

Biodiversity and Biofuels

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Biofuels refer to any fuel derived from biomass, such as alcohols, biogas, fuelwood, vegetable oil and animal fats, which can be used as a substitute for fossil fuel. Ethanol is currently produced from sugar cane and maize while rapeseed and palm oil are the major feedstocks used in the production of biodiesel. To a lesser extent, soybean, peanuts, jatropha, castor bean and coconut oil are also used for the production of biodiesel and wheat, sugar beet, sweet sorghum and cassava are used for ethanol. The use of lignocellulose materials (including grasses, algae, woody plants and residues from the agriculture and forestry sectors), or so-called second generation feedstocks, are also being considered as future sources of biofuels. However these are still largely in the research stage.

Liquid biofuels for transportation, such as ethanol and biodiesel, have garnered great attention in the past couple of years as they are promoted as a means of increasing energy security, supporting domestic agricultural producers, generating income and reducing greenhouse gas emissions. As a result of this growing interest, several countries have introduced policies to promote biofuel use and production, such as requiring that traditional fuels be blended with biofuels and the establishment of production subsidies or the introduction of import tariffs.

Why it is important:

- The potential impact of biofuels on biodiversity, climate change and livelihoods as been identified an emerging issue to be addressed
- Depending on the feedstock used, where and how it is grown and the manner in which it is processed, the greenhouse gas balance, energy yields and environmental impacts of biofuels may differ greatly
- Land use change associated with the production of energy crops can affect carbon dioxide emissions either positively or negatively
- Much of the biofuels currently being produced are based on agricultural products, thus environmental
 concerns, such as the use of fertilizers and pesticides, water consumption and the possible
 invasiveness of some of the species used in biofuel production, have arisen. Concerns over increased
 deforestation and the drainage of wetlands for the expansion of agricultural land are also emerging
- In terms of socio-economic impacts, the demand for biofuel could potentially increase rural incomes and create employment opportunities. On the negative side, increased commodity prices resulting from the diversion of agricultural products from the food to the energy sector, as well as trade-distorting subsidies and import tariffs, can have serious consequences for developing countries with implications for agricultural production and food security.

What the CBD is doing:

The Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity, at its twelfth meeting, held in Paris in July 2006 considered the interlinkages between biodiversity and liquid biofuel production as a new and emerging issue related to the conservation and sustainable use of biodiversity. Following this meeting, SBSTTA requested the Executive Secretary to synthesize and submit additional information at the ninth meeting of the Conference of the Parties.







