

WATER PERSPECTIVES ON LARGE SCALE BIOENERGY

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Long-term climate change is a growing challenge that will change the availability of land and water resources and also the pattern of biomass production. Furthermore, the adaptation and mitigation response strategies implemented by society can strongly influence land and water use: a growing global demand for both food and bioenergy is increasing the pressure on land and water resources, with implications for their ability to provide ecosystem support functions. The recent period of increasing food prices and land use changes in various parts of the world can be explained partly by the increasing bioenergy demand but also by rapid economic growth and changing food consumption patterns.

The presentation will review global and regional trends as well as longer-term scenarios for food and bioenergy, primarily based on a water perspective. Implications for water availability and use will be discussed with some global/regional conclusions. Stressing that the envisaged bioenergy development also implies opportunities, the presentation will further discuss the possibility of integrating the cultivation of new types of bioenergy crops within expanded agricultural systems in a modified water resource context. In the presenter's view, this is an area that has received too little attention in the present bioenergy debate. The use of bioenergy for mitigating climate change has been widely discussed but the role of bioenergy in agricultural strategies to adapt to climate change is less explored.

KEY WORDS: water demand, water resources, bioenergy, competition, synergies

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*** INVITED SPEAKER ***