



gtz



Biofuel newsletter
Programme for **B**asic **E**nergy and **C**onservation - Saving energy for a better future
www.proBEC.org

Biofuel newsletter - # 16

May 2009



Editor's introduction

Welcome to the sixteenth edition of the monthly ProBEC Biofuel Newsletter. The newsletter reaches a great variety of readers representing the main stakeholders in the bioenergy field in Southern Africa. The aim of the newsletter is to raise awareness about general biofuel activity in the SADC region, as well as of GTZ ProBEC's engagements in the biofuel sector.

The newsletter contains four sections. The first section highlights **current ProBEC and partner biofuel activity** in the SADC region.

The second section contains further details of relevant biofuel developments in various SADC countries. This section offers an **excellent opportunity** for national actors to **announce their activities** to a broader public. Please contact anna.d.lerner@gmail.com if you wish to contribute to the newsletter.

In light of the globalised biofuel industry, each newsletter analyses a relevant international event influencing the biofuel industry in the SADC region.

Anna Lerner & Tina Schubert

If you wish to subscribe or to this newsletter, or if you received it without consent please send an email to biofuelnewsletter@gmail.com. Comments and questions are also more than welcome.

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Table of Contents

| | |
|---|---|
| 1. The Programme for Basic Energy and Conservation | 2 |
| 2. Ongoing ProBEC biofuel activities..... | 3 |
| SADC Regional Biofuel Task Force | 3 |
| COMPETE policy meeting in Lusaka (contribution by Rainer Janssen)..... | 3 |
| Field research on Jatropha economics and agronomics, Mozambique (contribution by Flemming Nielsen) | 3 |
| 3. Biofuel development in SADC Member States | 4 |
| Mozambican Biofuel Strategy is released..... | 4 |
| Jatropha Curcas is fighting with its image in the region | 5 |
| 4. International developments in May 2009 | 7 |

1. The Programme for Basic Energy and Conservation

ProBEC's Mission

"ProBEC promotes improved energy solutions through market development and policy support"

ProBEC's Vision for SADC

"Low-income household groups in SADC have improved access to sustainable and affordable energy"

ProBEC's corporate vision

"Regional and national structures sustainable manage ProBEC's lead in basic energy solutions"

*The Programme for **B**asic Energy and **C**onservation (ProBEC) aims to ensure that low-income population groups satisfy their energy requirements in a socially and environmentally sustainable manner. The primary goal is to enable a better quality of life for Africans by ensuring basic energy security and access for low income groups.*

The programme lead is situated in the **SADC** Secretariat, Infrastructure and Services Directorate, and implementing agency is the Deutsche Gesellschaft fuer Technische Zusammenarbeit (German Development Co-operation).

ProBEC manages various projects based on basic energy conservation in 10 member states in SADC. ProBEC is involved in Malawi, Lesotho, South Africa, Mozambique, Tanzania, Zambia, Botswana, Namibia, DRC and Swaziland.

ProBEC recently received a mandate to further develop sustainable biofuel production in the SADC region. The biofuel component has as main object to support discussions on SADC level regarding social and ecological standards. The results of the SADC lead discussions should support three SADC Member States in their development of a sustainable bioenergy strategy.

For more information and country-specific interventions, visit www.probec.org



Biofuel newsletter

Programme for Basic Energy and Conservation - Saving energy for a better future

www.proBEC.org



2. Ongoing ProBEC biofuel activities

SADC Regional Biofuel Task Force

The SADC Secretariat together with ProBEC wish to announce that the planned regional biofuel task force meeting that was due to take place in July is postponed for September. This is due to other urgent commitments for the SADC Secretariat. Member States will be invited to the meeting sometime during July.

COMPETE policy meeting in Lusaka (contribution by Rainer Janssen)

On 25-27 May 2007 the COMPETE International Conference 'Bioenergy Policy Implementation in Africa' took place in Lusaka, Zambia.

This international conference was organised by the Centre for Energy, Environment and Engineering Zambia (CEEEZ) in cooperation with WIP Renewable Energies, Germany, in the framework of the project COMPETE, funded by the European Commission, DG Research.

The conference was opened by the Deputy Minister of Ministry of Energy and Water Development of the Government of Zambia and included presentations on policy implementation strategies in several African countries by representatives from governments of Botswana, Ghana, Niger, Kenya, Tanzania, and Zambia.

Furthermore, the topics "Land use and the food-fuel conflict in Africa" and "Value creation of bioenergy development in Africa" were discussed among high level experts from Africa, Europe and Latin America.

More information on the COMPETE conference in Zambia is available at the project website www.compete-bioafrica.net or through Rainer Janssen rainer.janssen@wip-munich.de

Field research on Jatropha economics and agronomics, Mozambique (contribution by Flemming Nielsen)

The economics and agronomics of Jatropha are poorly under-explored, resulting in many circulating myths and misconceptions. In Mozambique, a small scale farmer club initiative exists that other practitioners can learn from. At the FACT/ADPP Jatropha project in Bilibiza Cabo Delgado a recent assessment of the economics of Jatropha production found that:

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for **B**asic **E**nergy and **C**onservation - Saving energy for a better future

www.proBEC.org

-Food production has the highest priority and farmers are not tempted by high cash crop prices to compromise on food security. Consequently the expansion of Jatropha production has to come from involving more farmers.

-At a farm-gate price of 2.5 MZN/kg Jatropha compares favourable with paid employment. Depending on the efficiency of harvesting income from an eight hour working day is 20 to 60 MZN. Day labours in the area receive 30 to 35 MZN per day.

-Due to the lack of income alternatives in the area and the priority given to food production the Jatropha production is relatively independent of the farm gate price.

-Harvesting is the most labour demanding operation and tests showed that farmers can pick at least 5 kg seeds per hour. If the removal of the seeds from the fruit is included the productivity drops to 1-3 kg/h.

-The main harvesting period coincide with the most demanding months in food production, namely February and March. Jatropha seeds can be left for extended periods on the branches. More research is required to assess if this is a viable strategy for spreading the labour burden. The consequences for yield and oil quality are not known yet.

-Jatropha oil can easily compete with kerosene for lamps which sells for 20 to 50 MZN/l depending on the location. However, many farmers are switching to cheaper home made LED lamps. It is not clear if Jatropha lamps are competitive with LED lamps.

For more information, please contact Flemming Nielsen of Banana Hill Consulting:
fnielsen @ bananahill.net

3. Biofuel development in SADC Member States

Mozambican Biofuel Strategy is released

Published in the "Boletim da Republica", 21st May 2009, the biofuel policy is official. It was approved in the council of ministers on the 24th of March 2009 but not published officially until now. It has been very hard to get hold of a copy but last week the policy was to be found on the internet.

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for **B**asic **E**nergy and **C**onservation - Saving energy for a better future

www.proBEC.org

ProBEC has made a quick translation of the main part of the policy to facilitate understanding for our partners and external stakeholders. It is not to be interpreted word by word, but to be seen as a rough translation. For official translations, please contact the government of Mozambique.

The policy states clearly that sustainability criteria as well as national norms of good practise will be implemented soon. This push for a sustainable biofuel production is very encouraging for the whole biofuel sector and Mozambique should be proud to be leading this development in the region. The SADC Secretariat has also been asked by Member States to establish some kind of minimum guidelines of sustainability and hopefully Mozambique can share its national experience in this SADC process.

The Mozambican policy also indicates compulsory blending targets as well as the creation of various national commissions, programmes and funds to guide the biofuel activities. It is not completely clear what institution that will house these new institutions.

The policy is not a specified document in as much as it does not state tax levels, proposes laws and regulations, etc. It does state what government entity that is responsible to create regulatory environments and laws but not what the laws contain.

A translation of the policy is found as an attachment to the newsletter email. The original Mozambican version is also found in attachment.

Anna Lerner, GTZ-ProBEC, Mozambique, anna.lerner@gtz.de

Jatropha Curcas is fighting with its image in the region

Jatropha, often praised as the "wonder plant", "the green gold" the rich source of biodiesel that flourishes in semi arid areas of Africa, is fighting with this image. While China still pushes for planting 2 million hectares of Jatropha in Zambia, South Africa averted Jatropha from their biofuel crop list until more research has been done on the crop and also D1 oil "dismissed the idea that jatropha can produce a good harvest in any climatic conditions." (*Reuters*)

Evidence shows that companies might be mistaken believing that Jatropha can produce high yields of oil seeds when established on marginal or degraded land areas with neither nutrient support nor additional water. It is also doubtful to think Jatropha is easy to grow and does not need to be cared by farmers with expertise.

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for **B**asic **E**nergy and **C**onservation - Saving energy for a better future

www.proBEC.org

As stated in the *Guardian* Rob Bailis, an assistant professor at the Yale School of Forestry & Environmental Studies, along with Yale Ph.D. candidate Jennifer Baka, recently launched the first detailed "life cycle" environment assessment of jatropha as a biofuel. The two scientists claim "evidence suggests that the tree will grow far more productively on higher quality land with more rainfall or irrigation." Even D1 Oils warned against "overestimating jatropha's potential to produce economically viable yields on severely degraded lands."

Furthermore, it is known that Jatropha is hard to grow and often fails if farmers lack expertise. The Africa regional director for D1 Volckaert stated at a biofuel conference in March that Jatropha is not a miracle crop: it needs to be cultivated and farmed well to produce a good harvest," He also raised another issue: "in many cases seeds are given out to farmers without any instruction, plantings are done badly or at the wrong time of the year and then not managed properly."

Jatropha needs the right environmental surrounding and the right cultivation but it seems that at this point in time no one knows what the best practices would be to make Jatropha productions successful.

Shift of research focus

A lot of research has already been done and is still conducted on the genetic characteristics of Jatropha on how to create improved seeds that will generate more resistant Jatropha trees with higher yields. D1 Oils has set up research centers to develop and test new varieties of the crop, with a next generation of commercial jatropha plants to be launched in 2010. (*Reuters*) Other researchers shifted their focus of research on Jatropha to investigate not only different varieties but more importantly the physical agricultural features: on how to increase Jatropha yields through analysis of soil conditions, adding of water as well as on nutritional requirements. In March the German Investment and Development Bank (DEG) launched 11 Jatropha Research Plantations in Kenya, Tanzania and Uganda that will conduct research of that nature (*Biofuel Digest*).

Some research results state that tests have shown that water is in all circumstances the most limiting of the physical characteristics influencing the growth and the yield of Jatropha reports *Clive Richardson* the CEO of Kilimanjaro Biofuels in an article published on *Biofuels Digests*. He claims that "Centers of Excellence are required in all the regions where Jatropha Curcas is cultivated in order to successfully deliver first class quality products into a global industry" and to increase the benefit that Jatropha fuel production could have.

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for Basic Energy and Conservation - Saving energy for a better future

www.proBEC.org

4. International developments in May 2009

African leaders have a real possibility of influencing the climate agenda and the design of future mitigation tools during the post-Kyoto negotiations in Copenhagen 2009. Given the urgency of climate change action (mitigation and adaptation) in the region, as well as the close link between biofuels and climate change mitigation, the GTZ-ProBEC/SADC newsletter will devote a section in its monthly newsletter to “the Road to Copenhagen 2009”.

This month we will provide a brief background text on the Copenhagen negotiations and explain the issues at stake (1). An overview of the final report from the Commission on Climate Change and Development will also be outlined (2). Lastly, a summary of the climate change session during the Electrification of Africa conference (Maputo 9-11 May) will be included (3).

1.

The global community is in the midst of negotiations for a new climate treaty, which is expected to be signed in Copenhagen in December. The treaty is to replace the Kyoto Protocol, which sets greenhouse gas limits for its signatories until 2012.

The first United Nations Framework Convention on Climate Change (UNFCCC) takes place in Bonn (29 March–8 April) with the second session in Bonn early June. As has been the case before, the draft negotiating text ahead of June Bonn talks revealed a divide between rich and poor countries.

Developing nations are asking their industrialised counterparts to commit to sizeable CO₂ reductions and to offer financial aid to help poor nations in their efforts. But developed countries have not made any firm commitments on funding, and only the EU has taken on a firm CO₂ reduction target. The EU has however also strongly encouraged emerging economies such as China and India to take on their fair share of responsibility by agreeing to limit the growth of their emissions by 15-30% below business-as-usual by 2020

Debating where the money for tackling climate change should come from, participants in a Development Policy Forum roundtable on 29 May, Brussels, agreed that while funds for adaptation can be found, the demand side will need more work.

It is not obvious that developing countries, some of which are already having difficulty absorbing development aid, will be able to make efficient use of the

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for Basic Energy and Conservation - Saving energy for a better future

www.proBEC.org

additional funds they could receive under a new global climate treaty, the forum heard.

Johan Schaar, director of the Swedish Commission on Climate Change and Development, argued that the three years between the conclusion of the climate agreement and its entry into force in 2012 will be crucial for poorer nations to build the capacity needed to benefit from future funding.

As a response to the adopted negotiation text by parties to the UN climate talks, CIDSE and Caritas Internationalis, umbrella organisations for Catholic development agencies, called on governments not to forget adaptation technologies benefiting the world's poor. They stressed that such technologies also include different forms of knowledge and practice, and not just materials and equipment. Developing countries need adaptation technologies that take up few resources and are low-maintenance, the agencies stress. CIDSE and Caritas thus urged climate negotiators to link technology with adaptation talks.

2.

The Commission on Climate Change and Development has gathered 13 renowned individuals and been chaired by the Swedish Minister for International Development Cooperation. In May the Commission presented its final report to UN Secretary General Ban Ki-moon and the work of the Commission is now over.

In its final report the Commission's gave some interesting recommendations for the international society to help people adapt to the already visible effects of climate change. Donors should for example honour their ODA commitments and must give highest priority to local ownership of the processes. To provide new and additional money for adaptation to climate change, as a complement to effective global funding mechanisms was also pointed out as relevant.

The Commission recommendations continued stating that priority should further be given to the most vulnerable countries – African and Small Island states in particular. Existing National Adaptation Programs of Action should also be supported as entry points to long term integrated plans and strategies. The Commission also concludes that *Institutions* have a crucial role to play. They mediate resources and services, through them needs are expressed and accountability exercised.

Lastly, for the poorest communities the priority is to build people's *adaptive capacity* and resilience –their ability to manage risks and shocks. In richer environments, adaptation will emphasize technical measures that might not have been necessary

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634



Biofuel newsletter

Programme for **B**asic **E**nergy and **C**onservation - Saving energy for a better future

www.proBEC.org

without climate change. **In practice, each country will require a mix of human and technical measures – the challenge will be to get the balance right.**

3.

Climate change and carbon markets specialists in Maputo

During the Electrification for Africa meeting of international practitioners a session on Potential for Africa with carbon markets and CDM was held. Several interesting aspects were highlighted and discussed.

Fr. Felix Dayo of the Triple E, said that one reason why Africa is struggling with getting CDM credits is because Africa is not used to a system that assigns an essential part of the activity to the private sector. He continued that CDM should not be a source of funding for underlying project, rather seen as additional funding complementing normal FDI. Dr. Dayo also concluded that CDM project thrives better in environment with clear institutional structures.

Mr. Hegde of the UNFCCC in Bonn reminded the audience that 10.000 researchers representing the whole world once again has concluded that we need to reduce carbon emissions to 25-40% below 1990 years level. Mr. Hegde pointed out that small and cheap projects can be bundled together and thus achieve very high levels of carbon reductions to a very low price. Here he mentioned energy efficient stoves as an example. Lastly he pointed out that CDM credit emissions should not be seen as a potential upfront payment of liquidity.

Dr. Charlotte Streck of Climate Focus was a bit more cynical in her presentation. With extensive experience with CDM projects in Africa she alerted the audience to the fact that CDM credits takes around 400 days to get, that the Kyoto mechanism not is the only way to get carbon financing and that negotiations of a post-Kyoto protocol might actually offset possibilities of using CDM. The last statement was explained by the regional trading schemes that the US and the EU are establishing that might require additional methodology then only the CDM to accept the credit as offsetting to their rules. She advocated for projects to look in to the voluntary carbon market that not only has a broader scope but also goes faster and reduced transaction costs. Lastly she also concluded that decentralised solutions have most potential given their low cost and potential for being bundled together.

<http://www.euractiv.com/en/climate-change/eu-summit-hold-climate-funding-decision/article-183001>

<http://www.euractiv.com/en/climate-change/poor-countries-unable-absorb-climate-funding-eu-warned/article-182812>

German Agency for Technical Cooperation (GTZ) - Programme for Basic Energy and Conservation

Address 15th Floor, Sable Centre, 41 De Korte Street, Braamfontein, Johannesburg, South Africa

biofuelnewsletter@gmail.com, Tel: +27 11 3396633, Fax: +27 11 3396634