# BIO-POLICY, BIO-CULTURE: GLOBAL PRIORITIES FOR ENVIRONMENTAL PROTECTION

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## **Summary**

Human actions are interfering with global-scale environmental properties and processes in ways that have many unknown implications. Evidence that environmental alterations are seriously threatening life on our planet adds urgency to the need for coherent long-term international strategy and cooperation. A millennium vision in policy—bio-policy—can guarantee the continuity of bios (life) on our planet and lead society to a harmonious future.

Since its inception in 1985, the Biopolitics International Organization (BIO) has been promoting the concept of *bio-culture* as a powerful unifying factor for the future coevolution of humanity with the environment, and the harmonious coexistence of all forms of life. Bio-culture provides the necessary incentives for every endeavor to be governed by *biocentric* principles and orient toward the better understanding and preservation of life on our planet.

The emerging process of globalization ascertains future requirements in society. While we are becoming interested in economic growth, there is also an increased awareness of the need for environmental preservation and a better quality of life. To alleviate regional conflicts and reconcile environmental harmony and economic growth, new policies in industry, energy, transport, agriculture, and regional development must be emphasized. To be successful, however, these policies have to be based on a framework of environmental ethics. Bio-culture provides these ethical guidelines and urges a reassessment of current assumptions with a view to a global appreciation of bios.

## 1. Introduction—a Bios Vision in Globalization

With globalization defining the shape and structure of future society, the need for a new vision becomes more urgent. Globalization is taking place without goals and ideals, when it should be based on values that have a meaning for the continuity of bios on our planet and for the understanding of our dependence on all forms of life. Without this vision, globalization will not only fail but will also pose serious threats to the world. As environmental deterioration is becoming a compelling issue of unprecedented importance, international cooperation in the preservation of the bio-environment can provide the necessary unifying dimensions to face the challenges ahead. Environmental protection and respect for the gift of life must therefore evolve into a more expansive concept and become part and parcel of the dominant social paradigm. The ethics of this endeavor entails a number of different elements and the solution lies in a deeper understanding of our responsibilities as human beings on this planet.

Environmental policy today is based on the idea of sustainability. Although this idea consists of many aspects and operates as a first line of defense against environmental degradation, its long-term viability is not guaranteed. The flaws can be justified by the absence of an internationally agreed strategy and of a unified vision. A new strategy, which goes beyond sustainable development, can broaden our horizons and can introduce the necessary criteria for a more just and safe global management. For the reversal of negative trends to be effective and to avoid further degradation and catastrophe, environmental legislation has to be adopted in a universal manner. Threats to bios do not recognize national borders, political and religious differences. These can be resolved through multilateral cooperation and through bio-diplomacy.

Society needs to mobilize every one of its elements and strive for a better future. We are now consumed in an inverted pyramid structure, where nothing is in balance because the right priorities have not been set. The pyramid may once again become reinverted once we acknowledge the value of basing the entire structure of society on biocentric principles. The International University for the Bio-Environment (IUBE)—an initiative that actions the BIO aspiration for global environmental literacy—is a catalyst that can

infuse society with these necessary models. It provides a new educational challenge, fighting the trend towards overspecialization and seeking to open up all areas of study and training to an appreciation of life on our planet.

The current crisis of values is a great threat, not only to the environment but also to peace. This is why there is a pressing need to use the diachronic ideals of the past to motivate every member of society towards the conservation of the environment.

The Olympic Spirit can play a leading role in uniting the forces of culture and technology to instill appreciation of the aesthetic value of life on our planet. An Olympiad of values and not merely of physical prowess must evolve. Bios Prizes for each specialty, with the participation of every individual and profession, is one of the major BIO goals for the new millennium. Through a truly international and multidisciplinary environmental education, every citizen of the world can contribute to the spiritual renaissance of humanity.

## 2. Setting Global Bio-environmental Priorities

In the current crucial period of transition, world decision-makers have the responsibility to lead the process of change. To do so effectively, priorities need to be clearly defined and, to avoid mistakes of the past, a new vision and new models are urgently needed. The promotion of international peace and security and the fundamental human right of living in a clean environment have to be actively pursued. It is necessary to tie these issues together, since the environment is the most potent unifying agent in modern society. Concerns for the deterioration of our planet do not recognize national boundaries, ethnicities, or religions and, therefore, active global participation in the effort to preserve the environment can lead to the desired goal of international cooperation and understanding.

There is divergence in will expressed by national governments and these governments have to be guided, through consensus, to the direction of a genuine commitment and not merely an unenthusiastic compromise. Global priorities need to be collectively set and technological drives properly channeled. Balancing the seemingly incompatible aspirations of global environmental harmony and economic growth needs to become the focal point for future development policies. It is essential to realize that not only are these issues not conflicting, but it is impossible for any economy to flourish without just and long-range environmental management.

Fortunately, the world is currently aware of the fact that bios and the environment are in dire need of attention, and global conservation efforts are gradually starting to show results. However, this should not be cause for relaxing effective measures, but should be viewed as positive reinforcement in the struggle to make bio-environmental protection the core component of every action and thought. To be effective, global peacekeeping and humanitarian efforts should be coordinated on the basis of environmental conservation. A "millennium vision" in decision-making and policy-planning can provide the necessary long-term objectives, to address these problems with a view to the future.

Immediate action is of the essence. By the time reforms and revisions are approved, they tend to be already outdated. Loss of biodiversity, destruction, war, exploitation of the poor, unequal distribution of resources, and trade methods that increase the debt of developing nations require a prompt and radical solution. This solution has to be encouraged by expanding the potential of human resources and channeling them towards a productive and constructive renaissance. Long-term objectives for the implementation of global policies, such as fostering peace, developing human resources, curbing financial inequality, and promoting strategies for eliminating world disparities have to become the number one priority in the twenty-first century.

There is an urgent need for a new system of economic norms and principles, compatible with sound environmental management and with the most important task of ensuring unbiased international trade and long-term investment. Poor countries overuse their resource base and, thereby, their natural environment. The sale of raw materials in oversaturated markets leads to falling prices, which in turn reduces net proceeds. Because of such conditions, appeals to protect the environment are ignored or often met with derision. The conflict between the industrial countries' ongoing economic growth and the developing countries' undisputed need for growth, on the one hand, and the negative environmental effects of energy and raw material intensive production, on the other, cannot be solved within the present framework. As environmental problems do not discriminate along national boundaries, international cooperation and sanctions based on negative and positive incentives are the only viable alternatives.

The goal is to eliminate current inadequacies in financial trends and guarantee economic prosperity for every country in the world. Moreover, the goal is ultimately to render the concept of a "Third World" obsolete and, through enhanced communication, trade, and cooperation, reach a desired state of world equilibrium in both economic and sociological terms. Guaranteeing a better quality of life for every citizen in the world holds the key to a harmonious and peaceful global society in the new millennium.

## 3. Bio-culture—Moving beyond Sustainable Development

Present society resembles an inverted pyramid, with human rights representing the tip and technology expanding the unstable base (Figure 1). This imbalance could be changed if we "reinvert" the pyramid and place bios rights as the wide base of our society. Human rights will then occupy the stable tip of the structure.

The relationship between human culture and the bio-environment is now becoming increasingly important. The bio-environment is affected by our culture, which is, in turn, shaped by the bio-environment. Bio-culture represents the conscious effort of humanity to reach this interdependence. Aesthetic values, music, science, the arts, diplomacy, politics, business, and trade can all come together in the struggle for a better quality of life. In all its facets, bio-culture reflects the spirit of bios as a powerful unifying factor for the future coevolution of humanity with the bio-environment and the harmonious coexistence of all forms of life. Furthermore, bio-culture can provide the necessary incentives for every endeavor to be governed by biocentric principles and orient toward the better understanding and preservation of bios on our planet.



Figure 1: A crisis in values resulting in environmental deterioration causes major instability in society; for society to be stable, it must be based on respect for all forms of life on our planet

But more than just a simple orientation toward biocentric principles, bio-culture is a manifestation of life. Bios, with all its intricacies and wonders, can be a source of joy and inspiration. New cultural values, for a global appreciation of bios, can help the world acknowledge the importance of environmental preservation and the urgency of taking action against negative trends. Bio-culture can also provide the ethical guidelines for a reassessment of current assumptions and a critical evaluation of the future. The hope is that present regional conflicts will be alleviated and incompatibilities between environmental harmony and economic growth reconciled. Once the world acknowledges the importance of safeguarding bios, the most precious possession on our planet, embracing bio-cultural values will become the only viable alternative.

Working to sustain what already exists is not enough. With new challenges constantly arising and with an increased awareness of the urgent need to take action against destructive trends, the time is ripe to find more comprehensive, long-term solutions to protect our planet and guarantee a balanced society for the future. A new vision, *beyond sustainable development*, can help place the situation in perspective, and provide the necessary incentives to move ahead and explore possibilities leading to more just and safe global management.

## 4. Bio-assessment of Technology

Technology expands human potential but can also have disastrous consequences for the state of the environment and life on our planet. Technological development that proceeds without concern for its impact on the environment is not viable. New technologies that prevent pollution, rely on clean energy sources, and encourage resource conservation should be further researched and pursued. Moreover, progress in every field of human endeavor should be evaluated in terms of its contribution to environmental appreciation and protection. The "bio-assessment of technology" involves a thorough reevaluation of priorities in technology and the development of initiatives that respect and help the environment. These initiatives include all efforts to implement environmentally friendly technology, as well as progress in genetic

engineering and biotechnology, which should, however, always be carried out with the aim of protecting every form of life on our planet.

The bio-assessment of technology can help to bridge the gap between technological development and societal values. As promoted by BIO since 1985 and now widely endorsed by leaders in 111 countries, the bio-assessment of technology can be an ongoing process whereby experts in respective fields present a thesis and antithesis, and then create a synthesis of new concepts with the environment as the core element. Emphasis will be placed on identifying ways of reducing negative environmental impact, so as to truly benefit from the contributions of technological breakthroughs.

# 5. Bio-economics—Redefining the Concept of Profit

Environmental preservation is inextricably linked to economic progress. Preserving the wealth and beauty of the bio-environment, securing the health of the earth's population, providing fair rules of trade, and guaranteeing equal educational opportunities for every country in the world can be a source of genuine profit, both monetary and social.

Environmental destruction is still cheap, because the environment has not been priced. Threats to the environment can only be relieved through a fundamental change in the economy. Economic science must seriously contemplate the inclusion of concepts that are presently considered abstract and qualitative. The issue of "quality of life" needs to assume top priority, along with culture and education. These elements, which are often excluded from conventional theory of finance, need to become the framework for the new economics of the twenty-first century. Moreover, the concept of profit has to be redefined, to include dimensions of internal wealth, preservation of natural resources as a measurable part of a nation's prosperity, better health, and the protection of biodiversity, which constitute a "genuine" profit for society.

The prevailing economic structure must be quickly redesigned and reorganized to operate on a long-term basis. Reactive environmental policy is inadequate and there is a pressing need to shift from "react-and-cure" strategies to "anticipate-and-prevent" strategies. Within this framework, environmental standard setting must be conceived as a continuous process. With growing knowledge and awareness of actual and probable environmental damages, the thresholds for action must be successively lowered. This will not only lead to an efficient promotion of cleaner production and environmental management, but will also result in a reevaluation of current issues and a new economic strategy to meet the demands of an increasingly environmentally conscious society.

Regulation is a priority if the existing incentive structure in the economy is ever to change towards increasing resource efficiency. Furthermore, a grassroots mobilization and public participation, on both a local and an international level, are crucial to the establishment of worldwide, bios-supporting strategies and initiatives. Environmentally sound management guidelines have been discussed and arrogated at the negotiating table, but in real life directives on the national and international level all too often do not reach local decision-making. A "top-down" approach, effectively combining the consensus and consent of the people, as well as that of governments and international

institutions, is essential for the successful implementation of a global environmental policy.

## 6. A Three-Dimensional Approach to Economic Theory

Conventional business and national accounting are inadequate for the implementation of long-term economic policies. Economic growth is largely being measured in terms of goods and income categories only, while the effects of this on the stock and quality of resources—natural capital—are not adequately considered. Traditional economic approaches are generally limited to Cartesian representations of inflation and depression tendencies, histograms of monetary units, or regression analyses of stock market trends. Although these *two-dimensional* approaches were usually sufficient in the past, they are in dire need of revision and updating. We cannot carry nineteenth-century methods into the third millennium. The current fragmented and limited picture of economic theory must be replaced by a *three-dimensional* approach, where the value of culture, human capital, education, natural resources, and biodiversity will factor in every equation and diagram (Figure 2).

Figure 2: Three-dimensional economics. Economics to include quality of life, culture, ethics, legislation, governance, diplomacy, education, etc. as indicators. Time factors in as a long-term concept (durable development in international commerce, diachronic ethical values for society, time and space in micro- and macroeconomics). The bioenvironment is featured as the common parameter in each case, i.e. indicators are evaluated on the basis of their positive or negative contribution to environmental preservation.

Financially poorer nations may be richer in cultural values, art, tradition, or biodiversity. These elements represent an enrichment for the entire planet and cannot keep being ignored by economists. Evaluations of gross national product (GNP) and trade potential should evolve to include all the above-mentioned parameters and place special emphasis on the urgent task of safeguarding bios and the bio-environment. Policies for economic growth and employment opportunities, on a global level, have to be structured according to these new principles to be more effective in countering poverty, national debts, environmental deterioration, and unfair trade developments.

# 7. Green Salary—New Employment Opportunities

With current unemployment rates rising and governments forced to allot significant portions of their budgets for covering unemployment benefits, the time has come to seriously consider viable alternatives to counter the situation. BIO has been promoting the introduction of a Green Salary for the unemployed, with the commitment to work for the protection of the bio-environment. Projects could include tree planting, city cleanup, recycling, resource recovery, and other constructive activities. This Green Salary can help elicit a positive feeling among the unemployed, in addition to providing new opportunities for work and aiding the attempt to lower unemployment levels. Moreover, businesses could be granted special tax deductions when providing opportunities for the unemployed to be involved in environmental projects.

## 8. Genetic Banks—Saving the Wealth of Biodiversity

We live in an age where the state of a nation's wealth is evaluated increasingly on economic factors such as stock market performance and shrinking budget deficits. Booming industrialized economies have budget surpluses running into trillions of dollars, while even in countries with weaker economies millions of working-class people are investing in shares in runaway stock markets. This unprecedented spurt of misguided economic growth is seriously jeopardizing the environment and threatening biodiversity on a global level.

The protection of the environment and of the life that prospers within it are low on the list of priorities of near-sighted decision-makers, demonstrating just how crucial it is to adopt a long-term vision in policy. The real wealth of our planet is in the sheer breadth, richness, and beauty of the plants and animals whose species are quietly reduced every year by an insatiable hunger to feed material desires that have grown all out of proportion to our needs.

One of the ways propounded by BIO to safeguard this wealth of life on our planet is genetic banks, which preserve the genetic material of endangered plant and animal species and thereby protect the enormous wealth and biodiversity of wildlife. To be most effective, these genetic banks should be established locally—in situ—to preserve genetic variety in endemic species. Genetic banks will complement efforts already in operation, such as national parks, nature reserves, zoological and botanical gardens, and seed banks. If we succeed in introducing a biocentric vision into a world currently subservient to the existing anthropocentric system, the extent of biodiversity will in the future be a real indicator of wealth on our planet.

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## **Biographical Sketch**

In 1985, after twenty years of teaching and research in biology, **Dr Agni Vlavianos-Arvanitis** founded the Biopolitics International Organization (BIO) with the goal of promoting respect for the gift of bios (life) and international cooperation for the protection of the environment. Motivated by the feeling that humanity needs to move at a faster pace in order to prevent destruction and a strong belief that the future of humankind depends on ground-breaking reforms in education, she launched, in 1990, the International University for the Bio-Environment. In 1992, she proposed the revival of the ancient ideal of cease-fire during the Olympic Games, combined with an interdisciplinary award of Bios Prizes to "those who have contributed to the protection and preservation of the bio-environment." Her proposal for cease-fire during the Olympic Games has been adopted as a United Nations Resolution.

A graduate of Columbia University's Barnard College (BA), New York University (MS), and the University of Athens (Ph.D.), Dr. Vlavianos-Arvanitis, has worked as a researcher at the Museum of Natural History, in New York, at the University of California Berkeley, and at the University of Paris. She has also taught biology, biochemistry, and human genetics at the Friends Seminary in New York, at the American Community Schools Academy in Athens and at the University of Maryland. She is the recipient of many international awards.

As well as organizing numerous international conferences and publishing over thirty volumes of proceedings, she is the author of poetry books in Greek and English which have been translated into French, Russian, Iranian, and Japanese. She has been on the Board of the Alliance for Environmental Education, an assembly of over 200 US Universities, Honorary President of the Association Members and Co-ordinator for the Mediterranean Region of the international space project, "Life in Space," as well as Vice President of the UNESCO-MAB (Man and the Biosphere) Hellenic National Committee. She is Vice-President of the International Bio-Ethics Society, Co-Founder of the International Science Foundation, a member of the New York Academy of Sciences, the International Academy of Ecology, Human and Nature Safety Sciences, the American Institute of Biological Sciences, the Hellenic Philosophical Society, the National Society of Greek Writers, the Euro-American Women's Council and the Advisory Board of the Journal of Cleaner Production. She is also a Member of the Board of the Euro-Arab Co-operation Centre, Member of the Board of Trustees of the Uganda National Foundation for Research and Development, and Commissioner on The Global Commission to Fund the United Nations. She has been appointed Doctor Honoris Causa of Mendeleyev University in Moscow and Honorary Professor of St. Petersburg State Technological University for Plant Polymers. In January 1995, she was nominated for the Nobel Peace Prize, a nomination renewed in 1997, 1998, 1999, and 2000.