

Green Mission News

June 2014 Green Mission News

What's in the News...

We Are the Soil

by Vandana Shiva

We are made up of the same five elements — earth, water, fire, air and space — that constitute the Universe. We are the soil. We are the earth. What we do to the soil, we do to ourselves. And it is no accident that the words “humus” and “humans” have the same roots. (read the [article](#))



External Article Links:

- Food Scrap Diversion Interview with Melissa McGiniss and Tom Wright

<http://youtu.be/QHarXjxrM3g>

- How the sustainable foods market went mainstream

www.greenbiz.com/blog/2014/04/04/purpose-economy-book-excerpt

- It Can Be Done: Making the Case for Zero Waste

sierrabusiness.org/whats-new/blog/566-zero-waste

- Farming Free: An Interview With Vandana Shiva

A global food sovereignty activist speaks out about GMOs, seed freedom and the misconduct of industrial agriculture.

<http://www.motherearthnews.com/nature-and-environment/food-sovereignty-zm0z14jjzchr.aspx#ixzz2zdFRvVyJ>

- Fritjof Capra and Pier Luigi Luisi – The Systems View of Life: A Unifying Vision

transitionconsciousness.wordpress.com/2014/04/19/guest-article-fritjof-capra-and-pier-luigi-luisi-the-systems-view-of-life-a-unifying-vision/

- Former Mobil Oil exec urges brakes on gas fracking

Former executive says the drilling cannot be done safely

www.timesunion.com/business/article/Former-Mobil-Oil-exec-urges-brakes-on-gas-fracking-5422292.php

- The fossil fuel divestment movement: Putting the Freeze on Global Warming (25 min video)

billmoyers.com/episode/putting-the-freeze-on-global-warming/

- Wake Up Before It's Too Late
a stunning new UN trade report is saying about the world's approach to agriculture
seedmap.org/wake-up-before-its-too-late/
- The Zero Marginal Cost Society
management.fortune.cnn.com/2014/04/23/capitalism-economy-jeremy-rifkin/
- Illinois could be first state to ban plastic microbeads
www.chicagotribune.com/news/local/breaking/chi-illinois-could-be-first-state-to-ban-microbeads-20140416,0,875364.story
- You may find this excellent article helpful in raising awareness about toxic plastics:
<http://www.nature.com/news/toxicology-the-plastics-puzzle-1.15038>
- The West's Coming Tragedy of the Commons
truth-out.org/opinion/item/22414-the-wests-coming-tragedy-of-the-commons
- Ecological Wisdom From the Heart of Brazil (5 min.video)
<http://alicewalkersgarden.com/2014/04/ecological-wisdom-from-the-heart-of-brazil/>
- Can Permaculture Transform Industrial Agriculture?
www.treehugger.com/sustainable-agriculture/can-permaculture-transform-industrial-agriculture.html
- Warming World Threatens Us All, Warns U.N. Report
time.com/43118/climate-change-global-warming-united-nations/
- Climate Change 2014: Impacts, Adaptation, and Vulnerability
www.ipcc-wg2.gov/AR5/
- Leaked IPCC climate plan to worsen global warming - ecologists
Critics say bioenergy, carbon capture, among draft report's 'false solutions' to sustain business as usual economics
www.theguardian.com/environment/earth-insight/2014/apr/07/ipcc-un-climate-change-mitigation-wg3-worsen-geoengineering
- Amory Lovins: Don't cry for the electric utilities
www.greenbiz.com/blog/2014/02/12/
- A Taxing Solution to the Greatest Challenge of Our Time
Putting a price on carbon emissions is one of the best ways we can slow the pace of climate change.
otherwords.org/taxing-solution-greatest-challenge-time/
- GRAS Out: Surprising Number of Unregulated Chemicals Found in Food
<http://civileats.com/2014/04/10/gras-out-surprising-number-of-unregulated-chemicals-found-in-food/#sthash.HVG7r7tf.dpuf>
- Desmond Tutu: We need an apartheid-style boycott to save the planet

We must stop climate change. And we can, if we use the tactics that worked in South Africa against the worst carbon emitters

www.theguardian.com/commentisfree/2014/apr/10/divest-fossil-fuels-climate-change-keystone-xl

- System thinking at the core of Circular Economy - new publication

www.worldresourcesforum.org/system-thinking-core-circular-economy-new-publication

and www.worldresourcesforum.org/files/publications/RZ_a%2B_Kreislaufwirtschaft_englisch.pdf

- 11 steps toward going “zero waste” in the bedroom

www.treehugger.com/green-home/11-steps-toward-going-zero-waste-bedroom.html

- Rising prices aid \$15B food fraud problem

www.cnn.com/id/101569334

- You may find this excellent article helpful in raising awareness about toxic plastics:

<http://www.nature.com/news/toxicology-the-plastics-puzzle-1.15038>

- Colgate-Palmolive Commits to 100% Recyclable Packaging by 2020

www.rebnews.com/news/manufacturing/colgate-palmolive_commits_100_recyclable_packaging_2020.html

- A new, market-based approach to recycling

The notion of “extended producer responsibility” is the core idea behind a new market-based approach to recycling.

www.startribune.com/business/255782741.html

- Let This Earth Day Be The Last

www.thenation.com/blog/179375/let-earth-day-be-last#

- The High Price of Cheap Chicken

New rules could make slaughterhouses more dangerous for workers while increasing risks for consumers. otherwords.org/high-price-of-cheap-chicken/

- A zero waste world, a world where the very concept of waste is obsolete (3 min video)

<http://vimeo.com/78420086>

- Fig. 5b shows that if coal CO₂ emissions were phased out over 2010-

2030, atmospheric CO₂ would peak at 400-425 ppm. In that case it would just be feasible to get atmospheric CO₂ back beneath 350 ppm via the carbon uptake potential of improved forestry and agricultural practices, which could draw down atmospheric CO₂ by as much as about 50 ppm.

<http://www.greenpeace.org.uk/files/pdfs/climate/hansen.pdf>

- Follow the Honey: 7 ways pesticide companies are spinning the bee crisis to protect profits <http://libcloud.s3.amazonaws.com/93/f0/f/4656/FollowTheHoneyReport.pdf>

- Science Media Centre Spins Pro-GMO Line

<http://www.prwatch.org/news/2014/04/12442/science-media-centre-spins-pro-gmo-line>

- It's the toxic herbicide Roundup and glyphosates, stupid!

<http://rt.com/op-edge/154000-toxic-herbicide-gmo-monsanto/>

“The opposite of play is not work. The opposite of play is depression” – Steve Keil

"It cannot be denied that an improved system of practical domestic cookery, and a better knowledge of its first principles, are still much needed in this country; where, from ignorance, or from mismanagement in their preparation, the daily waste of excellent provisions almost exceeds belief." - Eliza Acton
Modern Cookery for Private Families (1845)

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Full Length Article Below:

May 5, 2014

Starbucks Recycles Coffee to Make Milk

www.environmentalleader.com/2014/05/05/starbucks-recycles-coffee-to-make-milk/



Starbucks is recycling coffee beans to make milk for its coffee.

The coffee giant is using Menicon's fermentation technology that allows the used grounds from Starbucks stores in the Tokyo area to be converted into feed for the dairy cows that produce the milk that goes into Starbucks stores' specialty drinks.

The company says it was looking for a better use than plant compost for the hill of beans its stores across Japan produce each day. Although compost is a green disposal method, composting coffee grounds (known as bean cake) leaves significant nutritional value unused.

Japanese contact lens manufacturer Menicon has been experimenting with fermentation technologies since 2011. The work is an offshoot of materials research

toward new contact lenses.

One lactic acid fermentation technique Menicon developed worked with bean cake. So, in a joint effort with the Veterinary Medicine Department of Azabu University, Menicon developed a cattle feed (suitable for long-term storage) that results in milk with a lower somatic cell count, a key quality indicator in dairy products.

Last year Menicon and Starbucks, along with Sanyu Plant Service, jointly applied for a patent on the process used to produce this lactic acid-fermented feed.

Starbucks is also working on [turning the used grounds](#), along with its bakery waste, into laundry detergents, bioplastics and other products.

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by Vandana Shiva

www.asianage.com/columnists/we-are-soil-730

We are made up of the same five elements — earth, water, fire, air and space — that constitute the Universe. We are the soil. We are the earth. What we do to the soil, we do to ourselves. And it is no accident that the words “humus” and “humans” have the same roots.

This ecological truth is forgotten in the dominant paradigm because it is based on eco-apartheid, the false idea that we are separate and independent of the earth and also because it defines soil as dead matter. If soil is dead to begin with, human action cannot destroy its life. It can only “improve” the soil with chemical fertilisers. And if we are the masters and conquerors of the soil, we determine the fate of the soil. Soil cannot determine our fate.

History, however, is witness to the fact that the fate of societies and civilisations is intimately connected to how we treat the soil — do we relate to the soil through the Law of Return or through the Law of Exploitation and Extraction.

The Law of Return — of giving back — has ensured that societies create and maintain fertile soil and can be supported by living soil over thousands of years. The Law of Exploitation — of taking without giving back — has led to the collapse of civilisations.

Contemporary societies across the world stand on the verge of collapse as soils are eroded, degraded, poisoned, buried under concrete and deprived of life. Industrial

agriculture, based on a mechanistic paradigm and use of fossil fuels has created ignorance and blindness to the living processes that create a living soil. Instead of focusing on the Soil Food Web, it has been obsessed with external inputs of chemical fertilisers — what Sir Albert Howard called the NPK mentality. Biology and life have been replaced with chemistry.

External inputs and mechanisation are imperative for monocultures. By exposing the soil to wind, sun and rain, monocultures expose the soil to erosion by wind and water.

Soils with low organic matter are also most easily eroded, since organic matter creates, aggregates and binds the soil.

Soil is being lost at 10 to 40 times the rate at which it can be replenished naturally. This implies 30 per cent less food over the next 20-50 years. Soil erosion washes away soil nutrients. A tonne of top soil averages 1-6 kg of nitrogen, 1-3 kg of phosphorous, 2-30 kg of potassium, whereas soil in eroded land has only 0.1-0.5 per cent nitrogen. The cost of these nutrient losses are \$20 billion annually.

Fertile soils contain 100 tonnes of organic matter per ha. Reduction of soil organic matter by 1.4-0.9 per cent lowers yield potential by 50 per cent. Chemical monocultures also make soils more vulnerable to drought and further contribute to food insecurity.

Further, eroded soils and soils without organic matter absorb 10 to 300 mm less water per ha per year from rainfall. This represents 7 to 44 per cent decrease in water availability for food production, contributing to a decline in biological productivity from 10-25 per cent.

No technology can claim to feed the world while it destroys the life in the soil by failing to feed it on the basis of the Law of Return. This is why the claim that the Green Revolution or genetic engineering feeds the world is false. Intrinsic to these technologies are monocultures based on chemical inputs, a recipe for killing the life of the soil and accelerating soil erosion and degradation. Degraded and dead soils, soils without organic matter, soils without soil organisms, soils with no water holding capacity, create famines and a food crisis, they do not create food security.

This is especially true in times of climate change. Not only is industrial agriculture responsible for 40 per cent of the Green House gases contributing to climate change, it is also more vulnerable to it.

Soils with organic matter are more resilient to drought and climate extremes. And increasing organic matter production through biodiversity intensive systems, which are in effect photosynthesis intensive systems is the most effective way to get the carbon dioxide out of the atmosphere, into the plants, and then into the soil through the Law of

Return.

Soil, not oil, holds the future for humanity. The oil-based, fossil fuel intensive, chemical intensive, industrial agriculture has unleashed three processes which are killing the soil, and hence impacting our future.

Firstly, industrial agriculture destroys living soils through monocultures and chemicals.

Second, an oil-based paradigm intensifies fossil fuel inputs and creates a false measure of productivity which presents an unproductive system as productive.

The trick lies in reducing creative productive work to “labour “ as a commodity, counting people as labour as an “input”, and not counting fossil fuels as an input. Intensive fossil fuel use translates into more the 300 “energy slaves” that work invisibly behind each worker on fossil fuel intensive industrial farms.

People as an input means the less people on the land, the more “productive” agriculture becomes. Farmers are destroyed, rural economies are destroyed, the land is emptied of people and filled with toxics. The creative work of farmers as custodians and renewers of soil and biodiversity is replaced by deadly chemicals.

Creative work in being stewards of the land and co-creators of living soil is not an “input” into a food system, but the most important output of good farming. It cannot be reduced to “labour” as a commodity. Land, too, is not a commodity. Creating, conserving, rejuvenating, fertile and living soil is the most important objective of civilisation. It is a regenerative output.

Third, displaced farmers flood cities. This is not a natural or inevitable phenomenon. It is part of the design of industrial agriculture. The explosion of cities buries fertile soil under concrete. The equivalent of 30 football fields are consumed by cement and concrete every minute.

The Save our Soils (SOS) movement, of which I am a patron, has been started by many organisations including FAO, IFOAM, Nature and More, to wake humanity to the soil emergency, which is also a human emergency.

We need to measure human progress not on the basis of how much cement buried the soil, but how much soil was reclaimed and liberated. This is what “saugandh mujhe is mitti ki” should mean.

Living seeds and living soils are the foundation of living and lasting societies.

The writer is the executive director of the Navdanya Trust

