

In contrast to the first Earth Summit, when environmental issues had hardly become associated with development, we are now fully aware of the close link between the environment and socio-economic growth, but we still have not implemented the needed action. Conventional structures and approaches have not been effective and fast enough. But time is of the essence, and we must act now. Insatiable over-consumerism has led to a crisis in values and to the financial and environmental instability threatening our future globally. We have to rebuild our value system by placing as a priority the preservation of life, the beauty of our world. We must also join forces internationally and interculturally and cooperate at every level to build a vibrant green economy focusing on clean energy, the protection of the environment and decent jobs for all. Eurasia, as the world’s supercontinent, rich with natural and cultural resources, has the added responsibility of leading the way with new strategies and a new vision to empower a global society of hope.

Building a green economy

A green economy can help us to restructure our economies, curb unemployment with the implementation of “green salaries,” eradicate poverty, protect biodiversity, and promote clean energy, education, international cooperation and intercultural dialogue, resulting in global prosperity for decades to come. The interdependence of interests is obvious. We need to forget the paradigms of the past where the neighbour was considered a dangerous “other” and where differences in culture or religion were a source of alienation and power games. We need to give priority to a new dimension of profit; not profit in terms of money only, but also in terms of values and of ways of rebuilding society.

Small additions to past patterns are no longer sufficient. Economic growth with concern for goods and income only is not viable. By encouraging over-consumerism, we are running towards a cliff. It is time for health, education, natural capital, water, food, biodiversity, culture, intellectual sharing, productivity, peace and security to be quantified and to assume their rightful place in a *three-dimensional* approach to economic growth. We cannot discard the old system within a day, but we can make big steps by introducing a new scale for evaluating “quality of life” and for encouraging an economy where the harmony and beauty of life are truly respected and appreciated.

Bio-Environment	
Quality of Life	• Health - Safety - Justice - Happiness - Co-existence with all forms of life - External and Internal Wealth - Micro-Environment - Macro-Environment
Ethical Values	• Diachronic Values for Society - New Criteria for Business Compatible with Quality of Life
Legislation	• National - Global - Bio Rights - Bio-Diversity - Global Warming - Ozone Depletion - Overpopulation - Poverty - Deprivation
Macro and Micro-Economics	• Time and Space Scale - Historical Perspective - Millennium Approach - Cleaner Production
Bio-Diplomacy	• Interdependence - International Cooperation - Third World Viewed as Partner
International Commerce	• Durable Development - Internalizing External Costs - Consumer Protection
Governance	• New Models of Participatory Democracy - World Referendum - Defense for Bios
Education	• Biocentric Curriculum in Economics - Satellites in Education
Media and Communications	• Internet Communication Feedback - Satellite Diffusion of Information - Marketing
Energy	• Protection of Resources - Study of Bios Models
Employment	• New Opportunities for Employment in Bio-Environmental Protection - Green Salary for Unemployed
Culture	• Arts, Cultural Values, Traditions

Bio-energy for combating climate change

The impacts of energy based on fossil fuels on the global environment and its contribution to climate change make it imperative that we develop more sustainable energy sources. Climate change is occurring sooner than expected and it is more urgent than ever to devote greater resources to the development of new energy technologies, which do not pollute the atmosphere and which do not contribute to global warming. Biological models can serve as paradigms for clean and renewable energy, revolutionizing the energy industry.

Algae are tiny biological factories that use photosynthesis to transform carbon dioxide and sunlight into energy. Algae can grow in salt water, freshwater or even contaminated water, at sea or in ponds, and on land not suitable for food production. Moreover, algae grow even better when fed extra CO₂, the main greenhouse gas, and organic material like sewage, and can be used in carbon sequestration programmes. Algae also produce hydrogen under certain conditions and can be used for the renewable and environmentally friendly generation of large quantities of hydrogen (H₂) gas.

Hydrogen has unique potential for reducing today's dependency on fossil fuels. Hydrogen can be produced from renewable resources, such as water and agricultural products, eliminating the net production of CO₂ and helping to alleviate global warming. The transition to a hydrogen based economy begins with the commercial production of hydrogen-based fuel cells, where it is efficient and intrinsically clean, for all end-use applications. Additional research is needed in this area to reduce the cost of hydrogen production, solve hydrogen storage problems and in the longer term, integrate renewable energy sources into hydrogen fuel production.

Bio-defence to meet new and emerging challenges

The transition to a green economy and the strengthening of international governance cannot be effective without environmental security. Bio-defence to protect life and the environment must become a priority on the global agenda, and all nations need to channel their efforts to eliminate environmental threats and to preserve life and prosperity. With the help of the "bio-assessment of technology," the life-supporting dimensions of progress can be evaluated and retained, and technology can be guided towards building a safer, cleaner and greener world for all.

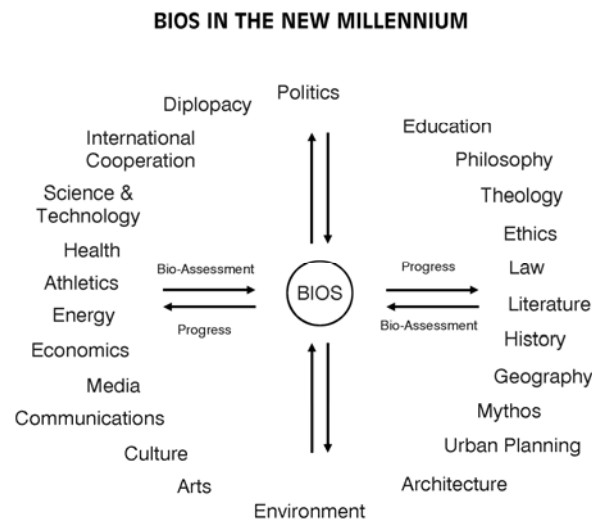
The environment, as a common point of reference, can bring all peoples of the world together, in a state of harmony and the absence of war. The conversion of war regimes to programmes for the preservation of the environment would guarantee a better future. Such a programme would not have negative economic effects, but rather, it would stimulate the

global economy and provide jobs, since existing defence industries would be re-tooled into “defence-for-life” industries. Existing defence manpower and equipment can be adapted for peaceful tasks such as reforestation, water resource clean up, soil erosion recovery, protection of the ozone layer and de-contamination of areas affected by nuclear radiation. These problems represent real threats to the continuation of life on our planet, and no human resource should be spared in the effort to contain them.

Bio-education for a global responsibility

The role of education is vital, as it is only through education that innovation can be achieved. Bio-education, with the environment at the core of every human endeavour, can lead to new technology, new policy and new employment opportunities, which can create sustainable livelihoods. The media are also essential in this effort, because they can raise the necessary global awareness of the urgent need for action and change.

To advance this vision, B.I.O. launched the International University for the Bio-Environment (I.U.B.E.) in 1990. This educational initiative urges scholars, decision-makers, diplomats, business leaders, teachers and students to actively contribute to the development of an environmentally conscious society.



An essential vehicle for making bio-education available to as many individuals as possible, is the I.U.B.E.’s e-learning programme, a series of online environmental courses that have so far elicited the participation of representatives from 119 countries. The goal of these courses is to address the urgent need to improve quality of life and to mobilise each individual to participate in protecting our common environment and its rich biodiversity. By using technological advances in this positive way, a uniquely rich source of information and training material can be placed at the fingertips of teachers, students and professionals around the world.

World Referendum – closing the gap between the rich and poor

Placing our world onto on a more sustainable path requires the right institutional framework. Governments cannot achieve sustainability alone and need to work with citizens, international agencies, and all stakeholders. People who suffer most from environmental catastrophes, border disputes, natural disasters, polluted or depleted natural resources rarely have a say in world affairs. A World Referendum, where every citizen can voice their willingness to save the environment and life on our planet, can stimulate a global response

that will urge world leaders to rethink development and prompt a wide range of actions for socially and environmentally sustainable economic growth.

It is the purpose of the B.I.O. World Referendum, first proposed in 1991, to transcend national boundaries and bring the world together in a common cause. In today's complex society, nations seldom share priorities. Climate change and other environmental concerns are possibly the only issues that are relevant to all the nations of the world. Furthermore, environmental degradation and resource depletion are often the impact of extreme poverty on the planet. A simultaneous electronic ballot on saving bios is a brilliant opportunity to demonstrate that, as citizens of the world, we can all – both rich and poor – agree on safeguarding the Earth for the generations to come.

Green society – the ultimate challenge for Rio+20

Following in the footsteps of previous Earth Summits, Rio+20 will again search for solutions to poverty, war, and the growing gap between industrialized and developing countries. Concerned educators, leaders and decision-makers, who see the need for new mechanisms to protect the environment and ensure sustainable development, will convene to discuss the building blocks for change. The building blocks for a strong, effective, participatory and inclusive governance framework for sustainable development. A “green society” of security and transparency, where bios is valued over greed and where peace and harmony replace discord and destruction, helping us understand and value the multiple links between the environment, the economy and the future development of society.

Decisions on our common future should no longer rest solely on world leaders, who can evade or even obstruct meaningful change. Every individual can and should be involved. An important challenge for Rio+20 is to engage people everywhere much more directly and deeply in the process and move them to take action in their own communities and lives. By giving priority to individual voices to be heard through a World Referendum, we can encourage the participation of every individual and every profession in the race to save the environment.

The clock is ticking. Can we hear it and act now, or will we face the continued decline in our environment and quality of life? The pursuit of narrow self-interest has resulted in a global crisis which threatens world peace, as well as the natural environment and human prosperity. We urgently need to change these trends by building a responsible and sound economy that can lead humanity to a brighter future. An economy based on a bios-promoting vision that places the ethics of bios at the heart of societal structure.

The need for action is now. Climate change is accelerating desertification, plant and animal species are disappearing from the earth at unprecedented rates, human populations are being displaced and driven to poverty and disease, the credit crunch is affecting consumers' environmental efforts across the globe. Humanity can no longer afford to disregard the close relationship between its actions and the environment. Meeting today's challenges requires new ways of stimulating creativity in politics and policy-making, in technology, industry and commerce, in education and the arts, and in social and community development. The widespread adoption of environmental thinking is the only way to alleviate economic instability and create a green society of hope. This should be the ultimate challenge for Rio+20.

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