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Biofuels: adding fuel to the fire!

-By Rachel Smolker, Biofuelwatch

Reports from civil society groups and published scientific research have documented, modeled, reported and issued multiple warnings about the many harms resulting from expanding bioenergy. However, this burgeoning literature has largely been ignored by governments and who instead are providing ever more mandates, subsidies and R&D investment to dramatically increase production and use of biofuels. The threats to biodiversity, climate and human rights are rapidly escalating, and dangerously, ignored.

Among recent contributions, a draft report from the European Commission is highly critical of bioenergy, especially with respect to indirect impacts and emissions. An article referring to the report ends with a remarkably honest and relevant assessment, stating: "For now the proposal (to make adjustments to the EU policy) remains stuck in the corridors of an EU that appears equally frightened of the political consequences of admitting a policy mistake, and the environmental consequences of denying it."

The CBD, appears



similarly poised, acknowledging the multitude problems with biofuels, but unsure what to do. The SBSTTA draft text has largely acknowledged many of the

problems with bioenergy, clearly stating: "Recognizing that various incentive measures, including subsidies, the setting of targets or mandates for biofuels production and use, and associated trade measures are significant drivers of biofuels expansion and therefore have impacts on biodiversity through land use change and associated GHG emission urges Parties and governments to..." Here it would seem necessary to urge curtailing the acknowledged drivers of demand: targets, mandates and subsidies. But instead, Parties are encouraged to "evaluate these measures" use appropriate "tools" such as "strategic environmental assessment", "assess the effectiveness of tools and approaches..." and "report findings" at the next SBSTTA. The emphasis is on using standards and sustainability criteria, including already progressing work with the Global Bioenergy Partnership and the Roundtable on Sustainable Biofuels. For some reason, SBSTTA appears unaware of the serious critiques emerging from a history of experience from the "roundtables" on sustainable soya, sugarcane, palm oil etc. and forestry certification schemes such as PFSC, FSC etc. These have largely failed to deliver true sustainability and have been soundly criticized. In particular, standards and criteria, especially when not mandatory, are no match for countering the drivers of bioenergy expansion: targets, mandates and subsidies. These must be addressed; and bold approaches are needed. With new "bioeconomy" initiatives just

announced from Europe and the US, as well a UN “Sustainable Energy For All Initiative” that fails to discriminate bioenergy (or other concerning energy technologies), it is critical that we take more serious and reliable actions – including a moratorium on further policy supports for bioenergy before it is simply too late.

Within the context of climate geoengineering, biomass based technologies, including bioenergy with carbon capture and sequestration, (BECCS) as well as biochar, are further promoted. Given the clear evidence that

bioenergy is not “carbon neutral”, BECCS cannot therefore be “carbon negative.” Biochar, also commonly discussed in context of geoengineering is similarly problematic. A review of peer reviewed field studies clearly indicates there is remarkably little scientific basis for assuming it can deliver the proclaimed carbon sequestration, or improved soil fertility benefits. Like other geoengineering technologies, there is no “adequate scientific basis” to justify their use. Therefore the risks for biodiversity and the environment are clearly serious.

Synthetic Biology – a new and emerging threat to biodiversity

- *By Eric Hoffman, Friends of the Earth U.S.*

Imagine: synthetic algae created in Europe escape from a biofuels plant into a local river and become invasive, displacing natural algae species and immeasurable changes to the local ecosystem and marine food chain. These synthetic algae, which are engineered to be more competitive than wild algae, swap genes with natural relatives and their synthetic genes spread endlessly in the environment and can never be cleaned up. In Brazil, synthetic yeast is breaking down sugarcane to produce biofuels and plastics for the U.S. market, significantly increasing demand for land, water, and energy and displacing local farmers. In Africa and Asia, farming communities are losing their livelihoods as the natural botanical production of products— such as rubber, vanilla, and spices – are replaced by synthetic organisms that can produce those same products in a synthetic biology vat in the U.S.

While such scenarios may seem like science fiction, each could become a reality under current commercial developments of synthetic biology. SBSTTA must ensure this frightening scenario remains science fiction and does not become fact by accepting synthetic biology as a new and emerging issue and urge that a moratorium be established on this unstudied and unregulated field.

Synthetic biology, or “extreme genetic engineering” refers broadly to the use of computer-assisted, biological engineering to design and construct new synthetic biological parts, devices and systems, and to redesign existing biological organisms. Synthetic biology differs from recombinant DNA technology both in the techniques of genetic manipulation and with its use of novel and synthetic genetic sequences

that have never existed before in nature and raise new risks to biodiversity.

Synthetic biology is a field of rapidly growing industrial interest worth over 1.6 billion dollars in sales today. A handful of products derived from synthetic biology have already reached the commercial market and many others are in pre-commercial stages. OECD countries dominate synthetic biology R&D and deployment, but basic and applied research is taking place in at least 36 countries worldwide. Many of the world’s largest energy, chemical, forestry, pharmaceutical, food and agribusiness

corporations are investing in synthetic biology

R&D or establishing joint ventures.

Despite the rapid growth in this industry

neither national nor international regulations have been established to ensure biodiversity and livelihoods are not negatively impacted, nor have possible impacts been formally assessed. Adherence to the Precautionary Principle, which is key when dealing with new and emerging scientific and technological



issues, would necessitate that a **moratorium be established on the environmental release and commercial use of synthetic organisms and their products until there is an adequate scientific basis to justify their use.**

The new threats to biodiversity posed by synthetic biology are best addressed by the CBD, which is the only international body currently assessing synthetic biology and its broader ecological and socio-economic impacts.

SBSTTA must address the issue now. If we wait until SBSTTA-17 or COP-12 then synthetic biology will no longer be a new and emerging issue; rather, it will be an established industrial technology that

will impact almost every part of the Convention. We must use precaution to ensure synthetic biology does not threaten biodiversity and the livelihoods of people and communities around the world.

More information :

International Civil Society Working Group of Synthetic Biology submission to SBSTTA: <http://www.cbd.int/doc/emerging-issues/Int-Civil-Soc-WG-Synthetic-Biology-2011-013-en.pdf>

CBD Alliance Issue Brief - Synthetic biology as a new and emerging issue: http://www.cbdalliance.org/storage/sbstta-wgri/cbda_briefing_sbstta16_syntheticbiology.pdf

About Perversities and Other People's Money

- By Simone Lovera, Global Forest Coalition and Sobrevivencia, Paraguay

The discussion on incentive measures came and went with the speed of light yesterday, which is probably symptomatic of the lack of appreciation for the significance of this shortest article of the CBD. Only 7 countries had taken the effort to send information on progress made on removal or mitigation of perverse incentives, promotion of positive incentive measures and assessment of biodiversity values. The lack of attention, especially for the role of perverse incentives, is simply absurd. Pretending to conserve biodiversity without addressing perverse incentives is like trying to drive a car by pushing the brakes and the accelerator at the very same time. It is like accepting 1 billion dollars in support for reducing deforestation and hosting a major summit on sustainable development while dismantling the forest code, building destructive megadams in the middle of the jungle and actively promoting environmentally destructive biofuels.

There is another attractive aspect to removing or redirecting perverse incentives like biofuel subsidies - it is a biodiversity measure that actually generates money. This is welcome news in times when government austerity rules. In fact, there is an increasing tendency amongst donor governments to mainly talk about 'Other People's Money' when biodiversity finance is discussed. In particular, the EU and other northern governments are rambling

on about generous financial contributions from a yet to be identified private sector, which should be willing to voluntarily invest billions of dollars in a highly volatile and uncertain ecosystems market. Admittedly, that story turned out to be a fairy tale as far as REDD+ was concerned. In REDD land, the absence of any perspective on legally binding cuts in the coming decade has led to a complete collapse of the carbon market, leaving Governments with a bill of some 500 million dollar in old and existing forest money invested in a process to make countries "Ready" for a REDD that will probably never happen. Payments for environmental services sound nice, as long as it is other people's money that pays for them. But in reality 99% of the payments for environmental services schemes are financed by the very governments that thought they were a mechanism to generate money. No wonder that the G77 is getting so suspicious of TEEB-like approaches that they even proposed to put all references to "environmental services" and "valuation" in brackets during the Rio+20 negotiations last week.

Removing perverse incentives and good old fiscal measures might not sound as enticing as innovative financial mechanisms but they have been proven to work, whereas IFMs like ecosystem markets have proven to be mere fairy tales. Money from perverse incentives could subsequently be invested in schemes that provide appropriate support for the initiatives by Indigenous Peoples and Local

Communities to conserve biodiversity. A recent analysis by the Global Forest Coalition (will also be presented at a side event on Thursday afternoon), the ICCA Consortium and IUCN CEESP concluded that such rewards for the benefits that ecosystems provide do not only have to be financial. Recognition of the territorial rights, autonomy and governance structures of Indigenous Peoples and local communities often provides sufficient incentives for people to continue fostering their community conserved areas and Indigenous territories (ICCAs).

Priority Setting for Biodiversity: On SBSTTA and IPBES

By Christine von Weizsäcker, Ecoropa and Ricarda Steinbrecher, Federation of German Scientists

The title and task is “improving the effectiveness of SBSTTA”. But Section A of document UNEP/CBD/SBSTTA/16/ is almost exclusively about IPBES. Section B starts with preambular text recalling Article 25 of the CBD, spelling out the functions of SBSTTA and also recalling relevant decisions of COP 8, 9 and 10. The rest of the recommendations, however, look as if the only arbiter of SBSTTA’s improved effectiveness were its relationship to IPBES.

SBSTTA has been found excellent in answering COP’s questions. It has been effective with regards to assessments of the status of biodiversity. It has to improve on the assessment of effectiveness of measures taken for implementation. There is an implementation gap and a lack of knowledge on how to fill it. That is the real science/policy interface. We need the assessment of the necessary information base to develop measures and thus promote political will, as an already existing COP decision says.

Only a SBSTTA confidently and effectively addressing its own tasks can credibly identify priorities and cooperate with other bodies on them. IPBES is new, and as interesting as a new Christmas present. But it cannot perform SBSTTA’s tasks and obligations. Moreover, SBSTTA is bound to all three objectives of the CBD. IPBES only mentions

two. No fair and equitable sharing of benefits to be addressed there.

IPBES has been established, but it still operates on a wobbly interim arrangement, with an interim secretariat, though the physical location has been decided. It has UNEP as interim host, interim rules of procedure, with the link to the UN system still up for discussion. The work programme needs a lot of further work. The rules for decision-making and the composition of the body are still under discussion. All this certainly will have a decisive impact on future priority setting by IPBES.

IPBES has the attraction of being 20 years younger: it has a multidisciplinary expert panel thus avoiding the connotation that science is natural science only. It speaks of indigenous peoples and local communities. It wants to integrate diverse knowledge systems. And it shall have our best wishes for its intersessional work and first plenary.

But it is SBSTTA’s effectiveness that has to be addressed here and now and in its own right. And, concerning duplication of work, as we all know, this is the very essence of scientific validation and sometimes even sparks innovation.

Hot from the press:

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[square brackets] is a newsletter produced jointly by the Secretariat of the Convention on Biological Diversity (SCBD) (www.cbd.int) and the CBD Alliance (www.cbdalliance.org).

The newsletter is meant to facilitate timely dialogue among civil society stakeholders on cutting edge biodiversity issues, from both policy (advocacy and decision-making) and practical (implementation) perspectives.

This year's square bracket issue is available online www.cbd.int/ngo/square-brackets/square-brackets-2012-05-en.pdf, and for those who are at SBSTTA, they can also pick up a hard copy which would be available sometime this week. The issue features an interview with Bráulio Ferreira de Souza Dias, a message from the CBD Alliance board, articles on achieving the Aichi targets, Innovative Financial mechanisms, Rio+, an article on Ecological and Biological Sensitive Areas (EBSAs), and bioenergy.