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ECONOMY REVISITED.  
WILL GREEN BE THE COLOR OF MONEY OR LIFE?  
PARADIGM WARS AND THE GREEN ECONOMY

**Abstract**

*The green economy agenda for Rio+20 will either deepen the privatization of the Earth, and with it the crisis of ecology and poverty, or it can be used to re-embed economies within the ecology of the Earth. Green economy needs to be authentically green. To address the ecological crisis, we must stop the war against the Earth and avoid taking such crisis to deeper levels through further commodification of nature and her services as is being proposed in some versions of green economy. The latter is the old paradigm in green clothes. It has no place either for people or for Gaia's laws. It is still driven by the flawed laws of the financial markets.*

*We have to follow another paradigm of green economy, a paradigm that is Earth-centered and people-centered. Earth-centered green economy begins with the recognition of the rights of Mother Earth and, with this, the rights of all Earth species, including the human species. This is the path of Earth democracy, it is the path of caring and sharing. It is the path to freedom.*

*The significant problems we face cannot be solved at the same level of thinking we were at when we created them.*

(Albert Einstein)

Economy and ecology are both derived from *oikos*, which is the Greek word for “home” or “household.” Ecology is the science of the household, both local and at the level of Gaia, our planetary home. Economy is supposed to be the management of the household. Aristotle referred to *oikonomia* as the art of living. He differentiated it from *Chrematistics*, the art of money making.

Today, economy has been reduced to the art of money making through the domination of a single indicator called “growth,” measured as a single number GDP or Gross Domestic Product, also referred to as Gross Domestic Problem, in the context of the multiple crises it has engendered.

Ordinary households are being robbed of their homes, lives, and livelihoods under the rule of money and money making. Our planetary household is being plundered and eroded.

And now the economy that has been reduced to money making, would like to make more money for big economic interests by commodifying all of nature in the name of the “green economy.”

In 1992, the citizens and governments of the world gathered in Rio for the Earth Summit. In 2012, the world community gathered again in Rio. On 24 December 2009, the General Assembly of the United Nations adopted a resolution (A/RES/64/236) to hold a conference twenty years after the Earth Summit. Member States agreed that the Rio+20 Summit would focus on “Green Economy within the context of sustainable development and poverty” and “Institutional framework for sustainable development.”

But what is the “green economy” and what is the “institutional framework for sustainable development”? If one stays with the answers offered in the old paradigm of market driven solutions, which have failed to protect the Earth, “green economy” will mean more of the same. It will mean more carbon trading which has failed to reduce emissions. It will mean more commodification of food and water, land and biodiversity, which has failed to reduce hunger and thirst, poverty and ecological degradation, and has instead increased them.

If the “institutional framework” creates a World Environment Organization like a World Trade Organization, based on commodification and trade in nature’s gifts, and trade wars as global environment management, we will further impoverish the Earth and local communities, and further destroy democracy.

On the other hand, if the answers offered are in the context of the emerging paradigm of harmony with nature and the rights of Mother Earth, then the green economy is Gaia’s economy, and the institutional framework is Earth democracy—democracy from the bottom up, democracy rooted in the Earth. The world order built on the economic fundamentalism of greed, commodification of all life, and limitless growth, and the technological fundamentalist belief that there is a technological fix for every social and environmental ill are clearly collapsing.

The collapse of Wall Street in September 2008 and the continuing financial crisis signal the end of the paradigm that puts fictitious finance above real wealth created by nature and humans, and puts profits above people and corporations above citizens. This paradigm can only be kept afloat with limitless bailouts that direct public wealth to private rescue instead of using it to rejuvenate nature and economic livelihoods for people. It can only be kept afloat with increasing violence to the Earth and people. It can only be kept alive as an economic dictatorship. This is clear in India’s heartland, as the limitless appetite for steel and aluminum for the global consumer economy, and the limitless appetite for profits for the steel and aluminum corporations are clashing head on with the rights of the tribals to their land and homes, their forests and rivers, their cultures and ways of life. The tribals are saying a loud and clear “no” to their forced uprooting. The only way to get to the minerals and coal that feed the “limitless growth” model in the face of democratic resistance is the use of militarized violence against the tribals—operation “Green Hunt” has been launched in the tribal areas of India with precisely this purpose, even though the proclaimed objective is to clear out the “Maoists.” Under operation Green Hunt, more than 40,000 armed paramilitary forces have been placed in the tribal areas, which are rich in minerals and where tribal unrest is growing. Operation Green Hunt shows clearly that the current economic paradigm can

only unfold through increased militarization and the undermining of democratic and human rights.

The technological fundamentalism that has externalized costs, both ecological and social, and blinded us to ecological destruction has also reached a dead end. Climate chaos, the externality of technologies based on the use of fossil fuels, is a wakeup call that we cannot continue on the fossil fuel path. The high costs of industrial farming are running up against limits, both in terms of the ecological destruction of the natural capital of soil, water, biodiversity, and air, and in terms of the creation of malnutrition, with a billion people denied food and another two billion denied health because of obesity, diabetes, and other food related diseases.

The green economy agenda for Rio+20 will either deepen the privatization of the Earth, and with it the crisis of ecology and poverty, or it can be used to re-embed economies in the ecology of the Earth.

Green economics needs to be an authentic green. It cannot be the brown of desertification and deforestation. It cannot be the red of violence against nature and people, or the unnecessary conflicts over natural resources—the land and water, seeds and food. As Gandhi said, “the Earth has enough for everyone’s needs, but not for some people’s greed.”

To be Green, economics needs to return to its home, to *oikos*. Both ecology and economics are derived from “*Oikos*” which means “home”. Ecology is the science of the household, economics is supposed to be the management of the household. When economics works against the science of ecology, it results in the mismanagement of the Earth, our home. The climate crisis, the water crisis, the biodiversity crisis, the food crisis are different symptoms of this crisis of mismanagement of the Earth and her resources.

We mismanage the Earth when we do not recognize nature’s capital as the real capital and everything else as derived. If we have no land, we have no economy. When we contribute to growth of nature’s capital, we build green economies. And the richer nature’s capital is, the richer human society is.

A nature, women centered perspective take us down a road which is sustainable and equitable. The Earth Summit in 1992 produced two legally binding treaties—the Convention on Biological Diversity and the United Nations Framework Convention on Climate change. A Women’s Action Agenda 21 through WEDO (Women’s Environment and Development Organization), which I co-founded with Bella Abzug and Marilyn Waring, was also produced.

The multidimensional ecological crises are the consequences of the war against the Earth. To address the ecological crisis, we must stop this war, not take it to deeper levels through further commodification of nature and her services as is being proposed in some versions of the green economy. According to UNEP (United Nations Environment Program), “in a green economy, growth in income and employment should be driven by private and public investments that reduce carbon emission and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.” This is the old paradigm in green clothes. It has no place for people, no place for Gaia’s laws. It is still driven by the flawed laws of financial markets.

Will green be the color of money or life? Will green be shaped by women's skills, knowledge, values, or by the continued greed of capitalist patriarchy? Will we in Asia be able to tap into the roots of ecological civilization that lie buried under the garbage of greed, violence, and pollution? This is our task, to create a livable future for ourselves and the planet.

We need to go beyond growth towards economies of care, well-being, and happiness. Growth in incomes and employment should be based on conservation of natural resources and equitable sharing of our natural wealth for sustainable livelihoods that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.

There are two different paradigms for and approaches to the green economy. One is the corporate centered green economy. For corporations which are now integrating access sectors, the green economy means:

(a) Greenwashing—one just has to look at the achievements of Shell and Chevron on how they are “green.”

(b) Bringing nature into markets and the world of commodification. This includes privatization of the Earth's resources, e.g., patents and seeds, biodiversity and life forms, privatization and commodification of nature. It also includes trade in ecological services, e.g., trade in carbon emissions which is in effect trade in the atmosphere's capacity to recycle carbon. The corporate centered green economy is based on maximization of profits and centered over natural resources. It is based on concentration of wealth and concentration of control over the Earth's resources.

The UNEP initiative on The Economics of Eco-systems and Biodiversity (TEEB) can serve as a caution to stop ecological and ecosystem degradation and destruction. For example, according to TEEB, the loss of ecological services from the degradation of forests alone comes to between \$2 - 4.5 trillion a year (TEEB quoted in David Hallows, *Toxic Futures* [Scottsville: University of KwaZulu-Natal Press, 2011], p. 40).

As David Hallows says, “In the act of costing the loss, however, ecological systems are framed within the market. Ecoservices are monetized, so making them available for sale” (*Toxic Futures*, p. 40). An example is a private equity firm that bought the rights to the environmental services generated by a 370,000 ha rainforest reserve in Guyana recognizing that such services—water storage, biodiversity maintenance, and rainfall regulation—will eventually be worth something in international markets (TEEB, 2008, p. 11).

The commodification and tradability of natural resources and ecological services has been deepening progressively over the last few decades. The trade metaphor promoting commodification is also guiding much of the work of environmental economics, making it indifferent to women's sustenance economy and nature's economy. For example, the World Bank policy paper on trade liberalization for India's agricultural sector recommends the creation of “markets in tradable water rights,” and argues “if rights to the delivery of water can be freely bought and sold, farmers with new crops or in new areas will be able to obtain water provided they are willing to pay more than its value to existing users, and established users will take account of its sale value in deciding on what and how much to produce.”

The institution of tradable water rights will guarantee the diversion of water from small farmers to large corporate “super farms.” Tradable water rights will lead to water monopolies. In the logic of the market, tradable rights have a tendency to be sold to the highest bidder. Hence the wealthier one is the more power one will have over one’s access to water. It will also lead to over-exploitation and misuse of water – since those who deplete water resources do not have to suffer the consequences of water scarcity as they can always buy water rights from other farmers and other regions.

Besides aggravating the already severe ecological crisis in water resources, tradable water rights will destroy the social fabric of rural communities, creating discord, and disintegration. The social breakdown in Somalia can be traced, in part, to the privatization of water rights according to the World Bank policy. Tradable water rights are based on the assumption that no ecological or social limits should be placed on water use. Such limitless use will lead to abuse. The World Bank proposals on tradable water rights are in fact a prescription for social and ecological disaster.

The introduction of tradable land and water rights is often justified on environmental grounds. For example, a World Bank study by Pearce and Warford argues “in the absence of rights to sell or transfer land, the land owner may be unable to realize the value of any improvements and thus has little incentive to invest in long term measures such as soil conservation.” This assumption is evidently false, since the best examples of soil conservation—the hill terraces of the Himalayas—are based on precisely the opposite reasons. Communities not threatened with the possibility of losing their resources and benefits have a long term interest in conserving resources.

In 2004 we stopped the World Bank driven privatization of water. However, privatization is back on the agenda. The commodification and privatization of land and water resources are based and promoted on the flawed belief that price equals value. However, all those working for justice in land and water rights, and working to prevent the ecological abuse of land and water, are asking for the opposite—the inalienable rights to resources—and where the resource is a common property resource, like water, the inalienability of common rights.

Commodification contributes to economic growth, but it undermines the rights of local communities. It undermines local economies. It erodes local cultures. And it undermines ecosystems in their diversity and integrity. As forests become valued only for carbon sequestration, or only for biomass production, rich diverse forest ecosystems are replaced with commercial monocultures.

The second paradigm of the green economy is Earth centered and people centered. The Earth centered green economy begins with the recognition of the rights of Mother Earth and with this the rights of all species of the Earth, including the human species. The green economy recognizes nature’s economy as its foundation. The green economy recognizes the sustenance economy through which human needs—material, emotional, psychological, cultural, and spiritual—are provided for. The corporate centered green economy ignores both nature’s economy and people’s sustenance economy, and thus undermines both creating the ecological crisis and the crisis of dispossession and poverty.

In the Earth centered green economy the resources of the Earth vital to life—biodiversity, water, air—are commons for the common good for all. While the corporate

green economy is based on privatization and commodification of the Earth's resources, the Earth centered green economy is based on recovery of the commons and the intrinsic value of the Earth and all her species. Whereas the corporate green economy caters to corporate profits, it fails in providing for people's needs and defending their rights. It is based on resource intensive, pollution intensive production and consumption with low human benefits.

The Earth centered economy is based on treading lightly on the Earth while maximizing well-being and welfare for all. This is increasingly evident in the way we meet our most basic need—food. The industrial-corporate system of food production uses ten times more units of energy as inputs than it produces as food. It wastes fifty percent of the food produced. It contributes to the structural problem of hunger of one billion and food related diseases of obesity, diabetes, etc. of two billion. It uses and pollutes 70% of water on the planet. It has destroyed 75% of the biodiversity in agriculture. And it contributes 40% of the greenhouse gases that are destabilizing the climate and further threatening food security. Earth centered agriculture, on the other hand, produces two times more food than the inputs it uses. It produces healthy and nutritious food. It conserves biodiversity, water, and soil. It mitigates and adapts to climate change. It protects the earth, farmers, and public health.

An Earth centered, people centered green economy would put nature's ecological cycles as the drivers and shapers of the economy, it would put people first, not investors. It would build on women's core contributions to create economies of sustenance and care that enhance the well-being of all.

Karl Polanyi warns us against commodification and reduction of nature and society to the market: "A market economy must comprise all elements of industry, including labor, land, and money. But labor and land are no other than the human beings themselves of which every society consists and the natural surroundings in which they are and exist. To include them in the market mechanism means to subordinate the substance of society itself to the laws of the market" (*The Great Transformation: The Political and Economic Origins of Our Times* [Boston: Beacon Press, 2001], p. 75).

To this we would add "to include nature and nature's resources and processes in the market mechanism means to subordinate the substance of the Earth's living processes to the laws of the market."

The laws of Gaia are the basis of life of Earth. They precede production, they precede exchange, and they precede the market. The market depends on Gaia; Gaia does not depend on the market. Both the Earth and society come first. They are sovereign and autonomous. They cannot be commodified and reduced to the market.

Nature has been subjugated to the market as a mere supplier of industrial raw material and dumping ground for waste and pollution.

It is falsely claimed that exploiting the Earth creates economic value and economic growth, and this improves human welfare. While human welfare is invoked to separate humans from the Earth and justify her limitless exploitation, all of humanity does not benefit. In fact most lose. Pitting humans against nature is not merely anthropocentric, it is corporatocentric. The Earth community has been reduced to humans, and humans have been further reduced to corporations as legal persons. Corporations then reshape part of humanity as consumers of their products and part of humanity as disposable.

Consumers lose their identity as Earth citizens, as co-creators and co-producers with nature. Those rendered disposable lose their very lives and livelihoods.

Corporations as the dominant institution shaped by capitalist patriarchy thrive on eco-apartheid. They thrive on the Cartesian legacy of dualism which puts nature against humans. It defines nature as female and passively subjugated. Corporatocentrism is thus also androcentric—a patriarchal construction.

The false universalism of man as conqueror and owner of the Earth has led to the technological hubris of geo-engineering, genetic engineering, and nuclear energy. It has led to the ethical outrage of owning life forms through patents, water through privatization, the air through carbon trading. It is leading to appropriation of the biodiversity that serves the poor. And now alienated man and corporations he has created would like to “own” and trade in nature’s services through the green economy. The Chipko Movement saved Himalayan forests by putting the life of the forest above human life. Today the ecological services of the forests are a tradable commodity. As Pablo Salon, the Bolivian Ambassador to the UN stated at the General Assembly session on Harmony with Nature (20 April 2011): “The green economy considers it necessary, in the struggle to preserve biodiversity, to put a price on the free services that plants, animals and ecosystems offer humanity, the purification of water, the pollination of plants by bees, the protection of coral reefs and climate regulation. According to the green economy, we have to identify the specific functions of ecosystem and biodiversity that can be made subject to a monetary value, evaluate their current state, define the limits of those services, and set out in economic terms the cost of their conservation to develop a market for environmental services... in other words, the transfusion of the rules of the market will save nature.”

The climate crisis is a result of putting pollutants into the atmosphere beyond the recycling capacity of the planet. To continue to add pollutants, while letting polluters make money through carbon trading is a deepening of the war against the atmospheric commons. The crisis of species extinction is a result of destruction of the habitat of species and a direct attack on them through the arsenal of toxic chemicals. As Michael Huesemann and Joyce Huesemann report, “the present rate of species extinction is alarming according to various estimates, ranging from best to worst-case scenarios between 1,000 to 100,000 plant and animal species disappear each year, which translates into 2.7 to 270 irreversible extinctions everyday” (*Techno-Fix: Why Technology Won’t Save Us or the Environment* [New Society Publishers, 2011])

According to the UN, species are disappearing at a thousand times the natural rate of wildlife loss. More than one-fifth of the world’s plant species are threatened with extinction.

The UN Secretary General Ban Ki Moon cautioned that “we are bankrupting our natural economy. Maintaining and restoring our natural infrastructure can provide economic growth worth trillions of dollars each year. Allowing it to decline is like throwing money out of the window” (<http://www.un.org/News/Press/docs/2010/sgsm13127.doc.htm>).

However, biodiversity is conserved when we love it, we revere it, and we recognize its vital role in maintaining life. Protecting biodiversity is an imperative not just because it helps make money. It is important because it makes life.

The UNEP report “Dead Planet, Living Planet: Biodiversity and Ecosystem Restoration for Sustainable Development” ([http://www.unep.org/pdf/RRAecosystems\\_screen.pdf](http://www.unep.org/pdf/RRAecosystems_screen.pdf)) shows how nature is far more efficient than humanmade systems. For example, forested wastelands treat more waste water per unit of energy and have a 6-22 fold higher benefit cost ratio than traditional sand filtration in treatment plants. In New York, a filtration plant would have cost US \$ 6-8 billion plus US \$ 300-500 million per year as operating costs. Conserving the Catskills watershed at a cost of US \$ 1-1.5 was a far more effective way to provide clean water.

Conserving biodiversity produces more food than chemical monocultures. Working with nature is also good for human welfare. If we destroy biodiversity and soil fertility with industrial monocultures in agriculture we have less food, not more. We might have more commodities, but not more food. Commodities are non-food, in fact anti-food. I have analyzed how the industrialized globalized system of food production creates hunger and how redesigning the food system in nature’s ways is vital for food security and food sovereignty.

The illusion of progress and growth measures the increased production and trade in commodities as growth, but fails to measure the death, destruction, and decay of our rivers and aquifers, our land and soil, our atmosphere and climate maintaining process, our forests and biodiversity. Since it is the poor, the marginal, the disenfranchised who bear the highest costs of ecological destruction and resource grab, but their deprivation does not count in the calculus of economic growth, poverty grows hand in hand with the ecological crisis.

Ignoring the Earth’s living and life-giving processes is at the heart of both non-sustainability and poverty. Non-sustainability is a result of disharmony with nature; it is a result of market laws having not just diverged dangerously from Gaia’s laws and nature’s laws, but actually becoming antagonistic to them. Nature has limits. The illusion of limitless growth based on limitless resource exploitation ignores ecological limits, and by ignoring limits creates scarcity.

Mathis Wackernagel calculates the ecological footprint of human production and consumption. The ecological footprint of an individual is a measure of the amount of land required to provide for all their resource requirements plus the amount of vegetated land to absorb all their carbon dioxide emissions. In 1961, the human demand for resources was 70% of the Earth’s ability to regenerate. By the 1980’s, it was equal to the annual supply of resources and since the 1990’s, it has exceeded the Earth’s capacity by 20%. “It takes the biosphere, therefore, at least a year and three months to renew what humanity uses in a single year so that humanity is now eating its capital, Earth’s natural capital” (“Tracking the Ecological Overshoot of the Human Economy,” *Proceedings of the National Academy of Science*, 99, no. 14 [2002]).

The ecological footprint of all humans of course is not the same. In fact, not only is corporate driven consumerism eating into the Earth’s capital, it is eating into the share of the poor to the Earth’s capital for sustenance and survival. This is at the root of resource conflicts across the Third World. The equitable ecological footprint is 1.7 ha/person. The average for the United States is 10.3 ha of land to provide for their consumption and absorb their waste. For the U.K, it is 5.2 ha, for Japan 4.3 ha, for Germany 5.3 ha, for China 1.2 h, for India 0.8 ha. (Mathis Wackernagel, “Ecological

Footprints of Nations: How much nature do they use? How much nature do they have?” [www.ucl.ac.uk/dpu-projects/drivers\\_urb\\_change/urb\\_environment/pdf\\_Sustainability/CES\\_footprint\\_of\\_nations.pdf](http://www.ucl.ac.uk/dpu-projects/drivers_urb_change/urb_environment/pdf_Sustainability/CES_footprint_of_nations.pdf)).

When seeds, the source of life, are deliberately made non-renewable through technological interventions like hybridization or genetic engineering to create sterile seed, the abundance of life shrinks, growth is interrupted in evolution and farmers' fields, but growth of the profits of corporations like Monsanto increases. I have shown how farmers' suicides in India are linked to seed-monopolies. This is why in Navdanya we defend seed sovereignty and farmers' seed freedom.

If we dam rivers, and stop their life-giving flow, we do not have more water, but less. More water goes to cities and commercial farms, but there is less water for rural communities for drinking and irrigation, there is less water in rivers for keeping the river alive. This is why we have been compelled to start the Save the Ganga Movement to stop large dams and diversions on the Ganges which are killing the river.

Humanity stands at a cross road. One road continues on the path of eco-apartheid and eco-imperialism, of commodification of the Earth, her resources, and processes. And this path must intensify violence against the Earth and against people.

Ecology movements are resisting the expansion of the market and the commodification of their land, their minerals, their forest, and biodiversity. That is why the path of eco-apartheid must become a path based on war against people. We witness this in India, today, which is growing at 9% but where violence has become the means for resource appropriation and land grab of forests and biodiversity to fuel that growth. The unjust conviction with life imprisonment of a friend and colleague, Dr. Binayak Sen, is an example of how resource greed and resource grab must convert democratic and peaceful societies into violent police states, even move them towards fascism.

The second road is the path of making peace with the earth, beginning with the recognition of the rights of Mother Earth. This is the path of Earth democracy. It is a path based on living within the Earth's ecological limits and sharing her gifts equitably. It is a path based on deepening and widening democracy to include all life on Earth and include all humans who are being excluded by the so called “free market democracy” based on corporate rule and corporate greed. The path of Earth democracy is the path of caring and sharing. It is the path to freedom.