

## **Embedding the Environment in Sustainable Development Goals (SDGs) (Review and Commentary)**

**Ke Chung Kim, Ph. D.**

Professor Emeritus, Pennsylvania State University

Human development cannot be sustained without healthy environment, whereas our environment on the planet Earth has been subjected to excessive abuse and destruction for the last Century to this day. We do not know how long our life-support system can sustain under the pressure of heavy-handed development activities for the needs of 7+ billion people with an addition of 90+ million people per year, as we humans have continued to convert nature into human habitation without much thought. As a result, our life-support system that sustains all living organisms, global biodiversity, has been transformed into human ecosystems with massive destruction of biodiversity and the natural environment. Now, we are faced with continued loss of many diverse species followed by global warming and its impact on climate changes. As we got used to implementing this approach to development over the last two Centuries, development has become commonly understood as converting nature into human habitation or utilizing natural resources for humanity without many thoughts regarding its impact on nature -- our life-support system. It is self evident for the United Nations to come up with sustainable means to justify development where environment sustainability becomes the lens to global sustainable development. Because sustainable development with environmental sustainability is inherently paradoxical and may even be antithetical, the first task is to build a set of universal sustainable development goals (SDGs), which is rather complicated, requiring a broad consensus for producing the final SDGs. Thus, it is well justified for carefully building a set of SDGs that are rational, realistic and readily doable linking global to local at the grassroots level. The kind of SDGs that will avoid the repeat of failed international commitments on biodiversity and development; first established with zeal at the RIO 1992 Earth Summit on the UN Conventions. Post UNCED in 1992, there has been nothing much to show for what we agreed to do over the last two decades, an oversight that cannot be repeated in order to obtain the goal of human sustainability.

### **What *We* have To Do for Sustainable Development**

The RIO+20 UN Conference 2012 brought about the transformation towards “sustainable development” as its theme and then as an integrated next-generation program for accommodating humanistic needs. Now, we are determined to come up with a set of universal sustainable development goals (SDGs) with the close embedment of environmental issues. In reality, however, there is not much we know about how to warrant the outcome for protecting and preserving a healthy, sustainable global environment when our life-support system is already badly damaged as measured by the scientific community showing continued biodiversity loss and growing global impacts from climate change. In producing the Post-2015 SDGs the primary question, often forgotten, should be how all relevant parameters inherently

embedded in achieving sustainable development are taken into account: such as 1) 7.1+ billion people with over 90 million new births per year; 2) socioeconomic disparity between social classes or countries that is widened every year, even in democratic systems; and 3) global warming with its climate change impacts along with other unresolved environmental costs accumulated from the last Century. These parameters cannot be overlooked in the process, as they may easily anathematize the “balance of environmental, social and economic dimensions of sustainable development.” (In *Précis* of UNEP Post-2015 Paper 1).

Even though the complexity is much greater with a huge human population under the threat of greater global disasters than what we faced in 1992, it should be refreshing to realize in building the Post-2015 SDGs we have an opportunity to address our sustainability challenges in this matter.

### **Development with Sustainable Environment**

Development has continued through the wars and natural disasters since the modern industrial revolution started after the WWII (1945) with a human population then of 2.51 billion in 1950. Nothing was considered a deterrence to economic development, a tunnel vision, which still is prevalent today without much thought given to the consequences for many people and many countries. On one level, as the world’s population expands along with growing demands for food, shelter, and other amenities, it is natural to have human development accelerated for supporting the essential needs of a growing human population. On another level, environmental sustainability is fundamental to sustainable development, where success is contingent upon maintaining healthy natural systems. It is common knowledge that today’s environmental systems in many parts of the world are so degraded they are not in sustainable condition. Development and environment are conceptually and historically antagonistic by their goals and outcomes. Within this context sustainable development is conceptually paradoxical and elusive in practice (Les Roopnarine, the guardian.com, Monday 12 August 2013 08.11 EDT), as it is also anathema to its intended definition of balancing environmental sustainability with humanistic dimensions. Certainly, they can be conceptually integrated as “sustainable development” but not in practice where development usually prevailed over environmental sustainability; for example, sustainable forestry is based on the quality, distribution and density (or population) of several tree species, the foundation species, without much thought on forest biodiversity beyond commercial logging species.

Beginning with the UN Conference on the Human Environment in Stockholm (1972), followed by the “Earth Summit”, the UN Conference on Environment and Development (1992) in Rio de Janeiro, formally established the biodiversity convention and recognized the antithesis of environment and development with focus on the issues of biodiversity loss with impacts of rapidly growing human population. Now, we are living in the different world with the growing population of 7.1+ billion people which naturally poses much greater challenges for humanistic development than what the Rio-1992 had to deal with of 5.47 billion people and all their demands for sustaining daily lives, whereas the global environment had gone through severe degradation for the last six decades, now we are directly faced with global warming and its climate change over biodiversity loss that galvanized the world public for the sustainability of our life-support system.

## **Sustainable Development Goals**

This report (UNDP Post-2015 Discussion Paper 1) seems to be clear about what sustainable development is and ready to develop universal principles for building the Sustainable Development Goals (SDGs) which should guide the world community to develop new sets of SDGs to follow and assess the global framework to monitor progress in sustainable development and to guide local SD projects meeting the needs and productive outcome of the people at the grassroots level. In this context four general dimensions are defined for sustainable development to bring every society towards the world of sustainability inclusive of four dimensions: 1) environmental, 2) social, 3) economic, and 4) peace and security, each of which has been so far separately dealt with in the UN organization. This framework should enhance the development of every society or country for integrated sustainability, all of which should also strengthen the global dimension of peace and security as well.

In developing SDGs we must begin with critical assessment of today's state of environment and other dimensions in our society for every country to come up with each baseline data on biodiversity, ecosystems, socio-economic society, and political stability under democratic premises. This information is not only indispensable but also help the UN Task Team develop comprehensive but realistically productive SDGs for global sustainable development. In practice sustainable development directly involves local people and their economy in the framework of their culture and future at the grassroots, and it requires scientifically based economic and environmental assessment with their demography. In reality, however, most villages or municipalities lack environmental baseline data and no way to obtain scientific data or database on the property but also short of what the current state of its own environment and backyard biodiversity is like in face of sustainable development. In the process all parameters must be adhered to the individual state of environmental sustainability but not the other way around for each or a set of factors in the environment.

The Report rightly emphasizes that environment and socio-economic are closely linked and they should be balanced. Yet, it is not realistic to expect such balance easily attainable in practice at any case considering that the environment is primarily passive and stationary, constantly subjected to human abuse and destruction, whereas development is in human domain and predatory. Similarly, it is not a panacea for continued development with sustainable environment by simply creating new name or adding words like "sustainable" or "green" for the antithesis of development and environment as Sustainable Development or Green Economy. Similarly, this report also lists some current proposals for SDGs submitted by several organizations such as the UN Department of Economic and Social Affairs, the Centre for International Governance Innovation with Korea Development Institute, German Development Institute, Griggs and colleagues, the High Level Panel on the Post-2015 Development Agenda, and the Sustainable Development Solutions Network. These proposed goals are mostly high-powered contemporary issues grouped into six to twelve similar goals which include those socioeconomic and generic goals but hardly touched on resolution for biodiversity loss, mitigation of climate change impacts, and other specific environmental issues, along with how all those goals to be financed, promoted, executed, and produced for positive socio-economic outcome and ultimately connected to implementation at the grassroots.

## **Framework for Embedding Environmental Sustainability in the SDGs**

We are at the crossroad for finding the way to sustainable humanity by embedding the environmental sustainability in the Post-2015 Sustainable Development Goals. However, this is an intellectual circus for resolving the antithesis of development and environment, which we already observed and learned for the last six decades. In fact we do not know what environmental sustainability or sustainable environment is, particularly in terms of development, with 7.1+ billion humans in the rapidly weakening life-support system on the planet Earth. As in this Report, most of environmental programs by the United Nations lack critical reality checks on the state of affairs in fighting global problems such as environmental decline, food shortage or humanitarian issues. Many Reports I encountered for review usually started out with the state of affairs related to global issues of environment or climate changes of yesteryears.

In fact, biodiversity and ecosystem functions are the foundation of our life-support system in the biosphere of the planet Earth, whereas everything else pertaining to development is anthropocentric and portable in its characteristics. Similarly, in principle sustainable development may be measurable and easily managed but in contrast environmental sustainability for living systems is not readily measurable to be applied for monitoring the process of sustainable development. At the same time, it is necessary to have environmental assessment that provides the profiles and state of ecosystems and biodiversity for each target site.

The ultimate goal for UN's sustainable development is to provide the guidance for building individual SD programs at any developmental sites for which what basic database is needed for biodiversity and community structure of ecosystems for every target sites. Here, SDGs should include procedural protocols for actually building individual SD program. In reality, however, we must recognize that the environment at the village or backyard level is unique in biodiversity and structure of ecosystems though they may look alike. Thus, for sustainable development at the grassroots level it is necessary to have baseline information on the surrounding environment and its biodiversity which requires environmental assessment for foundational data on backyard biodiversity and ecosystems before making any specific plans for every village or country; before developing a specific framework and SD model for a local sustainable development program.

The Report provides a framework for embedding environmental sustainability in the SDGs process. The following is my commentary in italics on those items, from my personal perspective as needed below:

### **Part 1: Rationale and Overarching Vision for the SDGs.**

**All commitments directed to sustainable development.**

**Sustainable development embraces and balances economic progress, social development, and environmental protection.**

**Develop a set of universal goals for sustainable development.**

*Considering that development and environment are antithetical and the environment including biodiversity and ecosystem functions is the foundation for sustainability of all living things, primary vision for SDGs must include science-based environmental assessment in the human habitation in the village or target areas, upon which all other parameters such as socio-economic and educational factors. We do not want to see a deteriorating environment with progressive socio-economic advancement – it is not a balance but environmental health as the foundation upon which a sustainable development strategy be built instead of seeking the balance between those parameters.*

## **Part 2: Integrated Approach.**

- 1) A complimentary set of goals and targets.**
- 2) Integrated Goals.**
- 3) A mix of targets.**

*Integration of all the parameters for sustainable development is a wise approach, which should be built on healthy environment as the foundation for sustainable development. We certainly do not want to downplay or even ignore the environment: biodiversity and ecosystem functions for the sake of development.*

## **Part 3 Criteria for Embedding Environmental Sustainability in SDGs**

### **1) Strong linkage with developmental goals**

*Environment is not simply linking to development goals but rather is the foundation for sustainable development as environmental sustainability should not be based upon artificial guesswork.*

### **2) Decoupling of socio-economic development from escalating resources use and environmental degradation**

*This sentence needs to be rewritten as it's not clear what it is supposed to be meant in terms of sustainable development.*

### **3) Coverage of critical issues of environmental sustainability such as important irreversible changes in the global environment**

*Environmental sustainability should be clearly defined if it is considered a critical issue and needs explanation for this statement for which relevant references should be provided.*

### **4) Take into account current global environmental goals and targets (e.g., MDGs).**

*Yes, global environmental goals and targets established in UN documents should be carefully reviewed. It should be relatively easy to define global environmental goals and targets as we know what and how we handled our environment for the last Century, particularly within the last two decades which include minimizing biodiversity loss and drastic emission control for clean air while finding the way to address climate change.*

#### **5) Scientifically credible and verifiable.**

*Environmental strategy for a country or region needs to focus on local environment at the grassroots for which ecosystem profile and biodiversity data must be available for environmental and economic planning which naturally developed by scientific work.*

#### **6) Progress must be “tractable”.**

*Certainly, progress for sustainable development at the grassroots or municipal level must be tracked and monitored for application.*

*It is hard for me to understand and follow what Part 3 is trying to say in terms of achieving sustainable development.*

#### **Part 4. Strengths of the Framework**

Integrated goals: all dimensions of sustainable development well represented in the set of SDGs.

Giving the environment an equal footing to social and economic considerations within the framework shows that environmental sustainability is a foundation for socioeconomic development.

*As I stated in the first part of my review, the task team for building SDGs for the future of sustainable development must build SDGs at the general policy level with strong background on the state of global environment, socio-economic reality, multitude of development. Because the world infrastructure is old and needs expensive repair or replacement, consequently all of these challenges are closely linked to the world's needs and what we want. Dimensions that also include the continued impact of 7.1+ billion people who are under the threats of biodiversity loss and global warming and the impacts of climate changes. The final SDGs must provide the guiding principles, the necessary tools and procedures for individual SDGs to be implemented at all levels be it region, country, or municipality but especially at the grassroots where ultimate actions and benefits would contribute to global sustainable development and security. A strategy that would result in a stable global environment through: conservation and rehabilitation of biodiversity and refreshed ecosystem functions with human population slowing down for human sustainability.*

**Author Profile:** Ke Chung Kim, Ph. D.  
Professor Emeritus, Pennsylvania State University  
Member of UN CSD Education Caucus  
Telephone: +1-814-234-1718