

GBEP AG6: Good examples of bioenergy-water relationships

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Presentation at the workshop "The world needs more land use change"
June 7, 2016 at the 24th EUBCE, Amsterdam

GBEP WGCC Activity Group 6: Overview

- Activity Group 6 (AG6) on "Bioenergy and Water" was established in 2015 under the GBEP Working Group on Capacity Building
- AG6 goal: identify and disseminate ways of integrating bioenergy systems into agriculture and forestry landscapes to improve sustainable management of water resources, including waste water
- AG6 held a workshop in August 2015 in Stockholm which presented examples, report published in February 2016

Activity Group 6 Vision

Good management of resources - benefiting from complementarity of different land use systems - can deliver food, materials and bioenergy AND improve the state of water



Stockholm Workshop: excellent presentations, productive discussions, and more...



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Stockholm Workshop Structure

Session I: Bioremediation and Riparian Buffer Zones

- Bioremediation of industrial drainage water - Egypt
- Bioenergy crop buffer zone - USA

Session II: 'Waste' to Energy and Water-Smart Processes

- Livestock waste to biogas – Italy & China
- Waste-to-bioenergy – Argentina; ethanol water challenges - Brazil

Session III: Agroforestry, Inter- and Rotational Cropping

- Impacts of switchgrass intercropping in traditional pine forests on hydrology and water quality – USA
- SRC strips integrated with site-typical crop rotation - Germany
- Integrated woody biomass cropping for salinity control in dryland agriculture - Australia
- Perennial biomass crops on environmentally sensitive land - USA

Session IV: Controlling Growth of Invasive Species

- Producing electricity from biomass from invasive alien plants - South Africa
- Improving water quality by harvesting water plants for biomass - Germany

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Stockholm Workshop Global Coverage



The workshop brought together examples from 11 countries across 6 continents: Argentina, Australia, Brazil, China, Egypt, Germany, Italy, Mexico, Paraguay, South Africa and the USA

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Key Messages from the Workshop

- Presenters showed an **encouraging variety** of water-efficient and even positive-water-balance bioenergy options, both in terms of supply/feedstocks, and geographical distribution
- There **are significant barriers** to “mainstream” such practices, though
- A prerequisite seems an easily accessible repository of data on these practices by “**trusted**” actors. GBEP may have a role here

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Key Messages (II)

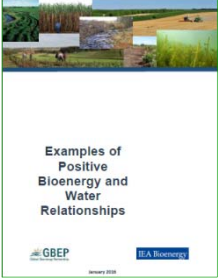
- **Capacity building** is needed with regard to farmers and NGOs “in the field”, addressing the socioeconomic dimension, and broad diversity of farmers
- Water is an important issue at political level – more dialogue should be sought
- Most of the best practices presented are “bottom-up”, but many policy makers view issues “top-down”: **translate** key issues into more acceptable language, and highlight potential of economic instruments in fostering sustainable bioenergy-water systems

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Stockholm Workshop Outcome Report



Freely available:

http://www.globalbioenergy.org/fileadmin/user_upload/gbep/docs/2015_events/AG6_workshop_25-26_August_2015/AG6_Examples_of_Positive_Bioenergy_and_Water_Relationships_Final.pdf

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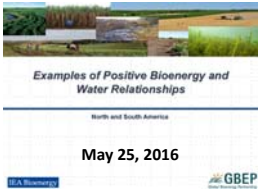
Dissemination: webinars



Examples of Positive Bioenergy and Water Relationships

Africa, Asia and the Pacific and Europe

April 24, 2016



Examples of Positive Bioenergy and Water Relationships

North and South America

May 25, 2016

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More Information & Contact

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