



## **Competence Platform on Energy Crop and Agroforestry Systems for Arid and Semi-arid Ecosystems – Africa (COMPETE)**

### **A European Commission Initiative**

**5th International Biofuels Conference  
7-8 February 2008, New Delhi, India**



**Dr. Rainer Janssen, Dominik Rutz  
WIP – Renewable Energies, Munich**

## COMPETE Platform



COMPETE Website: [www.compete-bioafrica.net](http://www.compete-bioafrica.net)

COMPETE Duration: January 2007 to December 2009

Coordinators:

Rainer Janssen, Dominik Rutz, Peter Helm (WIP)

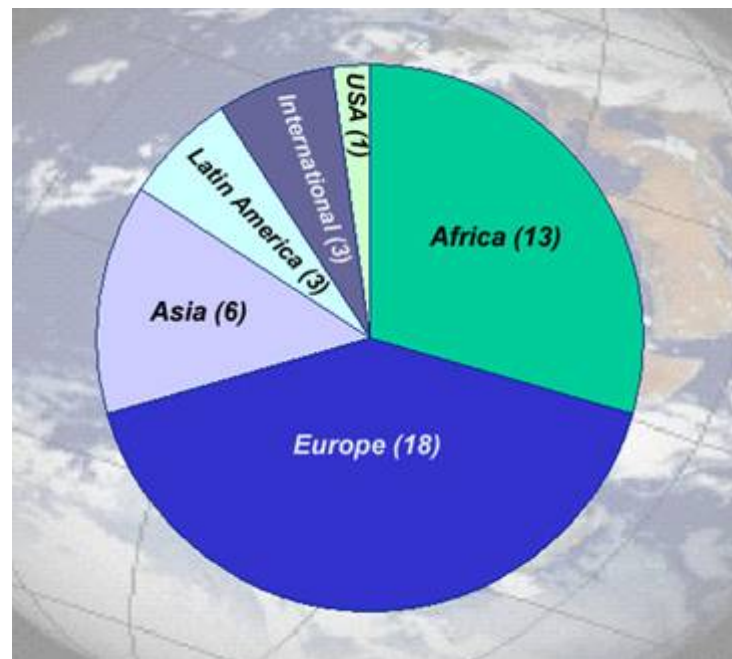
Jeremy Woods, Rocio Diaz-Chavez (Imperial College)

*COMPETE is co-funded by the European Commission in the 6th Framework Programme – Specific Measures in Support of International Cooperation (INCO-CT-2006-032448).*



## COMPETE – Partnership

- The COMPETE Consortium consists of 44 partners from 5 continents.
- **African partners** are from Botswana, Burkina Faso, Kenya, Mali, Senegal, South Africa, Tanzania, and Zambia
- **European partners** are from Austria, Belgium, Germany, Italy, Norway, The Netherlands, Sweden, and UK
- **Asian partners** are from China, India, and Thailand
- **Latin American partners** are from Brazil and Mexico
- **International partners** are the AFDB, CI, and FAO





## COMPETE Objectives

**COMPETE** will establish a **platform for policy dialogue and capacity building** and identify pathways for the **sustainable provision of bioenergy**

- to improve the quality of life and create **alternative means of income** for the rural population in Africa
- to aid the **preservation of intact ecosystems** in arid and semi-arid regions in Africa
- to enhance the equitable **exchange of knowledge** between EU and developing countries



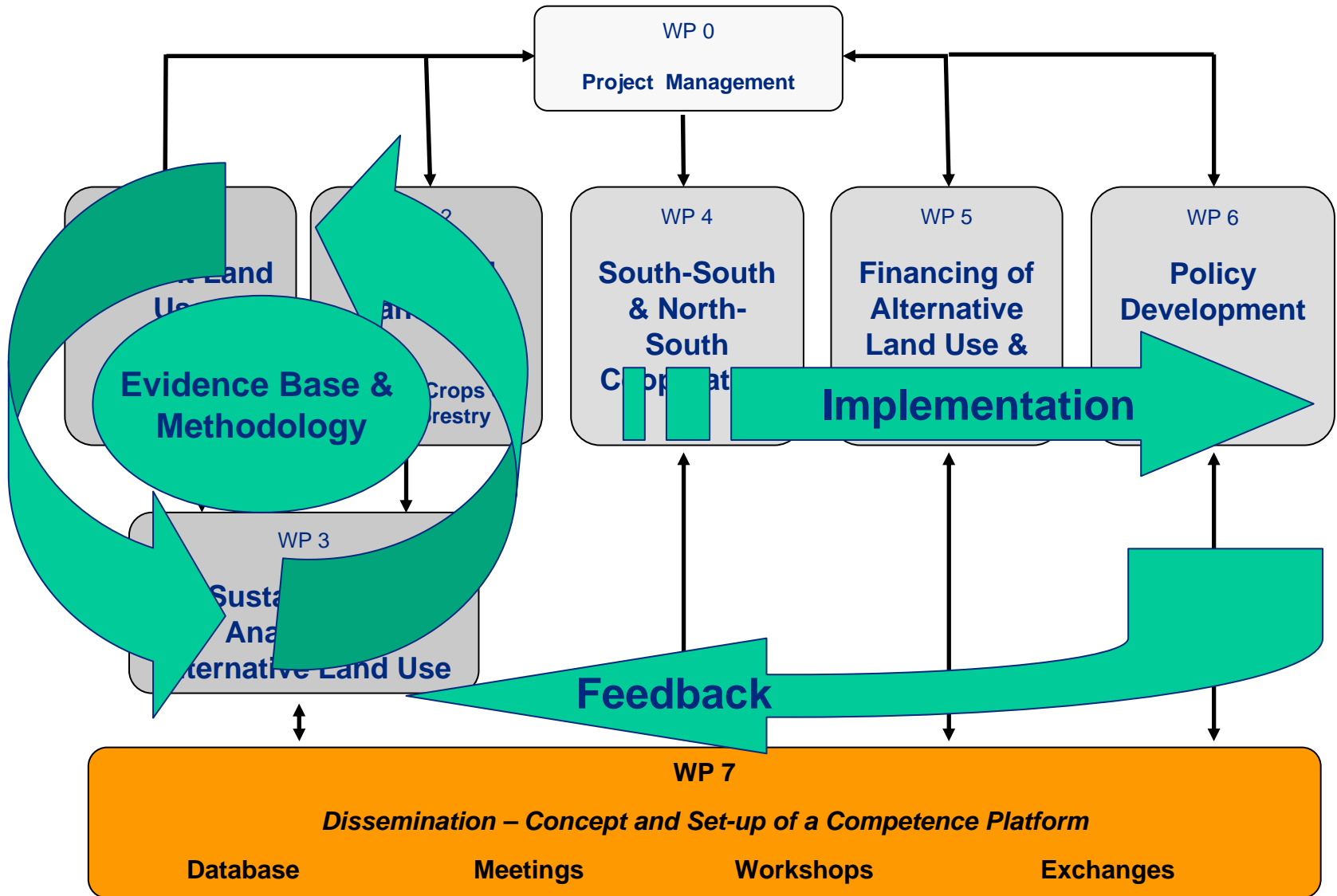


## COMPETE – Main Activities and Results

- to evaluate current and future **potential for the sustainable provision of bioenergy in Africa**
- to facilitate **South-South technology and information exchange** capitalising the world-leading RD&D in bioenergy
- to develop innovative tools for the **provision of financing** for national bioenergy programmes and local bioenergy projects
- to develop practical, targeted and **efficient policy mechanisms** for the development of bioenergy systems
- to **establish the Competence Platform** to ensure effective dissemination and knowledge exchange



# Project Overview



# Bioenergy Development Options - Scale matters

## Large Scale

1. Sugarcane to EtOH
2. Palm / Soy Biodiesel

### Mill-owned estate

Very competitive globally

Little Value Added to Local Communities

Export potential

### Small-holder led

Higher cost base  
Less globally competitive

High Value Added to Local Communities

Export potential

## Small Scale

1. Sweet Sorghum – micro-distillery
2. Woodlot gasification elec.

### Multi-product cropping

e.g. sweet sorghum

Economics  
Uncertain

Complex-Value Added to Local Communities  
High risk

Local Markets  
Social Issues  
Crop not well characterised

### Single Bioenergy Product

e.g. multi-species woodlot

Value Added to Local Communities  
High Risk

Complex food-fuel-cash-crop interactions



## Bioenergy – Ensuring Sustainability

**Bioenergy is now going to happen at very large scales in many African countries**

This can be either:

- 1) Very damaging and lock Africa out of new development opportunities**
  - 2) Sustainable and beneficial to African Development**
- **COMPETE provides an opportunity to help option ‘2’ to happen**
  - **Multi-disciplinary understanding to develop policies which reward best practice**
  - **Human capacity building to unlock synergistic exploitation rather than competition for resources**





## COMPETE Workshop on 'Improved Energy Crop and Agroforestry Systems for Sustainable Development in Africa'

- Organised by UKZN and WIP on 22 June 2007 in Mauritius in the framework of the ICSU 'International Field Workshop on Renewable Energy for Sustainable Development in Africa' (18-21 June 2007)
- Session on **improved land use** (e.g. sugar cane, sweet sorghum, jatropha)
- Session on **sustainability and policy frameworks**
- Session on **South-South cooperation** (China, India)
- Workshop proceedings available at [www.compete-bioafrica.net](http://www.compete-bioafrica.net)





## COMPETE Participation at The First High-level Biofuels Seminar in Africa

- Organised by the African Union Commission (AUC), the Government of Brazil and UNIDO in Addis Ababa on 30 July to 1 August 2007
- COMPETE members as speakers, experts and session chairs
- Introductory presentation by Prof. Francis Yamba, CEEEZ, Zambia, on **policy recommendations for biofuel programmes in Africa**
- **The Addis Ababa Declaration on Sustainable Biofuels Development in Africa**
- available at [www.iisd.ca/africa/biofuels](http://www.iisd.ca/africa/biofuels)



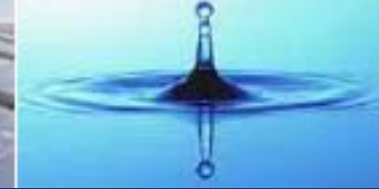


## COMPETE Seminar Brazil

22-26 October 2007 in São Paulo, Piracicaba, Riberão Preto

- Seminar with presentations from UNDSD, NGOs, CENBIO
- Launching of **BEST Bioethanol Bus Fleet**
- Visit to **DEDINI and TGM**  
(Equipment manufacturers)
- Visit to **Santo Antonio Sugar Mill**
- Visit to **Bertin** (Biodiesel production)





## COMPETE Meeting and Roundtables in Burkina Faso

26-29 November 2007 in Ouagadougou

- **COMPETE Roundtables in the framework of the International Conference ‘Stakes and Perspectives of Biofuels for Africa’**
  - Round Table 1 –  
‘Biofuels for transport versus electricity production’
  - Round Table 4 –  
‘Competition between non-food and food uses: stakes and risks’





## COMPETE Registered as Official Partnership of the UN Commission on Sustainable Development (CSD)

- CSD was established in 1992 at the Earth Summit in Rio
- Priority Issues of the next CSD sessions in 2008-2009 address the topics **Agriculture, Rural Development, Land, Drought, Desertification and Africa**
- **CSD-16 from 5-16 May 2008 in New York** (COMPETE: Side event, Partnerships Fair, Presentation of the partnership)
- COMPETE as CSD Partnership at [www.un.org/esa/sustdev/partnerships/](http://www.un.org/esa/sustdev/partnerships/)
- More information on the Commission on Sustainable Development is available at [www.un.org/esa/sustdev/csd/](http://www.un.org/esa/sustdev/csd/)





## COMPETE Seminar and Field Visits - India

4-8 February 2008 in Pune, Chattisgarh, New Delhi

- Organised by COMPETE partner Winrock International India
- Visit to **PRAJ Industries and Thermax Ltd.** (Biofuel Plant & Equipment Manufacturers)
- Visit to **Biodiesel Plant** operated by **Chattisgarh Biofuel Developments Authority**
- Visit to **Ranidhera Rural Electrification Project**
- Visit to **Jatropha Plantations in Kawardha**







## COMPETE Events 2008 - Invitation

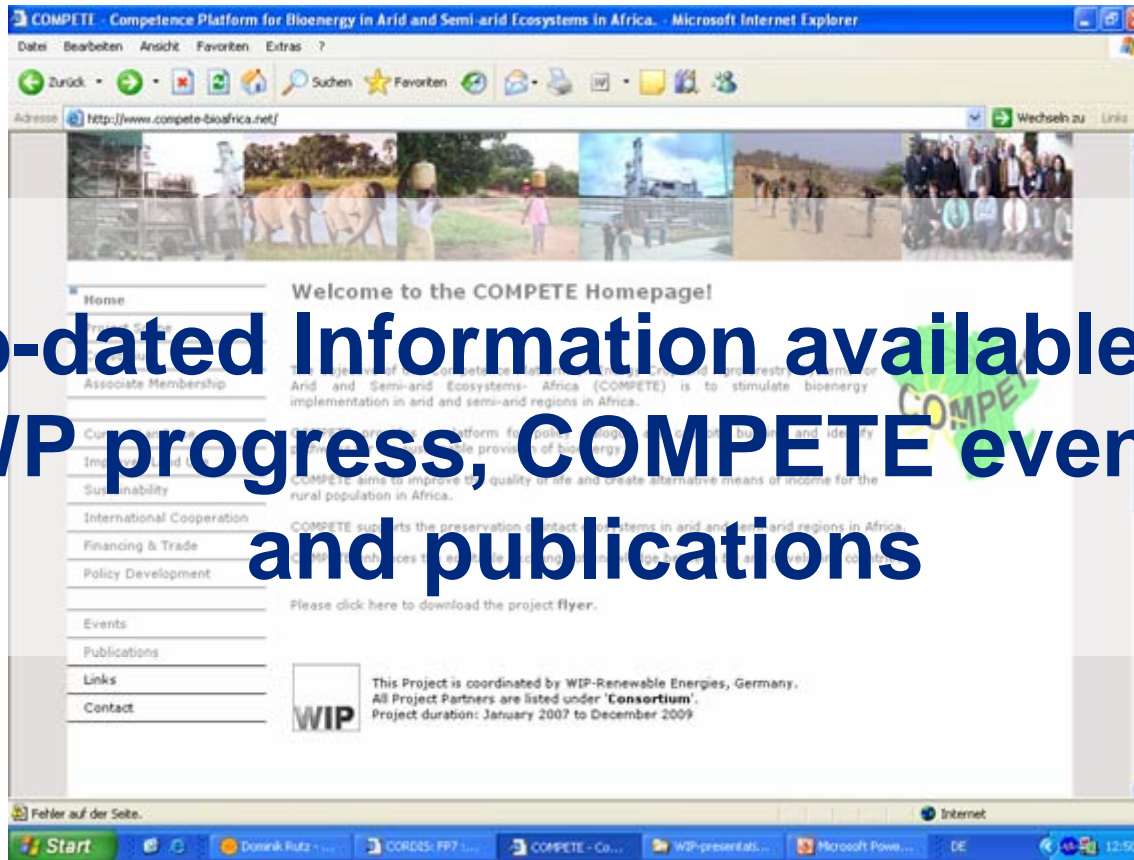
- **COMPETE WP5 Workshop  
(Financing of Alternative Land Use), 15 April 2008  
*on the occasion of the UNIDO Int. Renewable Energy  
Conference in Africa, 16-18 April, Dakar, Senegal***
- **Policy Conference on ,Sustainable Biofuels –  
An African Perspective‘, 16-21 June 2008, Tanzania**
- **COMPETE WP6 Workshop  
(Policy Development), 25-27 November 2008, Mali**

# WIP



**COMPETE Website** [www.compete-bioafrica.net](http://www.compete-bioafrica.net)

**Up-dated Information available on  
WP progress, COMPETE events  
and publications**



## COMPETE Newsletter and Flyer



Competence Platform on Energy Crop and Agroforestry Systems - Africa

# INVITATION to submit contributions to COMPETE Newsletter Issues

The objective of the Competence Platform on Energy Crop and Agroforestry Systems - Africa (COMPETE) is to stimulate sustainable energy production in Africa. COMPETE will provide a platform for policy dialogue and capacity building and identify pathways for the sustainable provision of bioenergy, which will:

- improve the quality of life and create alternative means of income for rural populations in Africa;
- aid the preservation of the critical functions of arid and semi-arid regions in Africa as intact ecosystems;
- enhance the equitable exchange of knowledge between EU and developing countries.

A comprehensive, multi-disciplinary assessment of current and use, energy demand and technology innovation focused on Africa, will be carried out to identify pathways for the sustainable provision of bioenergy, which will:

- improve the quality of life and create alternative means of income for rural populations in Africa;
- aid the preservation of the critical functions of arid and semi-arid regions in Africa as intact ecosystems;
- enhance the equitable exchange of knowledge between EU and developing countries.

### COMPETE - OBJECTIVES

COMPETE will establish a platform for policy dialogue and capacity building and identify pathways for the sustainable provision of bioenergy

- to improve the quality of life and create alternative means of income for the rural population in Africa
- to aid the preservation of intact ecosystems in arid and semi-arid regions in Africa
- to enhance the equitable exchange of knowledge between EU and developing countries



## COMPETE

Competence Platform on Energy Crop and Agroforestry Systems - Africa



COMPETE Coordination  
WIP - Renewable Energy, Germany  
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COMPETE Work-Package Leaders  
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Winrock International India  
Stockholm Environment Institute, Sweden  
European Biomass Industry Association  
Energy for Sustainable Development, UK  
Food, Agriculture and Natural Resources Policy Analysis Network of Southern Africa  
WIP - Renewable Energy, Germany

www.wip-munich.de



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### COMPETE - ACTIVITIES

COMPETE will deliver a matrix of multi-disciplinary and cross-sectoral work-packages

- to evaluate current and future potential for the sustainable provision of bioenergy in Africa in comparison to existing land use patterns and technologies
- to facilitate South-South technology and information exchange capitalising the world-leading R&D in bioenergy in the key countries Brazil, Mexico, India, China and Thailand
- to develop novel pathways for the production of energy from biomass, biofuels, biogas and biogas upgrading, including the use of advanced technologies, and the role of international trade
- to develop practical, targeted and efficient policy mechanisms for the development of bioenergy systems that enhance local value-added, assist local communities and create jobs



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### COMPETE - PARTNERSHIP

The COMPETE partnership comprises 20 European and 23 non-European partners - 11 partners from 7 African countries, 3 regional African policy and financing bodies (African Development Bank; Food, Agriculture and Natural Resources Policy Analysis Network of Southern Africa; LEMOA - Biomass Energy Regional Program), 9 partners from Latin America and Asia - and the Food and Agriculture Organisation of the United Nations (FAO).

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COMPETE Duration: January 2007 to December 2009



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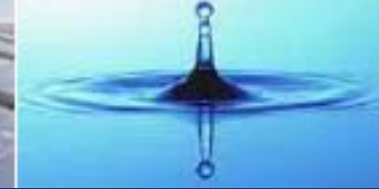




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# COMPETE Associate Membership

## The Associate Membership

- facilitates the involvement of other interested organisations

## Associate Members

- **will be** regularly informed about events and activities **of the COMPETE project**
- **are invited to** make use of the dissemination platforms **established in the framework of the COMPETE project**



Competence Platform on Energy Crop and Agroforestry  
Systems for Arid and Semi-arid Ecosystems – Africa

### Associate Member Application Form

(Please type or use block letters)

Family Name \_\_\_\_\_  
 First Name \_\_\_\_\_  
 Firm/Organisation \_\_\_\_\_  
 Address \_\_\_\_\_  
 Postal Code and City \_\_\_\_\_  
 Country \_\_\_\_\_  
 Tel. \_\_\_\_\_  
 Fax \_\_\_\_\_  
 eMail \_\_\_\_\_  
 Internet \_\_\_\_\_

COMPETE Associate Members will be regularly informed about events and activities of the COMPETE project. COMPETE Associate Members are invited to make use of the dissemination platforms established in the framework of the COMPETE project.

By signing this form the applicant agrees that contact details (name, organization, email address) are published in a database on the COMPETE website.

Signature \_\_\_\_\_ Date \_\_\_\_\_



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## Acknowledgement

**Thanks** to All Partners of the COMPETE Project

**Special Thanks** to our COMPETE Colleagues from  
Winrock International India:

Sobhanbabu PRK

Sudipto Chatterjee

Deepak Sharma





*Thank you very much  
for your attention!*





# WIP



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