

**Summary Notes¹ from the BMZ - GBEP Policy Forum
“Opportunities for Sustainable Bioenergy Development:
National Experiences and Global Exchange”**

Berlin 28 May 2013

BACKGROUND

Biofuels and bioenergy are key issues for energy, climate, environmental and development policy. The Global Bioenergy Partnership (GBEP) met from May 28–31, 2013 in Berlin. The BMZ invited interested participants to a Policy Forum on Opportunities for sustainable bioenergy development at the outset of the GBEP meeting. The conference brought together first-hand experience on how to address socio-economic and rural development issues in biofuel and bioenergy policies and projects, and how to foster sustainable biomass use with a focus on developing countries. Approaches and experiences with integrated policies and projects maximizing sustainable development opportunities were presented and discussed².

MORNING SESSIONS – Policies for Sustainable Bioenergy in Developing Countries

The speakers underlined that improvements regarding unsustainable **fuelwood** consumption and access to clean cookstoves are relevant to achieve the Millennium Development Goals. **Biofuel** production in developing countries can, if managed properly, contribute to rural development but **food security** should not be threatened. Scarce land resources for biofuel feedstock production should be considered, but also reduction of **food losses** in developing countries: if better cooling or drying systems for food are implemented and access to markets improved, less land would be needed for food production. The development of bioenergy could play a role in solving these problems.

During the past two years, BMZ developed several papers addressing rural development, most recently the strategy “Promoting sustainable agriculture”. In 2011 the paper “Biofuels – opportunities and risks for developing countries” was published. These identify key principles to adhere to, in order to guide sustainable agriculture and bioenergy development. At the international level, the Global Alliance for Clean Cookstoves is noteworthy and aims to provide 100 million clean cookstoves by 2020. The UN Secretary General’s SE4all initiative and the facilitation of policy dialogues such as the present Policy Forum form part of such efforts.

In the bioenergy sector, no “**one size fits all**” solution is available, but best practices should be taken as examples to be replicated. Successful projects need **scaling-up**.

When biomass **policies and strategies** are developed, they should be specific, have clear objectives and assess the situation regarding the various energy uses such as the domestic consumption or the transport sector. The compatibility of biomass policies with the overall agricultural strategy and the situation of the agricultural sector should be analyzed. Moreover, it should consider **land availability**.

¹ This summary was compiled by the conference moderator Uwe R. Fritsche (IINAS).

² See <http://www.globalbioenergy.org/events1/gbep-events-2013/other-events-2013/en/>

Policy development should consider a **bottom-up** approach, starting with the implementation of some projects that could help policymakers to assess the situation and develop the respective policies.

Policy **coherence and enforcement** are of critical importance. For example, in Mozambique there is a Biofuel Commission in charge of monitoring. **Stakeholder involvement**, including communities, is also needed. The importance of local level assessment was recognized.

Enabling environments as well as building local capacity in research and development are needed and investments in this respect should be considered. On the other hand, the necessities for capacity building should be assessed. The role of **education campaigns** was mentioned. It is very important to highlight public outreach and communication to implement bioenergy.

The importance of the **value chain** of the different bioenergy carriers and end uses was pointed out. In this respect, the relevance of **securing investments** on the one hand as well as **market solutions** on the other hand, such as clean cookstoves ventures mainly in periurban and urban areas was highlighted.

The development of clean cookstove markets is needed, with a focus on stakeholder inclusion. The role of the **public and private sector** was discussed. The importance of the participation of both sectors in the development of biofuels was recognized.

A proposal to improve the agricultural situation is transferring **technology** to smallholders. In the case of Mozambique, for example, there are national laws regarding Environmental Impact Assessment and investments in bioenergy. A good example of developing biofuels and improving energy access is the CleanStar initiative in Mozambique which provides clean gelfuel for cooking from ethanol.

Mapping land areas is needed to assess the potential availability of food and bioenergy feedstocks as well as to determine current uses, pressures and future necessities. A bottom-up approach taking into account biodiversity and social aspect is needed. Since land is a limited resource, an **efficient use of land resources** should be promoted.

In that regard, the **indicators** developed by the GBEP were recognized as a good tool to define and monitor policies. Since biofuels production is integrated within the agricultural sector, it was proposed that indicators should be implemented for all products and sectors, including forestry.

The best way to support **rural development** in developing countries is increasing **agricultural and forest productivity and yield/harvest efficiency** without compromising ecosystem functions. Also, farmer and forester empowerment and better use of co-products may contribute to achieve this objective. Relatively simple technology to improve yields is available, e.g. agroforestry that could contribute to increase food security.

When feedstocks are going to be cultivated, **crops** known by farmers should be promoted first. **Residues** can also contribute to energy access on farms if not in competition with other uses.

With regard to the sustainability of energy crops, a relevant point is how the management activities are performed regardless if it is a food crop or an energy crop.

The situation concerning **fuelwood and forest policies** was raised. On the one hand, it was highlighted that wood energy is still neglected in many countries and, on the other hand, the importance of transferring the forest management to local communities was highlighted. Wood energy promotion requires both long-term investments in forests and developing the entire value chain. It was stated that sustainable forest management (SFM) competes with (possibly lower-cost) unsustainable forest practices so that SFM needs support.

There are on-going efforts to develop adapted **technologies** for developing countries especially decentralized systems are important for access to electricity, e.g. mini-grids based on combined systems. At industrial level, an example is Brazil where 20 % of the electricity is based on bagasse. Regarding large-scale developments, it is foreseen that 2nd generation biofuels will be commercially available in industrialized countries in less than 10 years but it will take longer in developing countries.

Social issues need recognition, with utmost importance in consolidating **land holdings**, and land **tenure**. Also, local communities should be trained and empowered to manage machinery independently.

AFTERNOON SESSIONS – Facilitating Maximum Benefits for Smallholder Farmers

The reliance of developing countries on **traditional** woody bioenergy and charcoal was emphasized which causes severe health problems from air pollution, and deforestation and forest degradation, among others. In parallel, woody bioenergy use is increasing in **industrialized countries** as well - especially increasing demands for co-firing in large powerplants. With growth in international trade in woody bioenergy, there is a need for safeguards in order to prevent risks that this increasing demand could pose. One speaker remarked that biomass should be used first as biomaterials before being converted to energy. Furthermore, forest environmental services such as soil protection need to be considered. Wood plantations should use native species instead of exotic ones.

Regarding policies that should be introduced to **promote sustainable bioenergy development**, proper land use management was suggested. The participation of local people is not enough but co-management should be encouraged. In the case of Madagascar, better land use planning seems necessary and to contribute to this objective a new land law has been passed. Also, investments and inputs are needed. Developing an adequate legal and institutional framework to prevent problems with **land tenure** is relevant, though the difficulty of regulation enforcement was recognized. Local people can be involved and be attracted towards promoting projects.

The **interest of industrial country private companies** could contribute to provide initial support when receiving revenues from carbon off-sets, while local companies in developing countries could be also interested in profitable investments. The controversial issue of “land grabbing” was discussed and indicated that countries such as Brazil have put measures in place to prevent it - in Brazil, foreign investors cannot buy land. It is recognized that bioenergy is a

renewable options that can provide energy for **productive** uses at local level, but sustainability challenges must be met.

To get respective guidance for the development of the bioenergy sector, capacity building and the **transfer of experiences**, including technology, is needed. In that regard, it was asked how to create incentives to promote and implement sustainable forest management, as at present, existing guidelines are often not respected. In many developing countries **fuelwood** from forests is obtained for free, i.e. fuelwood prices only reflect cost of transportation and distribution, not production costs.

Changing this situation is not only a question of training communities and foresters but also of involving local people in modern woody value chains, and of improving efficiency of woody bioenergy use.

REMARKS FROM SESSION A

- **National policies** and programs can help ensure that added value is created and sustainable investments are promoted. For example, Mozambique requires for large investments that a certain share of land should be kept for communities.
- **Empower farmers** to produce the fuels. For example, Brazil's Social Fuel Seal for biodiesel ensures adequate revenue for small cooperatives.
- **Monitoring** in order to avoid risks such as land grabbing. In this respect, all stakeholders should be included.

REMARKS FROM SESSION B

- **Opportunities** of woody bioenergy are different in countries, e.g. Brazil focuses on industrial uses while the ECOWAS region addresses energy access at the household level.
- It is necessary to address both the **supply and demand side**.
- **Political will** and **legislative enforcement** are needed and inclusion of communities and local people in this processes and the definition of sustainability requirements.
- The role of **technology transfer** is important, especially for modern bioenergy uses.
- **Finance** is needed, e.g. by means of climate finance schemes, and co-benefits should be considered.

CLOSING STATEMENT

The BMZ representative recalled in his closing statement that most poor people live in rural areas and that bioenergy could offer them an opportunity for development. In order to promote bioenergy it is fundamental to deal with the risks and bear in mind that food security comes first. Since each country faces different realities bioenergy should be tailored to each specific circumstance.

Boundaries between production and protection should be established in order to prevent risks and other environmental considerations should be taken into account to promote sustainable bioenergy, for example, the landscape approach. In this respect, land use management and agriculture zoning have to be considered. In the social domain, participatory approaches as well as land rights are key.

In conclusion the role of the sustainability indicators developed by GBEP was highlighted and emphasized that bioenergy can play a relevant role, and that GBEP is an excellent partner to go forward in this direction.