

The contrasting need for food and biofuel: Can we afford biofuel?

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OUR WORLD in the second decade of the 21st century is characterised by extensive growth of the human population (7.2 billion humans in 2014, with one billion extra expected in the next 12 years), and a parallel increase in the use of fossil fuels such as crude oil, natural gas and coal. These present trends cannot continue without resulting in grave implications affecting the global quality of life. Numerous speculations exist regarding future scenarios.

Population growth and energy demand are clearly interacting. Increased carbon dioxide (CO₂) levels, caused by oxidation of fossil fuel, together with other greenhouse gases (GHG) such as methane (CH₄) and nitrous oxide (N₂O) appear to be causing a global temperature increase. This results in increased fluctuations of climate (storms, rain, drought, heat), thereby increasing the frequencies of regional crop failures. Globally, opinions are divided on the significance, severity and human-caused mechanisms of such climate change. The actual causes do not matter because fundamentally we must act to lower fossil energy usage, as resources are being depleted and natural replacement of fossil fuels such as crude oil does not occur.

Direct destruction of agricultural land and agriculture-related infrastructure also occurs globally, caused by increased